REFERENCE REBORN

Diane Zabel, Editor

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Breathing New Life into Public Services Librarianship

DIANE ZABEL, EDITOR

Preface by Linda C. Smith

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CONTENTS

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PREFACE

In 2008, Robert H. Kieft, one of the contributors to this volume, observed, "The service edifice built by reference librarians beginning in the late nineteenth century does not so much threaten to collapse as to be reborn in ways that we are still groping to discern" (Kieft, 2008, 6). As a teacher of reference-related courses since 1977 and the coeditor of a reference textbook since the first edition was published in 1991 (Bopp and Smith, 1991), I have continually sought to discern new trends in reference services and the roles new librarians can play in shaping them and to share those with my own students and readers of the textbook. Editor Diane Zabel and the more than 30 other contributors to *Reference Reborn: Breathing New Life into Public Services Librarianship* have given readers a timely examination of developments in public services librarianship and an affirmation that this remains a vital and creative part of the profession. This book will be of value not only to beginning librarians looking ahead to the opportunities and challenges that will shape their careers but also to librarians who began their careers at any time since the 1970s. At that time reference services transitioned from a period of certainty regarding roles, resources, and methods to a period of change and challenge, driven in large part by developments in computer and communications technology (Rettig, 2006).

The organization of this volume highlights major themes that should be of interest to anyone concerned with the future of public services librarianship: the current and potential users of our services, new and improved service models, new and revised roles for reference librarians, the role of technology in reference services, reference collection development, staffing in 21st-century libraries, and the education and training of reference librarians.

Contributors, include several who are well known for their contributions to reference research and practice and some who are newer to the profession. This new generation will lead the way in ensuring that reference services—in forms that we are just beginning to discern—will continue to be a vital part of libraries. Concluding on a personal note, it is rewarding to count among the contributors a number of graduates of our master's program at Illinois: Diane Zabel herself, as well as Jim Hahn, M. Kathleen Kern, James LaRue, Meris A. Mandernach, Amber A. Prentiss, and David A. Tyckoson.

Linda C. Smith

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ACKNOWLEDGMENTS

This happy collaboration with more than 30 creative contributors happened by accident. I had no intention of working on a book project at this stage in my career and was taken completely by surprise when Barbara Ittner, a senior acquisitions editor at Libraries Unlimited, invited me to develop a proposal for a book on trends in reference and public services librarianship. Anyone who has ever met Barbara knows that she is both charming and persuasive. Before I knew it, I was recruiting wonderful authors whom I had worked with on other projects, and enlisting other authors whose work I had long admired. I also had the good sense to invite some rising stars to contribute. I have worked with many editors over the years, and Barbara is simply the best. We just clicked and I will never forget her warmth, generosity, patience, and understanding.

Much of my thinking about reference and public services librarianship has been shaped by my participation in the Reference and User Services Association (RUSA), a division of the American Library Association. I have been active in RUSA for almost a quarter century, and my RUSA colleagues (too numerous to list by name) have enriched my life. Many of the contributors to this volume are part of my RUSA network. RUSA was also my forum for finding a mentor early on in my career. I would be remiss if I did not acknowledge the important role that David Kohl, a past RUSA president, played in my professional development.

Completion of this project would not have been possible without the support provided by my institution, the Pennsylvania State University Libraries. In particular, I want to thank associate dean Sally Kalin, who is the embodiment of service excellence in our profession. I also want to acknowledge the

assistance provided by Emily Robins Sharpe, the gifted doctoral student who served as an editorial assistant, thanks to financial support provided through the Louis and Virginia Benzak Business Librarian Endowment. My colleagues in the Schreyer Business Library also need to be recognized for their enthusiastic support of this project. Finally, I want to thank my family, especially my husband (Craig) and son (Zachary), for their continued encouragement.

INTRODUCTION

The time is right for a balanced look at trends in reference and public services librarianship (in both academic and public libraries in the United States) and a consideration of future scenarios. Rather than worrying about reference's demise, many librarians have been energized by their newly expanded roles, many of which allow for creative ways of delivering enhanced services, thanks in part to Web 2.0 and other user-centric technologies.

THE REBIRTH OF REFERENCE

In the past few years there has been a renewed interest in studying best practices for reference delivery. All of a sudden, reference is the rage. Reference-related programs at conferences pack rooms. A participant at a reference retreat that I attended in 2007 commented, "I'm glad reference is back" (Zabel, 2007, 109). While reference never went away, more librarians are recognizing that providing excellent public service is critical to the future of libraries. Perhaps evidence of this is the tremendous positive response to the guest editorial that Lorraine J. Pellack contributed to the Fall 2009 issue of *Reference & User Services Quarterly.* The message of this article, titled "First Impressions and Rethinking Restroom Questions," is very simple: Patrons' first impressions matter, and polite responses to the most routine questions create a welcoming environment. I have been editor of this journal since 2006; no other article has generated so much discussion. Many readers posted comments on the Web site of the journal's online companion (www.rusq.org). Others wrote to me directly to let me know how much they appreciated the reminder that courteous service never goes out of style. Some

readers also indicated that they intended to assign this article to students enrolled in master of library science (MLS) courses or library staff during training programs.

I was humbled to learn that "A Reference Renaissance," an editorial I wrote for the Winter 2007 issue of *Reference & User Services Quarterly,* has been background reading for reference retreats and assigned reading for continuing education courses. I was also informed that this editorial was the inspiration in part for the theme of Reference Renaissance: Current and Future Trends, a 2008 conference sponsored by the Bibliographical Center for Research and the Reference and User Services Association (a division of the American Library Association). Marie Radford, the program chair for this Denver conference, has been instrumental in bringing reference to the forefront in our profession. The conference drew more than 500 attendees; based on its success, a second Reference Renaissance conference took place in August 2010.

I invited Marie Radford to write a guest editorial on reference service excellence for the Winter 2008 issue of *Reference & User Services Quarterly.* She used this forum to "celebrate the rise and revitalization of reference service excellence" (Radford, 2008, 109). She wrote, "I have been involved in reference for twenty years on the front line in school and academic libraries, and as a researcher for an over-lapping time of twenty-three years. I have never seen a more exciting time for reference. In fact, I've never seen any time that has even come remotely close" (109). That's quite an assessment from someone who has given numerous conference presentations and workshops on reference and has published extensively on various aspects of reference services, including groundbreaking research on interpersonal communication in face-to-face and virtual reference encounters.

There have been other manifestations of increasing interest in reference and public services librarianship. Columbia University Libraries has been hosting an annual library symposium on 21st-century reference service since 2001. This conference "invites representatives of large private academic research libraries in the Northeast to share ideas, plans, and concerns about reference services," (Free, 250). The theme of the 2008 symposium was "Beyond the Desk." Nor is interest in new reference models limited to elite institutions or academic libraries. The January–February 2007 issue of *Public Libraries* (the official publication of the Public Library Association, a division of the American Library Association) focused on reference—bringing together articles on reference transaction statistics and trends, collaborative virtual reference service, roving reference, digital formats of reference materials, and librarians' evolving role.

Significantly, broader publications have also featured articles on the future of reference. The cover of the April 20, 2007, issue of the *Chronicle of Higher Education* posed the question, "Reference Desks: Endangered Species?" This provocative question was the lead-in to Scott Carlson's thoughtful article, "Are Reference Desks Dying Out?" which examines how academic libraries continue to grapple with how best to redefine roles and services. Carlson

notes that arguments for eliminating the desk began to surface in the mid-1980s, culminating with the publication of Jerry Campbell's controversial article in the Spring 2000 issue of *Reference & User Services Quarterly* arguing that librarians should enhance technology and move away from the traditional reference desk model.[1] Campbell's call to adopt technology almost seems quaint in 2010, and librarians of a certain generation (myself included) can recall with some fondness early experimentation with tiered reference and other models of service. Librarians have been rethinking reference since the 1993 publication of Virginia Massey-Burzio's seminal article ("Rethinking the Reference Desk") on the topic. *Reference Reborn* is a vehicle to share interesting perspectives on how we can best serve library users. This volume brings together essays on new public service configurations, the impact of e-resources on reference and collection development, innovative outreach, and other timely topics.

THE IMPACT OF THE RECESSION

I developed the proposal for this book in May 2008, before the recession had profoundly impacted many libraries. This severe economic downturn has precipitated major changes in public services for many libraries across the country. In her retelling of this crisis, *portal* editor Sarah M. Pritchard recalled that "the effects began to hit many libraries in early 2009, with mid-year budget take-backs, hiring freezes, and large endowment drops; and, over the course of the spring, the forecasts for FY 2010 got increasingly grim. As librarians gathered at professional association meetings this last summer, it was clear that the financial trends look bad or worse for FY 2011" (2009, 437). In terms of the impact on academic libraries, Pritchard noted that "we are seeing a flurry of news bulletins and electronic list messages about branch closings, service point consolidations, layoffs, serials cancellations, shorter hours, delayed building projects, outsourcing, consortial contracting and the like" (437). The forecast is unfortunately gloomy for many academic libraries.

The recession has had dire consequences for America's public libraries as well. While public library use has soared during the recession (especially since public libraries provide resources to assist job seekers), funding has been slashed. A recent news release from the American Library Association (2010) reported that "half of states have reduced funding to public libraries and to state library agencies, and close to one-quarter of urban libraries have reduced open hours. Adequate staffing is the leading challenge to aiding job seekers." In response, the American Library Association has mounted an aggressive campaign to promote the value of American libraries.

ARE THERE OPPORTUNITIES IN A RECESSION?

My home institution, the Pennsylvania State University, has been closely monitoring how other academic libraries have responded to cutbacks. The

University Park Libraries at Penn State, my specific library, used this crisis as an opportunity to create a more coordinated and cohesive approach to the delivery of reference services at University Park, a campus serving more than 42,000 students.

At the beginning of 2008, associate dean Sally Kalin (a contributor to *Reference Reborn*) created the Reference and Consultation Services Council, a cross-departmental leadership team charged with providing direction for the improvement of reference-related services at University Park. I had the good fortune to be a member of the initial council (serving as cochair along with *Reference Reborn* contributor Anne Behler). Within the first few months, with considerable input from other librarians and staff working on the front lines in our libraries, our team developed a tactical plan for delivery and improvement of reference services at University Park, one that aligned with the goals of our library's strategic plan. This concise plan consists of 10 tactics and includes more than 40 action items that have been identified as immediate (achievable within 6 months), short-term (achievable between 6 and 18 months), or long-term (actions that require more than 18 months for completion or are ongoing).[2] Several teams have been appointed to address specific issues and to complete these action items. This tactical plan is serving as our blueprint for reference service excellence at University Park. While the plan's goal is to improve services for our users, some tactics and actions address the need for more effective sharing of staff across service points, and the need for more strategic and cost-effective reference service delivery, using a variety of delivery modes and mechanisms.

The Reference and Consultation Services Council was also charged with the task of tracking national trends, identifying best practices, and fostering discussions about reference and user services. One of our mechanisms for promoting dialogue about user services has been sponsorship of an ongoing forum (usually held monthly) that we have named "UP Public Services Unplugged." Some of these forums have been designed as "report backs" from relevant meetings and conferences where public service trends, new reference service models, and successful technological applications have been discussed. So what are some of the predominant trends in reference and public services librarianship? In forums held throughout 2009 and early 2010, my colleagues and I identified the following trends based on attendance and participation in various regional and national venues:

- Elimination of service points
- Consolidation of reference/service points (e.g., merged reference and circulation or merged reference and information technology help)
- Closure or merger of branch or discipline-based libraries
- Use of technology to assist patrons (e.g., icons on library computers that enable patrons to ask for help)
- Increased usage of two specific models of reference service: the triage-tiered model and the shared staffing model

- Expansion of self-service options (e.g., self-checkout, online group study room reservations, self-service reserves, and touch-screen FAQs [frequently asked questions])
- Reduction of staff due to hiring freezes and greater use of nine-month contracts
- Increased liaison roles for subject librarians (with an emphasis on getting out of the building)
- Greater emphasis on virtual reference
- Acceptance of instant messaging and text messaging as mainstream reference mediums
- Growing usage of telephone reference (a trend fueled by the ubiquitous cell phone)
- Reconfiguration of reference services and reference resources for smartphones and other mobile devices
- Increased use of software programs to track and manage reference transactions and to manage referrals
- Development of core competencies for reference service providers and development of formal ongoing training programs
- Greater focus on candidates' "soft skills" in the hiring process
- Reduction of print collections due to aggressive weeding and policies that discourage duplication
- Accelerated growth of e-book collections
- Greater marketing and promotion of e-book readers

SOME THEMES IN *REFERENCE REBORN*

Many of the trends identified in the preceding are discussed in this collection of essays. In addition, chapter contributors have identified and expanded on the following themes:

- While there are varying opinions about how to best prepare the next generation of reference librarians, our profession's core values (e.g., sensitivity to the needs of our users, commitment to connect our users to the information and materials they need, recognition of the educational role of librarians) will continue to underpin library education.
- A good public services librarian is always tracking economic, social, cultural, and technological trends that may drive change in libraries. Librarians can use data from external environmental scans (such as those conducted by the Online Computer Library Center [OCLC] and the Pew Internet & American Life Project) and local surveys to plan new services or reconfigure existing services.
- Libraries must offer multiple modes of reference delivery as users want a range of services.

- Librarians are rethinking the traditional liaison role. It extends beyond collection development to encompass a variety of library services. Susan Sharpless Smith and Lynn Sutton write about embedding librarians in academic departments so librarians can become active partners in the educational mission. In the public library environment, James LaRue refers to this trend as "community reference work." Linda Friend describes the powerful role reference librarians can play in fostering dialogue on open access and other issues in scholarly communication.
- Readers' advisory service is experiencing a renaissance in public libraries, according to Barry Trott and Neil Hollands. Anne Behler observes that a growing number of academic libraries are creating leisure reading collections and introducing readers' advisory services as strategies to encourage reading and promote use of book collections.
- Reference librarians need to go where users are. This might mean leaving the library for residence halls or having a presence on Facebook, Second Life, or other online communities.
- Since a library's Web site is the first service point for many users, it is imperative that libraries focus on improving the interface. Users want easy-to-use and customizable Web sites. With the large-scale migration from print to e-reference collections, it is critical that libraries create usable interfaces so users can find resources.
- We can't forget that the physical library plays an important role as a learning space. Juliet Rumble describes how information commons support learning communities.
- While we need to deliver reference service using multiple modes, this delivery of service should be seamless to the user. Organizationally, reference should be viewed as a single centralized service.
- Since libraries are under greater scrutiny to account for return on dollars spent, systematic data collection is critical to document outcomes and assess services. Evaluation of reference service must be ongoing. It is important that libraries follow through and act in response to the data that can be collected using the various methods and tools described by Julie A. Gedeon and Joseph A. Salem, Jr.
- Marketing is key, as many of our users (and nonusers) are not aware of the services that libraries offer. In addition to marketing reference services, libraries should market how they are strategically different from Google and other competitors.
- Ongoing training for reference providers is essential. Training needs to emphasize the importance of empathy in face-to-face and virtual interactions. Greater focus needs to be placed on the behavioral aspects of reference service, for example, incorporation of those model behaviors outlined in national guidelines for professional practice.

And finally, while librarians tend to focus on new tools and emerging technologies, there are two important threads throughout *Reference Reborn*. First, there is an overwhelming belief in the sustainability of reference service.

Reference will remain an important service since users value the human touch. Sally Kalin writes eloquently about the enduring qualities of reference librarians: "Even though the progression of my career has seen a dramatic change in what reference librarians do, what has not changed is the formula of how they do it: with skill, courtesy, and kindness." Second, there is tremendous optimism about the ability of librarians to adapt to change. Charlotte Ford and Lili Luo sum this up best: "Reference librarians are known for their resourcefulness, wide-ranging curiosity, and capacity for learning. . . . Reference librarianship is an adaptable profession, and in this adaptability lies its salvation."

Diane Zabel

NOTES

1. This was not Campbell's first controversial article on reference service. His 1992 article, "Shaking the Conceptual Foundations of Reference," published in *Reference Services Review,* is a classic. To understand Campbell's immense influence on changing models of reference, see Marcy Simons's excellent 2008 profile of him: "ChangeMasters All: A Series on Librarians Who Steered a Clear Course toward the Twenty-first Century: An Interview with Dr. Jerry Campbell" (*Library Administration and Management* 22 [4]: 168–171).

2. The 2009 tactical plan for reference and consultation services for the University Park Libraries at Penn State consists of the following 10 tactics:

> 1. "Develop a set of standards and policies that govern reference and consultation services in all areas of the University Park libraries."
> 2. "Develop a model of reference as a single centralized service with multiple delivery modes."
> 3. "Identify and implement models of effectively sharing staff across service points."
> 4. "Focus on proactive reference strategies and practices that anticipate library user needs."
> 5. "Identify fail points in the navigation of the physical library and of the Web interface, and implement safety nets to help users better navigate those spaces."
> 6. "Explore delivery options for 24/7 Virtual Reference Service."
> 7. "Establish a formal referral/availability system and develop both immediate and delayed (synchronous/asynchronous) internal communication mechanisms which are interoperable and flexible (agile) for all service points. Core functionality should be similar across systems for sharing ideas."
> 8. "Establish a curriculum and standard level of training for all new faculty and staff hires (including part-time)."
> 9. "Market reference services."
> 10. "Engage in ongoing assessment of reference services."

Several actions identified in the plan were accomplished in the first year, including the following: creation of a public statement stating our commitment to excellence in delivery of patron services, a pilot involving shared staffing of a general service point,

implementation of a commercially developed software product to record reference transactions, and use of instant messaging software at all service desks for communication among service points.

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I

OUR CHANGING USERS

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1

WHO ARE OUR USERS? SCANNING THE ENVIRONMENT TO DETECT TRENDS

Ellysa Stern Cahoy

Knowing your users involves more than placing a prominent suggestion box on the reference desk, considering e-mailed kudos or criticisms, or conducting patron focus groups. To truly understand and encapsulate the current and future needs of the library's users, librarians must systematically and regularly collect, analyze, and disseminate both internal and external information on trends that impact user behaviors and needs. *Environmental scanning* is an organizational practice of screening external demographic, social, cultural, political, legal, and technological trends in an effort to better anticipate and meet future user needs. This chapter provides an overview of environmental scanning in libraries, shares scanning strategies, gives examples of existing library-related environmental scans, and explains the importance of comparing local data with national trends. Albright states, "Success requires a keen understanding of external influences in order to respond in ways that will ensure the organization's survival and success. Environmental scanning is one tool in an organization's arsenal that can be used to gain this understanding" (2004, 39).

Francis Aguilar, a Harvard Business School professor, coined the term *environmental scanning* in 1967 to describe the action of "scanning for information about events and relationships in a company's outside environment, the knowledge of which would assist top management in charting the company's future course of action" (Aguilar, 1967, 1). Used heavily in the corporate world, environmental scanning helps organizations "assess and respond to external environmental change that may have a decisive impact on strategic business decisions, organizational performance, and viability" (Castiglione, 2008, 528). Originating in the social sciences, environmental scanning emerged as

a method for qualitative research. Environmental scanning is an example of a "naturalistic" study that seeks to understand an event or a series of events without altering the occurrence. The practice of scanning was more widely adopted in higher education (and in libraries in general) in the 1980s and 1990s, most frequently as part of a visioning or strategic planning process (Hatch and Pearson, 1998). Environmental scanning can help libraries understand external threats and opportunities, leading to change that will maximize user satisfaction and support (Crist, Daub, and MacAdam, 1994). The environmental scan, "a product of the collection of relevant data on social, economic, technological, and other developments over an extended period of time, connects the organization with the larger world and is used to identify trends and forecast their possible impact on the organization" (Prentice, 1989, 713). The knowledge uncovered by a scan is most integral when the library has undergone significant changes and must newly assess the impact on users' views of the library and its services. Libraries entering a period of strategic planning or contemplating significant change are also ripe candidates for scanning.

A comprehensive environmental scan helps librarians gain an understanding of the library's relationship with the external environment, whether it is positive, negative, or neutral. If the findings of a scan are utilized properly, they can help librarians improve the library's symbiotic relationship with the external environment.

For libraries, the materials used to assess the external environment can include a host of different audiences and organizations. External resources include conference papers and presentations; print and Web-based reports on user trends and attitudes; blog posts; media articles on political, social, or legal developments; and white papers on current issues. Internal information sources include the feedback of other employees in the organization, interviews with personal contacts, focus groups or meetings with user groups, and internal surveys or reports conducted with the organization's primary user base or other relevant constituencies (Castiglione, 2008).

Khandwalla (1977) identifies three types of existing relationships between organizations and their external environment. A comprehensive environmental scan will help identify the library's current relationship with the external environment and will provide the organization with direction in better balancing the library's current and future environment.

—Dominant organization/dominated environment

The organization maximizes the opportunities and challenges presented by the external environment, effectively meeting the needs of its users and adequately anticipating and preparing for future needs. A current example of a dominant organization is Google. Google's many products and services, including Google Books and the Google search engine, have dominated the market and, in many respects, have shaped the development of search and retrieval on the Internet, including local search tools maintained by individual libraries.

—Dominant environment/dominated organization

In this setting, developments in the external environment impact the organization and its ability to reach users and provide needed services. The external environment dominates many libraries. Slow to change because of bureaucracy, a lack of funding for new initiatives, or other barriers to innovation and change, libraries find themselves impacted by (and, in many cases, later emulating) commercially provided online resources and services.

—Symbiotic relationship: Neither the organization nor the company dominates

A symbiotic relationship provides perhaps the best of both worlds—an organization that understands and responds to external threats and opportunities, and an environment that is in sync with the organization's priorities and developments (Abels, 2002). Symbiosis should be the goal for libraries as information providers.

THE BASICS OF ENVIRONMENTAL SCANNING AS A PROCESS

The practice of environmental scanning is of use to all types of libraries—public, school, academic, and special libraries. How the scan is conducted, and the sources that are used to compile the scan, will differ by type of library. Specific types of libraries will have sources inherent to the audiences they are studying that will be of greater importance than others.

Environmental scanning focuses on strategic thinking and strategic planning, keeping the organization more abreast of current trends and future challenges. A well-conducted scan should result in a new management and marketing style that is more anticipatory and forward-thinking. It is not meant to be a stagnant process or a one-shot endeavor. Good environmental scanning is conducted as a continuous process, helping the organization to "maintain a preparative stance" as environmental circumstances change (Albright, 2004, 40).

In *Future-Driven Library Marketing,* Weingand (1998) identifies questions for librarians to ask of their organization when considering undertaking an environmental scan. Does the organization have an intense internal focus, with little understanding of external factors that may influence future user needs? Are there valuable opportunities that are not being seized because the library lacks an understanding of the external environment? Is the library's staff adequately skilled and ready to deal with users' changing needs, ensuring future success? Is the library in peril of hitting an "iceberg"—an unanticipated danger? Weingand states that a "yes" to any of these questions is evidence that environmental scanning will be of use in a library. An environmental scan places greatest emphasis on what the library may face as challenges in the next three to five years. It also gives librarians a needed perspective on where librarianship is headed in general, as a profession.

—What resources are needed for an environmental scan?

The most significant resource needed to effectively complete an environmental scan is staff time and dedication. Because the results of an environmental scan are subjective and culled from a variety of sources, the staff conducting the scan must be librarians or administrative staff, perhaps those working in a marketing or public relations capacity or at a managerial level in the organization. The library staff conducting the scan is also responsible for collecting sources, coordinating analysis, and widely disseminating the scan's results. Staff may also oversee a comparison of local user studies with environmental scan results.

Before undertaking an environmental scan, librarians should reflect on the following organizational considerations:

—Does the library currently capture environmental information?

Some libraries may have a structure already in place for scanning print and electronic media and other sources for information relevant to future challenges. Many do not. If your library is not currently involved in environmental scanning, it is important to think about where, organizationally speaking, the responsibility for environmental scanning will reside. Does the library have a marketing office, a marketing committee, or an administrative team that oversees marketing? Groups formally tied to strategic planning and marketing provide a natural home for the sort of visioning activity and analysis that environmental scanning provides.

—Is the sort of information that environmental scanning provides internally considered important to the strategic planning process?

Environmental scanning provides an opportunity to reflect on the library's existing flow and process for strategic planning. Does the library's strategic planning process provide for and support preliminary exploration of new trends, current challenges, and other information provided by internal and external sources? A related question—is the library administrative structure flexible and open to new ideas (and responding to external threats)?—has a similar focus, asking whether the library is ready to undertake and implement recommendations provided by environmental scanning information.

If conducted at the right time in the strategic planning process, environmental scanning can help administrators identify and evaluate leading-edge trends and organizational strengths and weaknesses early enough to address these challenges head-on within the strategic plan. Castiglione warns that "high impact ES (environmental scanning) is not a 'one shot' process. Effective ES is conducted continuously in an effort to identify emerging changes and trends that may have a significant impact on library operations and stakeholder satisfaction" (2008, 530). Conducted properly, environmental scans merge marketing and strategic planning into a symbiotic, responsive process.

—How is an environmental scan conducted?

The following outlines the essential steps in conducting an effective environmental scan in a library:

1. *Identify the library's environmental scanning needs.* How often does the library need to conduct an environmental scan? Which external and internal documents are of greatest importance with regard to a scan? Who are the staff members that will direct or be involved in the scanning process? What is the library's current strategic planning process timeline, and how will the scan inform that process?
2. *Conduct an analysis of the library's external environment.* The external environment can include any factors that are influencing or are currently adopted by users. This analysis could refer to a wide variety of external documents in order to present a portrait of current user needs and trends. A current document useful for determining the external environment is the 2009 *ECAR Study of Undergraduate Students and Information Technology* (Educause, 2009). This regularly updated study provides a comprehensive portrait of students' technology use, forecasting future trends that are likely to impact libraries and other technology-focused organizations. Aaker (1983) recommends scanning on two different levels. At the first level, librarians and staff assigned to project teams can look comprehensively at the current economy (local and national), current and emerging patron demographics, and service requirements. At the second level of scanning, there is a singular focus on technological changes that will have a significant future impact on user services and library instruction (Castiglione, 2008).
3. *Assess the library's existing strengths and limitations.* This is an audit of the library's internal environment. As much as it is important to look at external factors and our users' future plans, it is also critical to understand the current climate, direction, opportunities, and limitations that exist in the library. This internal assessment of current conditions will temper the overall scan's recommendations and will ground future planning in a realm (that is) appropriate to the library's needs. According to Albright, "Internal information includes organization-specific information that can be compared to the findings of external scanning in order to maximize organizational responsiveness" (2004, 44).
4. *Evaluate the identified trends, opportunities, and issues, ranking each in importance according to its relevance to user needs and potential positive impact on user services.* Ranking trends can be accomplished as a group activity within the library. Publicizing the scan findings in a forum for library staff, and asking librarians and other staff to rank issues identified as relevant to the library, can increase internal investment in the scan's relevance to the organization's needs.
5. *Communicate the results of the scan widely to the local library community and to the library's user base.* Avenues for publicizing scan results include the library's Web site, library newsletters, and public forums for library users. Sharing results widely will help users better understand the library's current challenges, while increasing their confidence in the library's ability to address and develop (better) future user services.

6. *Employ a decision-making process to apply the information collected and analyzed within the environmental scan to the library's current marketing plan and strategy-making process.* This activity may fall to the library's strategic planning group, in consultation with the librarians and staff involved in conducting and analyzing the scan.
7. *Continue to conduct environmental scans on a regular basis, reassessing trends, opportunities, and issues for their relevance to emerging user needs.* According to Karim, "Assessment should lead to the strategic integration of the environmental scanning process with organizational strategic planning" (2004, 362).

Organizational adoption of continued environmental scanning is a critical first step in changing a library's organizational structure to focus on adaptive decision making (Hambrick, 1981). Castiglione reiterates the importance of organizational adoption of scanning: "The use of environmental scanning by library administrators may reduce complacency; inform the progressive adaptation of our profession; enhance the importance of our professional activities; and facilitate the development of appropriate stakeholder services" (2008, 531).

EXAMPLES OF EXISTING LIBRARY-RELATED USER STUDIES AND ENVIRONMENTAL SCANS

Conducting environmental scans on a regular basis is a staff-intensive process. Libraries with many marketing demands or small staff may not have the resources to conduct scans locally. A wide variety of more globally produced environmental scans exist to fill this need and assist libraries in envisioning future goals.

Since 2003, the Online Computer Library Center (OCLC) has periodically published "landscape reports" (OCLC, 2007). The reports are primarily technology focused and seek to help librarians understand "the emerging library services environment" (Castiglione, 2008, 533). OCLC's first report in this area, the 2003 *Environmental Scan: Pattern Recognition,* identified current issues and trends likely to impact library services in the near future, targeted to OCLC decision makers and librarians engaged in strategic planning. In 2005, OCLC published *Perceptions of Libraries and Information Resources.* This report looked almost exclusively at the library "brand" and how users perceived the value of libraries as information providers. The publication's introduction nicely sums up its focus as an environmental scan:

> There are no major recent empirical studies that look specifically and broadly at the role that libraries and librarians play in the infosphere, from the point of view of the information consumer. How are libraries perceived by today's information consumer? Do libraries still matter? On what level? Will library use likely increase or decrease in the future? (OCLC, 2005, vii)

OCLC published *College Students' Perceptions of Libraries and Information Resources* in 2006. This report was a subset of the data compiled for the 2005 report and was of specific use to the academic library audience. The 2007 report, *Sharing, Privacy, and Trust in Our Networked World,* cast a wider net, looking closely at how Internet users share information and social data on the Web, with specific analysis and recommendations for how libraries can maximize services incorporating social media. Its most recent report, *Online Catalogs: What Users and Librarians Want* (2009), targets current and emerging issues in enhancing and developing new online public access catalog (OPAC) interfaces.

The Pew Internet & American Life Project issues numerous reports of interest to libraries. A "non-partisan, non-profit 'fact tank,'" the project shares information about trends and current issues impacting America and the world (Pew Internet & American Life Project, 2009). Recurring Pew report topics relevant to librarians include the use of the social Web (including Facebook and Twitter), data on generations of users online, use of the mobile Web by various age groups, and information-seeking patterns online. Recent Pew reports include *Information Searches That Solve Problems: How People Use the Internet, Libraries and Government Agencies When They Need Help* (Rainie, Estabrook, and Witt, 2007) and *Teens and Social Media* (Lenhart, Madden, Smith, and Macgill, 2007). Each Pew report surveys a large number of U.S. residents on a specific emerging topic. While not all Pew reports are related to libraries or the Web, they provide compelling data that highlight changing and growing trends online and elsewhere.

Annually, the New Media Consortium (NMC) publishes "The Horizon Report" (2006). Focused on technology, the report details emerging technologies predicted to have an impact on teaching and learning over the coming year. Critical challenges, technologies to watch, and key trends are highlighted. Primarily focused on higher education, the NMC now also publishes (as of 2009) a "Horizon Report" for the K–12 environment. Libraries interested in understanding new user technologies impacting the learning environment (including the time to adoption for specific technologies) will find much to use in the "Horizon Report" in order to forecast and plan for addressing new technology initiatives in the library.

The Association of College and Research Libraries (ACRL) has issued several environmental scans (in 2003 and 2007) to "identify the trends that will define the future of academic librarianship, to support research aimed at improving the practice of librarianship in academic and research environments, and to develop resources and programming that support the continuing professional education needs of its membership" (ACRL Research Committee, 2007). Previous to that, ACRL issued a report, *Top Issues Facing Academic Libraries,* that was summarized by Hisle (2002). The environmental scans are linked to related research agendas produced by ACRL sections, including the "Research Agenda for Library Instruction and Information

Literacy" (last revision in 2006) and the "Scholarly Communications Research Agenda" (2004). Each ACRL environmental scan looks at "major assumptions" currently shaping academic librarianship, as well as emerging issues likely to significantly impact libraries and librarians (ACRL Research Committee, 2007). The assumptions, which include forecasted challenges and predicted issues impacting libraries, are culled from a survey of academic librarians. In this respect, the ACRL scans give academic librarians a summary of new trends while providing a barometer for the opportunities and challenges at the forefront of librarianship. The parent organization of the ACRL, the American Library Association (ALA), is currently collecting resources for an association-wide environmental scan in 2015. This new scan is an interesting exercise in harnessing the combined knowledge of the library community to build a collection of scan resources. ALA members are invited to contribute recommended documents for use in the scan, available on the association's community software platform, ALA Connect (ALA, 2009). This collaborative process provides a new social model that may ease individual libraries' burden of collecting a wide range of resources for a comprehensive scan.

Two academic organizations, JISC and Ithaka, have also released reports useful for libraries undertaking environmental scans. JISC, a U.K.-based organization, is focused on the integration of emerging technologies in higher education. In 2008, JISC released "Information Behaviour of the Researcher of the Future." The report contains the results of a study commissioned by the JISC and the British Library regarding how children and young adults will interact with information resources over the next 5 to 10 years. The report contains the results of a massive literature review focused on several areas of information literacy and information access over the past 50 years, combined with a "deep log analysis" of the use of BL Learning, a British Library database. While the report does not contain significant original research, it provides compelling projections and conclusions for libraries, primarily based on their wide-ranging review of the existing literature (JISC, 2008).

The Ithaka project "helps the academic community use digital technologies to preserve the scholarly record and to advance research and teaching in sustainable ways" (Ithaka, 2009). The 2006 Ithaka report, "Studies of Key Stakeholders in the Digital Transformation in Higher Education," surveyed faculty and asked them to rate the importance of the library as a gateway to information, as an archive and as a buyer of information (Housewright and Schonfeld, 2008). The Ithaka reports contain essential information regarding stakeholder groups—in addition to faculty, the Ithaka Project has also surveyed and analyzed academic librarians in the past. For libraries seeking to understand the current mindset and future needs of faculty, the Ithaka reports are invaluable tools.

STRATEGIES FOR COMPLEMENTING NATIONAL DATA WITH STUDIES OF LOCAL USERS

Using national or international findings for environmental scanning can suggest future needs and challenges that may face a library. To extrapolate the data effectively to a specific library's needs, additional data from local surveys should be used to provide a more complete picture of the user population. One option is to join with local libraries or library consortiums for collaborative, cooperative scanning. Cooperative scanning programs may help develop wider and more frequent environmental scanning among libraries. Castiglione notes that

> individual library professionals, library schools, and our professional associations must become part of an interconnected system of learning, adaptation and renewal; based on collective environmental scanning and the sharing of intelligence. This process will be facilitated—not hindered—by the evolution of our library associations into a more global, interconnected and coordinated group of concerned library professionals operating on behalf of our stakeholders. (2008, 534–536)

Castiglione identifies external factors that librarians should monitor on a regular basis. These include the impact of new technologies on library services and collections; changes in copyright and intellectual property law; state and local changes in budgetary finances for library operations; new information services competitors (whether online or physically based); workforce trends and the availability of qualified, trained staff; regulatory changes impacting employment and human resources procedures; and the current and future economic outlook in general. All of these factors influence how a library plans, designs, and delivers its services and collections. It is important to remember that environmental scanning done in isolation will not be entirely useful to an organization. To be most useful, environmental scanning must be conducted in tandem with other assessment efforts to discern user needs and learning gaps (Hatch and Pearson, 1998).

Resources useful for local scanning efforts can take the form of user surveys, usability analyses of library Web pages or of locally based online library tools (such as the library catalog), user population surveys done at the community or campus level, articles in the local media, and socioeconomic data and trends relevant to the local area. Cyert and March (1963) warned against "bounded rationality," which can occur when individuals scan their own local environment so extensively that they may be unaware of the impact of important, externally occurring factors (Castiglione, 2008). It is important to retain a balance between scanning of local resources and a more wide-ranging scan of external national and international sources.

Libraries that are considering undertaking a local assessment of users or other populations should consider the following questions:

1. *Are there already-existing local studies that can be utilized?* Within colleges and universities, local communities, and school districts, an office for assessment or other assessment-related unit may have existing survey data that could prove helpful. Conducting a local environmental scan of existing data may prove useful in identifying any relevant data, as well as refining the need and focus for a new study.
2. *Who will conduct the study?* Are there support systems in place on campus or in your local community that could assist you in conducting a local user study? At colleges and universities, other units of campus (such as student affairs offices or educational technology units) may have experience, expertise, and resources for conducting local surveys.
3. *What is the focus of the study?* Are there specific areas that you would like to study with regard to current and future users (for example, library spaces, instructional technologies, or the library Web site)? Narrowing the focus of the study will assist in providing reasonable goals and a defined scope for your survey.
4. *What are the timeline and staffing for the study?* When undertaking a local study, planning ahead is essential. Consider how much time and staff effort are needed in planning and refining the survey instrument, conducting the survey, and analyzing the results. Finalizing and implementing the timeline up front will assist staff in understanding the flow and measurable goals of the study, as well as maximizing the time and staff resources available.
5. *Are there national studies that can be used for benchmarking purposes?* Identifying one or more complementary studies relevant to your research will assist in providing a more seamless connection between local and national data. Look for national studies that cover the same user population and/or topic area that you are interested in. Most studies make their survey questions available to the public. Consider using similar wording in the questions on your survey instrument in order to make correlations and analysis much easier and more powerful.
6. *How will results be analyzed and implemented?* Will the results of your study be used to inform a current strategic planning process or other current planning initiative in your library? Knowing beforehand how results will be deployed to inform future decisions will help add power and a time-sensitive focus to your survey. It may also assist in bringing more administrative resources to your study.

Local studies can provide valuable information to libraries. In "Library Service Perceptions: A Study of Two Universities," Sutton, Bazirjian, and Zerwas (2009) replicated the 2005 OCLC study, *Perceptions of Libraries and Information Resources,* on two North Carolina university campuses. The study found that local factors in place at a specific university can affect student responses. The authors stressed the importance of using local data to drive decision making, rather than relying on more globally focused data. The importance of conducting local surveys to discern the needs of a library's specific user pool is stressed throughout the article. According to Albright,

"Internal information includes organization-specific information that can be compared to the findings of external scanning in order to maximize organizational responsiveness" (2004, 44).

CONCLUSION

Abels (2002) notes,

> Competitive intelligence, knowing what competitors are doing, requires one to define the competition. In an environmental scan, the competition has to be defined in the broadest sense, going beyond obvious competitors to potential competitors in other industries. Libraries have often considered information brokers to be competitors; now libraries have to compete with bookstores, the Internet, and search engines.

Conducted properly, an environmental scan can help libraries look at new and emerging user needs and trends locally, nationally, and internally. A scan can serve as an "early warning system," helping libraries maintain preparedness for potential organizational threats (Albright, 2004, 45). Think about your library community, your library's needs, and your user population. Are there opportunities for collaboration on local user studies? Are there existing scans that could be utilized to help direct efforts to serve your local population? Is there a group in your library that would serve as a natural guide for designing and implementing scanning in tandem with a strategic planning process? Using the guidelines shared in this chapter, your library can develop a plan for environmental scanning that can help move the library forward in a future-thinking, purposeful manner, while giving librarians and staff the opportunity to engage in creative problem solving and forecasting regarding the library's future services and activities.

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II

NEW AND IMPROVED SERVICE MODELS

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2

DEMYSTIFYING VIRTUAL REFERENCE

Daniel Hickey

BY FOOT OR BY FINGERTIP?

When one thinks about a library, it's not unlikely that the mind will conjure up an image of collections housed within a physical building. However, another front door to the library demands increased attention from librarians and patrons alike: the library's Web site. Within the space of a human lifetime the medium and method for disseminating and retrieving information have shifted drastically, from tangible to digital media. This shift's repercussions have transformed the information landscape. Although the challenges that the changes in information retrieval and dissemination have posed now seem mundane, libraries are still struggling with the long-term, far-reaching consequences.

Before the advent of the networked computer, libraries served as a primary hub for information dissemination. Today, libraries must compete with a multitude of formal and informal information providers in the digital sphere. One aspect of information retrieval that libraries still have a corner on, however, is reference. The profession places a high priority on reference as a traditional and increasingly valued role of librarians. With the exponential proliferation of available information, users—regardless of their level of information literacy—often require research assistance beyond that which a search algorithm or frequently asked questions (FAQs) page can provide.

Virtual reference services have become ubiquitous for libraries with an online presence. However, these services rarely occupy a space of prominence on a library's main Web site. At the time of this writing, only 6 of the 124 member libraries of the Association of Research Libraries have chat widgets

on the main page that allow patrons to immediately contact a library employee for assistance. (In contrast, almost all the member libraries contain prominent search boxes that let users directly interact with collections.) In almost all cases, virtual reference services are at least one click deeper into the Web site. These links often occupy very little screen real estate, making it difficult for them to compete with other Web content.

Why Aren't Virtual Reference Services at the Fore at More or All Libraries?

Increasingly, researchers are calling into question the cost-effectiveness of staffing a physical reference desk with librarians. The outcome of one study, conducted by Susan Ryan (2008), suggested that 74 percent of questions received at a traditional reference desk did not require the expertise of a trained professional to answer. With evidence-based decision making decreasing the need for librarians at a desk, the logical place for reference librarians to assist patrons is "out and about meeting users when and where the help is needed" (Watstein and Bell, 2008, 6). In the current research milieu, meeting patrons at their point of need is almost synonymous with providing virtual reference services. Libraries have a unique, and largely unexploited, opportunity to highlight their strength in reference by pushing these services to the forefront in online environments. Doing so is only one method that librarians can employ to make virtual reference services a priority at their library.

ASTOUNDING SAMUEL GREEN

In 1876, in the first issue of *Library Journal,* Samuel Green of the Worcester Public Library published an article entitled "Personal Relations between Librarians and Readers" in which he chronicled the many situations in which a librarian might be of assistance in fulfilling a patron's information need. Notably absent from these interactions was the use of letter writing to communicate with people at a distance. In the vision of reference services that Green presents to readers, the patron invariably "calls for the work, and takes it home to study" (Green, 1876, 77). Now, the patron, the materials she's looking for, and even the librarian answering her question need not reside in a library for a reference transaction to occur.

Joan Reitz's *Online Dictionary for Library and Information Science* (2007) defines *digital reference* as "services requested and provided over the Internet, usually via e-mail, instant messaging ('chat'), or Web-based submission forms, usually answered by librarians in the reference department of a library, sometimes by the participants in a collaborative reference system serving more than one institution." The core of this slightly antiquated definition rings surprisingly true, despite methods (such as virtual worlds and

text messaging) that don't strictly rely on the use of a Web browser to access the Internet.

Although technology evolves rapidly, it is useful to frame current virtual reference services in terms of the history of remote reference. Whether a librarian chooses to send a letter, write an e-mail, or video chat with a user, his intended goal is the same. The only difference is the medium he selects and the constraints that medium places on communication. As mainstream methods of communication change, librarians must ensure that their approach to virtual reference is flexible enough to accommodate necessary revisions to services.

As of December 2009, the Pew Internet & American Life Project reported that 93 percent of Americans aged 18 to 29 use the Internet (Rainie, 2010). Although older Americans are less likely to use the Internet, it is important to note that as educational attainment increases so does the statistical likelihood that one is an Internet user. While 63 percent of people with a high school education use the Internet, the percentage jumps to 87 percent for those with a college degree and 94 percent for those with tertiary education (Rainie, 2010).

Between 2005 and 2008 all age groups polled (from age 12 to 76 and over) experienced growth in Internet use (Jones and Fox, 2010). In the foreseeable future, it seems likely that Internet use will increase and eventually level off to a constant across age groups and levels of educational attainment. To remain relevant, libraries must be ready for patron bases that increasingly expect reference interactions to take place in a technologically mediated, virtual environment. In addition, librarians must be receptive to unanticipated changes in how their users initiate contact in virtual environments:

> Despite the power that email holds among adults as a major mode of personal and professional communication, it is not a particularly important part of the communication arsenal of today's teens. Only 14% of all teens report sending emails to their friends every day, making it the least popular form of daily social communication on the list we queried [landline, mobile phone, in person, IM, text message, messaging over social networking sites, email]. (Lenhart, Madden, Smith, and Macgill, 2009, iv)

While e-mail is a primary mode of professional communication for librarians, there may come a time when maintaining a presence in a prevailing social networking Web site becomes just as important to conversing with patrons.

In the same year that Green's landmark article was published, Alexander Graham Bell was awarded a patent for the telephone, a technology still used today by librarians to provide reference services at a distance. Although we don't know whether Green found the advent of telecommunication particularly striking or relevant to his interactions with patrons, hindsight allows today's librarians to imagine the unique set of challenges new technologies can pose to interpersonal communication.

THE HARDEST BUTTON TO BUTTON

The *Virtual Reference Bibliography* (http://vrbib.rutgers.edu/index.php), first established by Bernie Sloan and now maintained at Rutgers by Marie Radford, is an index of over 900 works about virtual reference. Searching a library science database such as Library and Information Science Abstracts (LISA) will yield approximately the same number of citations. Clearly, a very large corpus of literature already surrounds virtual reference. Why are librarians still talking about it? The answer to this question is multipronged and illustrates the challenges that face virtual reference providers.

Many of the problems that virtual reference practitioners deal with are technological in nature. First and foremost, much of the software that librarians employ to connect with remote users was never designed with the reference interview in mind. Instead, these young technologies were created to facilitate casual communication and thus lacked the functionality required to coordinate online reference at a library. Examples of technologies that have achieved widespread use due to their popularity with users are programs such as AOL Instant Messenger or services such as text messaging. As these technologies developed over time, their creators' goals were focused on a set of needs distinct from those in reference work.

At the same time, software specifically designed for librarians and virtual reference has proven less than competitive. Vendor products became notorious for lagging behind technologically, imposing unreasonable constraints on users (such as having to install software on their computers), and generally not meeting needs as easily as free products. Only recently have freely available and vendor products begun to meet the needs of both the librarian and the user.

Libraries also have philosophical tendencies that serve as hurdles to excellence in virtual reference. Although this is a stereotype and not true of all institutions or individuals, libraries have a reputation for being slow to change, taking conservative or wait-and-see approaches. Instead of taking risks and seizing opportunities, libraries hesitate and are subsequently forced to change to avoid obsolescence. For visionary virtual reference providers, institutional resistance to change may be the largest challenge to overcome for virtual reference implementation. Libraries of the 21st century that are stuck with late 20th-century technological infrastructures need to remain cognizant of advances in virtual reference. Lina Coelho (2009) summed up this sentiment perfectly when she stated that "it is essential to know what is happening beyond 'the limits of the possible' set by your institution's IT department."

If libraries want software tailored to both librarians' and users' needs, one option is to build and maintain the tool in-house. Although not focused on virtual reference, an excellent example of open-source software is Oregon State University's *Library à la Carte*. Ideally, instead of one library designing and disseminating virtual reference software, several libraries could band