Revitalizing Reference

Student Workers at the Reference Desk
From an Information Commons to a Learning Commons: Twelve Years of Change and Innovation at the OSU Valley Library
Introducing Teachers to Library Databases
Chat Widget Placement Makes All the Difference!
Analyzing Value: EBSCO and Gale
Evolving to Meet Changing Expectations: Adult Services at the Corvallis-Benton County Public Library
Intentional Reference: A Mindful Approach to Fielding Questions Beyond the Desk
Reference Hasn’t Changed at All, but Reference Has Changed a Lot
Revitalizing Reference

5
Student Workers at the Reference Desk
Heidi E.K. Senior

7
From an Information Commons to a Learning Commons: Twelve Years of Change and Innovation at the OSU Valley Library
Cheryl Middleton

13
Introducing Teachers to Library Databases
Luke Kralik

16
Chat Widget Placement Makes All the Difference!
Paul Frantz & Brian Westra

22
Analyzing Value: EBSCO and Gale
Steve Silver & Scott Gallagher-Starr

26
Evolving to Meet Changing Expectations: Adult Services at the Corvallis-Benton County Public Library
Lisa Tattersall

30
Intentional Reference: A Mindful Approach to Fielding Questions Beyond the Desk
Dale Vdmar

34
Reference Hasn’t Changed at All, but Reference Has Changed a Lot
Anne Billeter

Upcoming Issue
Fall 2010
Openness in Libraries
I’ve been fielding reference questions since 1982 when I landed my first reference librarian position at BA Investment Management Corporation. One thing that has remained constant through the years is that users have questions and reference librarians know how to find answers. It is amazingly rewarding when you do it well. Not a day goes by that I don’t learn something new and receive the gratitude of a patron who often goes away impressed by what librarians can do for them. That gratitude can’t be put in the bank, but it is worth an awful lot to me.

When I think back to 1988, the year I arrived at Southern Oregon State College, as SOU was known then, it’s hard not to think about how reference work has changed through the years. Back then we had one electronic database, ERIC on CD-ROM, and we were so excited about it we even had business students using it for their research. Dialog searches were commonly done using a dumb terminal with a phone receiver plugged into it. Boy, you wanted to be fast and prepared when you got online where every second cost you money! Gradually we added computers to the reference area and moved the microfilm and microfiche elsewhere. Each computer was designated to run a particular database on a CD-ROM. We eventually added CD towers and little by little, more and more print reference sources became a thing of the past. It was pretty traumatic when we cancelled Readers’ Guide to Periodical Literature in print and went entirely with the electronic version. Those were the days when users had to physically come into the library to use databases. Gradually CDs became passé and databases became accessible through remote servers. Our card catalog also became a thing of the past and we auctioned off the catalog cases. Increasingly we used electronic resources to answer reference questions and then the most amazing tool of all came along … the Internet. At first we had to be encouraged to use it to answer questions, but now it is often the first tool of choice. The ultimate, “Killer App” if you will. Our users no longer have to be in the library to access our resources. They can use the catalog and databases from home 24/7 and can also virtually chat with a reference librarian day or night. Our reference area has transformed into a Learning Commons. We’ve added a Writing Center and Math Lab to our services and our partners at the reference desk are undergraduate students who take care of all the technical questions.

In this issue of OLA Quarterly we’ll hear from Heidi Senior about the experience of employing student reference assistants at the University of Portland. Cheryl Middleton from OSU leads us through the creation of their Learning Commons and how it has evolved through the years. Luke Kralick from Tillamook County discusses a unique partnership with their Educational Service District to provide teachers with a class on library databases that can be taken for continuing education credit. Paul Frantz and Brian Westra from the University of Oregon engage us in a lively discussion about chat reference widgets and the importance of location, location, location. Steve Silver and Scott Gallagher-Starr explain what happened at Northwest Christian University when the vendor for Oregon’s Statewide Database Licensing Program switched from EBSCO to Gale. This change was particularly difficult for those of us in academic reference services. Lisa Tattersall describes how reference services have grown and changed at Corvallis-Benton County Library. Dale Vidmar describes a process of “Intentional Reference” and finally Anne Billeter gives us a both sides of the argument in her article, “Reference Hasn’t Changed at All, but Reference Has Changed a Lot.”
I offer sincere thanks to the contributors of this issue and particularly to Diane Sotak who held my hand through the editing process. The articles reflect the myriad issues faced by all types of libraries as we attempt to provide excellent service to our users in an environment of rapidly changing technology and diminishing resources. “Revitalizing Reference” has been an enjoyable theme to explore in this issue. I hope you enjoy it as much as I have.

Guest editor
Connie Anderson-Cohoon
Reference Services Coordinator
Hannon Library
Southern Oregon University
and
OLA President 2009–2010
Student Workers at the Reference Desk

by Heidi E.K. Senior
Reference/Instruction Librarian,
Wilson W. Clark Memorial Library, University of Portland

At the University of Portland’s Wilson W. Clark Memorial Library, three reference librarians each spend approximately 12 hours per week at the reference desk during the academic year. Yet, we advertise that the reference desk is staffed all 101.5 hours that the library is open. How do we accomplish this? By hiring undergraduate student workers as reference assistants. The University of Portland library is not the only academic library in Oregon to employ undergraduate reference assistants—Oregon State University and the University of Oregon also have students working at the reference desk, and we imagine other libraries do as well. Nor were we the first; we learned a lot from the University of Oregon program. But we might rely on ours more heavily than these larger institutions.

Over the past 11 years, we have employed 62 reference assistants. In the beginning students covered a few hours a week, but we gradually expanded hours of student coverage so that librarians could fulfill the increased demand for library instruction. During the school year students cover evening and weekend hours when a librarian is not available, and some morning and afternoon hours with librarian backup. During the summer they are at the reference desk all hours that the library is open, with librarian backup from 10 am–4 pm on weekdays.

Our hiring process identifies mature students capable of handling a variety of questions. We screen for applications from sophomores or juniors who have spent some time at the university and can answer questions about the campus—and who have probably taken at least one research-intensive class. Occasionally we hire second-semester freshmen, but we generally do not hire seniors as we would like to retain our reference assistants for as long as possible once we’ve trained them. We look for familiarity with research tools but don’t perform any other screening, such as knowledge or ability tests. In the interview, we ask students to describe the process they used when they taught someone how to do something, not necessarily research-related, and about a time when they had to refer a question. We look for students who are cheerful, energetic and outgoing but who are also good listeners.

Students receive intensive training. The initial training takes 4–6 hours and covers a wide range of topics:

- the library facility, services and policies
- the library catalog inside and out as well as our consortial catalog
- database searching tips, especially for our most frequently-used databases
- citation help, including using RefWorks
- tracking down full text of articles and books
- computer-related troubleshooting

Throughout the training we emphasize important reference behaviors: looking approachable, asking questions to determine what a patron needs, helping patrons use databases and resources, and knowing when to refer questions to the librarians.

We reinforce this early training with a set of worksheets that students complete over the course of their first semester. In addition to covering the above bullet points, these worksheets are about communicating with people with disabilities, which students complete after viewing a film, and recognizing inadequately-answered questions.

Ongoing training also occurs throughout the students’ employment, via replies to their shift reports. At the end of each shift, students post the questions they received and how they responded to a reference team blog hosted on Blogger. Shift reports are formatted as a numbered list to facilitate statistics-keeping. Librarians post comments to shift reports as necessary, usually
to explain how we followed up on a referral, but sometimes to suggest that a referral would have been a good idea, or to offer additional resources to recommend if a similar question is asked. Blog posts and comments are sent to the entire team through a Google Groups mailing list. To increase the probability that students have seen librarian responses to shift reports, we send a monthly executive summary to the mailing list. From tracking student shift reports and librarian responses, we have found that students can adequately answer more than 90 percent of the questions they encounter (see Table 1).

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th># Questions answered by students</th>
<th># Questions with librarian follow-up</th>
<th>% of questions with librarian follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>4433</td>
<td>92</td>
<td>2.08</td>
</tr>
<tr>
<td>2008</td>
<td>4198</td>
<td>97</td>
<td>2.30</td>
</tr>
<tr>
<td>2007</td>
<td>3812</td>
<td>112</td>
<td>2.98</td>
</tr>
<tr>
<td>2006</td>
<td>3983</td>
<td>118</td>
<td>2.96</td>
</tr>
</tbody>
</table>

During the fall semester, and ideally each semester, we bring the reference team together for a training meeting to discuss changes that have occurred during breaks. Past training meetings have included hands-on practice with Libstats (our web-based reference statistics tracking program), answering Instant Messaging questions via Meebo and using the RefWorks citation management tool.

We continue to work on getting students to refer questions to the librarians. Since they receive so much training, they sometimes believe they can solve every problem. Or they are reluctant to refer when a librarian will not reply until the next day; we have better luck with referrals when a librarian is immediately available. To increase the likelihood of referrals, we coach the students in our different categories of reference statistics (Directional, Reference 0–5 Minutes, and Reference 5+ Minutes), and encourage them to have a librarian follow up on the extended questions. During training we tell students to offer referrals proactively; they should say “let me take your contact information to have a librarian follow up” rather than “would you like a librarian to follow up?” In the latter case, patrons might see a referral as imposing on the librarians, while we want them to see it as a natural part of reference service.

In our 11 years of experience, we have rarely had reliability and service problems with student workers. One student had a habit of responding “I don’t know,” and another impersonated one of the reference librarians while instant messaging friends, but the most common issue has been punctuality and attendance. We have resolved these problems by emphasizing appropriate behavior in our employment contract, by instituting a “three strikes and you are out” system, and by adding and revising interview questions to better identify good candidates. A librarian meets with each student after an infraction occurs, to offer suggestions for improvement and additional training if necessary, so that if the pattern continues all parties can recognize that the student is not a good fit for a reference assistant position.

Students benefit from their work experience as much as, if not more, than the library. They use their research knowledge in their school work and after graduation report that potential employers are pleased with their apparent ability to research and to help others. A few of our students have gone into library school or are considering it. Overall, we are pleased with our reference student experience, have confidence in their abilities, and are happy with their service. We encourage other libraries to explore this opportunity to expand their reference service.
In 1999 the Oregon State University Valley Library had just undergone an extensive remodeling process and had installed state-of-the-art technology in a library information commons. The mission of the Information Commons was to provide one central location where scholars could discover, retrieve, synthesize and create new information. In the Fall 2000 *OLA Quarterly*, Richard Griffin penned a brief article that highlighted the technological planning that took place to develop the Information Commons. In his article, he referred to the Information Commons as the centerpiece of the library. This statement holds as true today as it did ten years ago. The Information Commons has undergone significant transformations to keep up with the evolving technology and information needs of OSU’s student body.

This article will focus on three major phases of development for the physical information commons; the technology, the difference between an information commons and a computer lab, and identifying what our users need in an information commons to be successful. However, it should be noted that many of the same questions we sought to answer for the physical environment also apply to the virtual environment.

When the Information Commons opened in 1998, the emphasis was on personal computers and access to the resources that were available on those computers. This was new territory for the library faculty and we were concerned about the gap between our user expectations and our expertise with the technology.

How do we handle new technology our users expect and balance that with what we can provide?

In response to this question, we hired student assistants with computer software skills and in the beginning referred our technical questions to those students. We learned by observing and by doing when the technical students were not available, and eventually developed a small library of software handbooks that we could use for harder questions. For a period of time, things remained static as we came to see the technology as simply one more tool to assist our users with their information and research needs. As we became more comfortable with this concept we began grappling with standardizing computer desktops, determining what software packages to make available, as well as finding optimum staffing for the Reference Desk in the Information Commons.

Although things in the Commons were static in this period, the library was not. While reference question statistics were dropping, technology-related questions were increasing and unlike other academic libraries, we were seeing increasing numbers of students in the library (Carlson A35). The Valley Library was the primary place on campus where students came to use computers, talk with friends, relax and study. The Commons became known as the computer lab in the library and this led us to ask, “How do we make sure that we’re not just about the technology; just another computer lab on campus?”

We determined that what differentiated the Valley Library Information Commons from a computer lab was the Library’s ability to provide access to expert subject content and assistance with that content, as well as providing space for non-library services that complemented and contributed to the academic success of OSU students.

The first non-library student service to join the Valley Library Information Commons was the Collaborative Learning Center (CLC). The College of Science approached the library
administration and asked us to consider partnering with them and other student success units on campus to create a space in the Information Commons where OSU students could receive drop-in tutoring in chemistry, physics, mathematics and writing. In 2004, the Collaborative Learning Center opened with the understanding that The Valley Library would provide the space, technology and building maintenance, and the academic departments would provide the peer tutors. This has been a very successful partnership and from September 2009 to May 2010, 73,711 individuals visited this service point. The development of the CLC reinforced the idea that the library was a campus “centerpiece” and students could do even more of their academic work in one location.

The next student service to join the Information Commons was Student Media Services (SMS) in September of 2009. SMS is solely supported by student fees and their mission is “to provide multimedia facilities, equipment and technical support for students producing and presenting academic work” (Student Media Services). SMS complements the mission of the OSU Libraries to be a center for student learning and work, incorporating tutoring, research, and the necessary technology support for the effective completion of student papers and projects (OSU Libraries Strategic Plan, 7). The third student service to take up residence in the Information Commons was the OSU Student Computer Help Desk. This service desk provides computer support to OSU students, staff, and faculty (Technology Support Services). The OSU Computer Help Desk and Reference Desk staffs share a desk and provide services from a single location. This service is only available to students, as it is funded by student fees. Faculty and staff in need of computer assistance services are directed to offices elsewhere in the Valley Library and can make appointments with a technician. Sharing a service point works well because many of the questions that are asked at the Reference Desk relate to OSU student computing resources, authentication for access to university computer resources and course management software (Blackboard), as well as setting up their home computers and laptops for remote access to university and library resources. Library staff continue to provide information and research assistance, as well as basic support of the computers and printers in the Information Commons. However, Reference Desk and Computer Help Desk staff can easily refer a question to each other without losing the library user in the transition. Since the opening of this service point in Fall of 2009, the Computer Help Desk has served over 2,900 students and serviced 2,152 student laptops.

The addition of these three new student service points in the Valley Library Information Commons is beneficial to the departments providing the services and to OSU students because, unlike other departments on campus, the library is open seven days a week, plus nights and weekends during the regular academic term. These student services blend well with library resources and services in the Commons, and are in alignment with the original intent of the Information Commons to create a centralized point for OSU students to meet their information discovery and creation needs.

The next question we started to explore was how to enhance the learning aspects of the Commons. In 2006, our Undergraduate Services librarian and one of our Science Librarians crafted a proposal to begin transforming the Valley Library Information Commons to a Learning Commons (Walker and Deitering, 2006). First, we relocated the reference service to a desk that was more visible to users entering the library. Next, we replaced a number of our single seat computer workstations with workstations that were designed for collaborative work and purchased task chairs on wheels for all computer workstations. Finally, we reduced our refer-
ence collection by a fourth and furnished the reclaimed space with movable task chairs, tables, and soft chairs with arm tablets for use by students with laptop computers. While the impact of the reference desk staffing move was not measured, we did survey library users for their response to the new furnishings. We used a pop-up survey on the computer desktops that asked respondents to rank the new furnishings in the Information Commons on a six point scale. The scale ranged from “love them” to “hate them.” We had 349 responses and 90 percent of the responses fell into the strongly positive categories of “love them” or “like them a lot.”

Once we implemented changes in the physical environment that allowed students to create their own learning environments, we began to examine how we staffed the Reference Desk. Like many academic libraries, The Valley Library was struggling with the optimum staffing of a reference/information service point and effectively utilizing our most costly resource, the library faculty member. Our reference desk statistics had dropped by 50 percent; 17,818 questions per year in 2003 to 8,877 in 2008. Concurrently, there was an increased expectation that library faculty would engage more with academic departments to promote information literacy, identify and manage digital content, and develop online tools and services that enabled users to find, organize and create information more easily. A pool of seven part-time librarians was created to provide reference desk coverage. Library faculty worked with their department heads to arrange a reduced reference desk load or to opt out of reference desk hours so that they could spend time working on research and special projects. However, our staffing model still relied on faculty librarians for primary coverage.
In the fall of 2008, with urging from University Librarian Karyle Butcher, we began exploring staffing the reference desk in a way that did not rely on faculty librarians. We conducted a literature search to identify different models for providing academic library reference desk staffing and services. We did not find a definitive consensus, and realized that while there were similarities between academic library reference services, every institution was also unique. Next, we conducted focus groups with our part-time librarians, paraprofessionals and students that provide services at the reference desk. We started each focus group with the premise that library faculty would no longer staff the physical reference desk and asked a series of questions that included:

What is the most important service the reference desk provides?

What do you think library users want when they come to the reference desk?

What kind of training and support do you think you will need with the new model in place?

In answer to the first two questions, our part-time librarians and paraprofessional staff agreed that library users wanted a comfortable, welcoming place where they could ask any question, and they expected answers. Part-time librarians and student employees indicated that library users were not interested in instruction but just wanted the answer, and were not receptive to having to wait if the question needed to be referred to library faculty member.“They want service and they want it fast.” All three focus groups indicated that in the new model with no academic librarian staffing, they wanted to receive additional training in providing reference services.

To address the requests for training and quantify the types of questions being asked at our reference desk, we logged every reference transaction for ten days in November 2008. Reference desk staff coded questions as Reference, Directional or Technical and then each transaction was reviewed by a senior library faculty member with more than ten years of experience in reference services to determine if the questions required the expertise of a library faculty member, or if they could be answered by a well-trained reference desk staff member. Our analysis of 768 transactions found that 80 percent of the questions being asked at our reference desk did not require an academic faculty member to answer them. We also identified which questions were being asked most frequently and reviewed our training materials to be sure that these areas were addressed.

In the Fall of 2009 we switched to having no faculty librarians at the Reference Desk in the Commons. The desk is staffed by a pool of part-time librarians and student assistants. Library faculty provide backup support virtually and by chat. We are still analyzing how successful our new service model has been, but anecdotally we can relate that library staff and users have been happy with the arrangement.
What’s next for the Valley Library Information Commons?

Currently under the direction of our new Associate University Librarian for Innovative Services, Jennifer Nutefall, the name of our Commons has changed from the Valley Information Commons to the Valley Library Learning Commons. We reclaimed approximately 5,000 linear feet for the Learning Commons by eliminating the print reference collection. Also, we have been engaged in a conversation with library users through a series of focus group and surveys asking them how they think the space should be furnished and organized. Fall term 2010 will see yet another iteration of the Learning Commons designed to promote OSU student success.

Over the past twelve years, we have made significant changes to the Commons environment. In 2009, six library faculty members received a library innovation grant to fund visits to nine academic library commons spaces across the country. They brought back a wealth of information but one of the most important is that a Commons is not limited by physical space; the Commons concept can be embedded throughout the entire Library (Hussong-Christian, Rempel, Deitering, 2010). We’re exploring what changes and innovations this will bring to today’s library commons.
**Works Cited**


Introducing Teachers to Library Databases

by Luke Kralik
Reference Librarian, Tillamook County Library

“Do you believe?” he cried.
“If you believe,” he shouted to them, “clap your hands; don’t let Tink die.”
Many clapped.
Some didn’t.
A few little beasts hissed. —from J.M. Berrie’s Peter Pan

Seeing is Believing
Have you ever tried to tell a patron about your library’s databases? If you have, did it feel more like you were describing an imaginary friend than describing a valuable library resource? And when the almost inevitable “so they’re on the Internet?” question was asked, did you feel like you were describing an imaginary friend, who also lived in an imaginary place?

Explaining the usefulness of databases in a vacuum can be hard. Patrons who are unfamiliar with databases usually need a demonstration in order to see their value. Unfortunately, this need for a one-on-one interaction limits the visibility of the resource. It would be impractical to assail everyone who walks into the library with database instruction, but how else can databases be discovered?

Our solution was to offer database classes to the general public. We already had a handful of basic computer classes and adding another seemed like an elegant solution. As the months went on it seemed like we could not offer enough basic Internet and e-mail skills classes, but our database sessions were poorly attended. It was clear that our current plan was not working. We needed a new, more effective way, to make patrons aware of this important resource.

Leveraging a Good Idea
At the 2009 OLA conference we had the good fortune to attend a presentation by Peggy Bryan. Peggy is a librarian for the Whitman County Library in southeast Washington. With the help of her staff she created a database class designed for the teachers in her community. However, initiating a library class for teachers can be difficult. While their connections to the local community make them a desirable group to work with, their busy schedules can often hinder a meaningful programming.

Outcomes of Peggy’s Program:

• In the first year they had a 900% increase in database use
• They had a 400% increase the second year
• They experienced their most successful School Library Card Drive
• Received free, (and positive) local press dedicated to their achievements
• Built relationships with educators and schools
The genius behind Peggy’s program was that she took the motivations of her audience into account. Rather than offering a class that the teachers could take for fun, Peggy created a class that teachers could take for credit toward their continuing education requirements. Peggy was able to leverage this simple idea with great success. With the legitimacy of a “for credit” class, she was able to gain instant acceptance and provide a tangible and visible benefit to the teachers in her community.

We wondered ... could we reproduce something like that here in Oregon? Fortunately for us, Peggy is as generous as she is inspiring. When we asked her if she had any advice she sent her entire lesson plan and all of her promotional material.

**Our Program**

The first thing we did was call our local Educational Service District (ESD). We told them about Peggy’s program and explained how we would like to try something similar. When describing the program we made sure to mention that we were introducing a valuable resource that could also save the school district money and travel time for the teachers. That simple phone call resulted in an invitation to present our idea at the next meeting of the school principals and superintendents.

Due to technological limitations at the meeting, we were forced into the difficult task of describing the databases. Our handouts and bookmarks were well received, and our descriptions of the databases stayed fairly lucid. However, the most persuasive part of our argument was that such a program had already proved successful in Washington.

After several months we received a call from the ESD. They wondered how soon we could send over a class outline for their approval. We sent it right away, but said we would need a month to prepare the class materials and secure a viable venue.

While designing our program, we learned that Oregon teachers need to accumulate Professional Development Units (PUDs) in order to retain their teaching credentials. Each classroom hour equals one PUD. We wanted our class to be as accessible and as useful as possible so we decided a one hour session would be best. This decision also helped us focus on what we wanted to cover and carefully consider the reasons we find databases so useful.

### Goals of the Presentation

**Our Main Purpose:**
- Demonstrate the usefulness of the library databases

**Primary Objectives:**
- Teach the basic skills needed to get the most out of the databases
- Articulate why these resources enhance student performance
- Show how teachers can use these resources to develop their professional skills

**Desired Outcomes:**
- Increase database use by students and teachers
- Set groundwork for continued collaboration with schools
While working on our presentation, we began to search for a location to teach the course. For the sake of convenience, we wanted to hold the class shortly after school ended. Our library was not a viable option because our computers are busiest at this time. Following a short brainstorming session, we decided to give our local community college a call. Since our class was free and would benefit the community, they were more than happy to provide a space for us.

Our last step was getting the word out to the teachers. Because we were in cahoots with the ESD, we were able to take advantage of their infrastructure. We announced our program through the ESD’s e-mail lists, and used their courier to deliver a poster and fliers for all the teachers. As an extra precaution, I called the schools and gave the school secretary or the mail room staff a heads up.

With our announcements made, our course work prepared and our venue secure, we were ready for the presentation.

The Presentation
Our presentation material and outline can be viewed online (http://www.tillamook.plinkit.org/eshelf-research/teacherdatabaseclass/) and should give you a good idea of how we proceeded, so I will not go into too much detail here. However, I would like to share some of the more effective ideas we used.

• We brought all of our print Gale encyclopedias that were included in the database. We also hauled in a full year’s worth of any print journals we still had that were also covered electronically. The amount of material made a strong impression on our audience and helped give the electronic databases a physical presence.

• We printed up complete title lists of all the material covered in the databases. This was also impressive, and made for a good visual aid.

• We only presented features that we felt a first time user might find useful, and possibly interesting. We made no mention of Boolean operators or automated article notifications, and instead focused on keyword searching, limiting to full text and the importance of picking the best database for your search topic.

• We did not use Power Point slides. In my opinion, the only thing with less visual pizzazz than a database is a slide of a database!

How Does This Reflect a Change in Reference
With more reference materials becoming invisible to the naked eye, the need to make patrons aware of them becomes increasingly important. We, as librarians, need to take active roles in promoting these resources. Many important user groups are either unaware of, or do not fully appreciate, the benefits that databases provide. Hopefully our program will help you generate some ideas to try at your library. And like Peggy, we are happy to share more. Just ask!

List of Databases Covered
• Kids InfoBits
• Student Resource Center Gold
• Gale Virtual Reference Library
• Educator’s Reference Complete
A prevailing attitude among academic librarians toward reference is that this service is in a numerical decline and is not worth maintaining at previous staffing levels. So, those of us who work at the University of Oregon’s Knight Library research/information desk were pleasantly surprised when the number of reference interactions increased from Fall term 2008 to Fall term 2009 (see table 1). A major reason for this increase was the rise of chat reference interactions.

Table 1
Knight Library Reference Interactions

<table>
<thead>
<tr>
<th>Fall term 2008*</th>
<th>Fall term 2009*</th>
</tr>
</thead>
<tbody>
<tr>
<td>3899 reference interactions</td>
<td>4397 reference interactions</td>
</tr>
<tr>
<td>288 by chat (using Meebo chat software)</td>
<td>1482 by chat (using LibraryH3lp chat software)</td>
</tr>
</tbody>
</table>

* Fall term totals do not include directional or computer-related questions.

What accounted for the rise in chat interactions? We don’t attribute the increase to switching from Meebo to LibraryH3lp. Both employ similar widgets; we doubt that patrons were aware of any difference in chat look or performance.

We believe the increase occurred because we placed chat widgets in more locations on library Web pages, especially those with the highest traffic. In Fall term 2008, patrons could only ask a chat question from the Ask a Librarian page or from a search result in the local library catalog (see fig. 1).
By Fall term 2009, we had added chat widgets to the library’s FindText and OneSearch Web pages. FindText is an oft-used service that enables patrons to locate print or online full text articles from citations they find in database searches (see fig. 2).

Likewise, OneSearch, a federated search service, allows patrons to search for articles in several databases simultaneously, and we added chat widgets to both the search and results pages of this service (see fig. 3).
We believe the placement of the LibraryH3lp chat widget on Web pages for these two highly-used services of our Library resulted in the more than 500 percent increase in our chat interactions. The chat widgets provide assistance to the patron at the point of need when the patron may be experiencing difficulty interpreting what is appearing on the screen. This strategic location of the chat widget is designed to anticipate problems that patrons may face. For an early analysis of the effect of the placement of chat widgets, see: Wells, Catherine. “Location, Location, Location.” Reference & User Services Quarterly, 43.2 (2003): 133–137.

There are also societal and technological reasons for the increase in chat reference: the virtual use of our library resources, rather than the traditional in-person use; and the continued adoption of chat as a form of communication among college students (although chat would probably rank below texting and tweeting among these same students). But if we had relied on a chat widget only on our main library portal Web page, we believe we would not have seen the exponential increase.

The logs and chat transcripts that the LibraryH3lp software generates have a number of uses. One is for training purposes, where reference staff can review chat transcripts for purposes of establishing best practices. Equally useful is that chat logs provide a record of the pages that patrons were on when they initiated a chat. From these logs we can determine
if chat interactions are coming from our “Ask a Librarian” link on the main library portal, or if they are coming from our catalog, FindText, or OneSearch pages.

The table below shows the wide variety of source pages that our chat interactions came from, for 2009 and 2010 (January–May), as expressed in chats per week (see fig. 4). For the purposes of this article, all variants for a particular page were combined. For instance, the OneSearch numbers are a compilation of all chat interactions that were initiated from any of a large number of individual OneSearch pages. In particular, it is worth noting the large number of chats that came from WorldCat Local pages, once the chat widget was enabled in that resource in December 2009. When chat became possible from WorldCat Local, it also became a primary starting point for chat questions.

Fig. 4. Sources of Chats Per Week
Note: The chat widget for WorldCat Local was activated at the end of 2009. “Referer N/A” represents chat interactions where no source can be determined.
We are getting all kinds of questions on chat: reference, directional (“This book has x call number. Where is that!”), and service questions (“Are you open this weekend?” or “How do I reserve a study room?”). We are getting chat questions from patrons off-campus, on-campus, or even within the library (from patrons who would rather ask a chat question than walk to a service desk). The heaviest days for chat questions are Mondays and Tuesdays; the heaviest time period for chat questions is 2–5 pm (see fig. 5) The Knight Library offers chat service weekdays from 8 am–9 pm; Saturday from noon–6 pm; Sunday from noon–9 pm.

The placement of the chat widget on FindText, OneSearch, and WorldCat Local pages has meant that our most common chat reference question are from patrons who get lost within these systems. Questions such as the following dominate our chat interactions: “I would like the online version of x article from x journal. FindText says it’s available online, but I can’t get it. Can you help?”

Ironically, although patrons are using chat to ask questions about FindText, OneSearch, and authentication problems, the difficulties in conveying the context surrounding these questions makes chat an awkward tool for handling these interactions, as compared to in-person or even telephone communication. Authentication problems, for instance, involve so many variables, that dealing with it through chat can become an online guessing game.

Chat interactions have also become a numerically significant part of our total reference service. During Fall term 2009, the Knight research/information desk received 2,915 reference questions that were not chat-generated but were in-person or by telephone. So the 1,482 chat interactions accounted for approximately 34 percent of the total reference questions received; a percentage that we expect will only increase.

During the Christmas 2009 intersession, the number of in-person reference questions dropped to almost none. But we continued to receive reference questions through our chat service. This indicates that our patrons are continuing to work during the intersession on their research and teaching, are still in need of reference service, and find chat a convenient way to get that service.

<table>
<thead>
<tr>
<th>Chat Interactions by hour and day: Sep 20, 2009 - May 25, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>8:00  9:00  10:00  11:00  12:00  1:00  2:00  3:00  4:00  5:00  6:00  7:00  8:00  9:00  10:00</td>
</tr>
<tr>
<td>AM  AM  AM  AM  AM  AM  AM  PM  PM  PM  PM  PM  PM  PM  PM</td>
</tr>
<tr>
<td>Sun</td>
</tr>
<tr>
<td>Mon</td>
</tr>
<tr>
<td>Tue</td>
</tr>
<tr>
<td>Wed</td>
</tr>
<tr>
<td>Thu</td>
</tr>
<tr>
<td>Fri</td>
</tr>
<tr>
<td>Sat</td>
</tr>
</tbody>
</table>

Fig. 5. Chat Interactions by Hour and Day
In 2010, we added chat widgets to the result pages of the EBSCO databases. It will be interesting to see if fall term 2011 chat statistics show a further increase.

One might ask: Is chat reference going to be the dominant form of online reference in the future? Probably not. We have already had chat patrons ask us, “Why can’t I do this from my Blackberry or iPhone?” It may be that as we put more energy into chat reference, increasing the number of library Web pages that offer chat and increasing the number of service desks with chat queues, we may find that our patrons have shifted—are already shifting—their preferred form of communication to mobile devices, texting, and social media.

The fluid nature of social computing applications and information technology doesn’t mean we should throw up our hands and say it’s impossible to keep up with our patrons. We can monitor the research that libraries are conducting with mobile devices and other media, such as the use of WolfWidgets at North Carolina State University Libraries (http://www.lib.ncsu.edu/wolfwidgets/). Some tools require less technology investment, making it possible to test and adopt new approaches to reference. We can also try to avoid becoming too attached to any one technology.

Some final thoughts on the future of reference services:

1. Traditional reference services involving in-person and telephone interactions are numerically in decline.

2. The need for quality reference services will always remain, especially if electronic library resources remain bound to authentication, labyrinthine in the choices we ask our patrons to make, and prone to navigational complexity, frustration, and dead ends. Reference services may truly die when we reduce resource discovery and access to one, magic Google-like box. That day is not here yet.

3. Our initial experience with chat reference shows that previous traditional reference service is now being “redirected” to media that are more convenient for our patrons to use.

4. These new media—chat, texting, mobile devices, Twitter, etc.—may not be ideal in answering complex questions, but they will often be the media that our patrons prefer.

5. These forms of virtual reference, as convenient as they are, do not supplant but are complemented by the in-depth, in-person consultations that we also offer our library patrons.
When the Oregon State Library’s Statewide Database Licensing Committee announced that LSTA funds would be subsidizing a new vendor, rather than our long-standing vendor EBSCO Publishing, the Edward P. Kellenberger library at Northwest Christian University (NCU) faced a decision: whether or not to continue our subscription to the EBSCOhost database package we had enjoyed for many years. EBSCOhost databases had been our primary resource for online full text and students, as well as faculty, were tied to this particular tool for meeting their information needs. The money was found to continue our EBSCOhost subscription on our own, with the intent of doing a careful study of the costs and benefits of the two database packages. This article describes our process of doing that study and discusses our conclusions.

NCU is a very small, private liberal arts university in Eugene, Oregon. When Gale/Cengage was awarded the statewide contract, our student body was around 480 FTE. Over half of the FTEs were in our daytime undergraduate programs, with the remaining students in our evening Professional Studies Program (degree completion) and graduate programs. A small number of these students are in distance sites or online-only programs. The cost to continue EBSCOhost on our own was roughly equal to our entire electronic resources budget, so represented a very significant unplanned investment at a time when our university was struggling with budget concerns as many in Oregon were and still are. With very limited staff and financial resources we set about to determine if this investment was worthwhile for our university.

NCU already had an existing Library Advisory Committee (LAC), consisting of a few faculty and two professional librarians. This committee was charged with conducting the study and making a recommendation in time for budget planning in March 2010. To ensure that the interests and perspectives of students, the primary users of our online databases, were taken into account, an effort was made to recruit student representatives from our various student populations to serve on the committee for this project.

As a first step the LAC identified criteria for evaluating EBSCOhost and comparing the two online database packages. Those criteria included:

- search interfaces (ease of use, ability to discover all relevant documents, and the relevance of documents retrieved)
- scope (the number of journals and articles in full-text)
- number of scholarly/peer-reviewed articles in full-text
- degree of support for disciplines in which NCU has majors
- number of unique items in each database package
- “extras” (such as “MyEbsco”)
- reliability and the level of technical support
- cost

Costs were already known, so the LAC set about determining how best to address the other criteria. Constraints on available time for library staff and for faculty members of the LAC, along with difficulties in getting students fully engaged with the committee, hampered our efforts. As a result, not every identified criterion was reviewed or reviewed fully. During the process we also realized that usage statistics would be easy to obtain, so usage was added to the criteria.
In the end we prepared and conducted a student survey (see: http://bit.ly/dqEPot) to gauge student perceptions of the two interfaces; prepared and conducted a survey of faculty to generate a list of journals most important to them in their various disciplines to have available in full-text online (see survey: http://bit.ly/9YJulp and results: http://bit.ly/aN0FhD); and reviewed the COUNTER usage statistics from both databases over identical time periods. Time constraints precluded a review of reliability and support issues. Investigation of the various “extras” in each package, became a lower-priority criteria and assumed to be somewhat addressed in the student survey. A review of unique journal titles or number of articles in full text in each database was deemed too time-intensive and not attempted. We also determined that such a measure was not as useful in determining the added value of a database. We were not necessarily comparing the relative values of Gale and EBSCOhost, but determining if EBSCOhost represented enough added value to warrant the added expense.

The faculty survey was administered during a faculty assembly. This “captive audience” coupled with advance publicity and follow-up e-mails resulted in a very high response rate for faculty. This list of journal titles was then compared to the title lists for both EBSCOhost and Gale (see summary: http://bit.ly/djzaqt). The student surveys were administered in selected daytime undergraduate, evening Professional Studies, and evening Graduate classes. No scientific sampling method was used, but every attempt was made to select classes that would be representative and avoid the same students taking the survey multiple times. Ninety-five completed student surveys were received and tabulated (see results: http://bit.ly/9Sfa3u).

The averaged responses from the student survey are slightly higher for Gale for ease of use (3.4 vs. 3.0 on a 5 point scale) and slightly higher for EBSCOhost for usefulness (3.2 vs. 3.1). These differences are negligible and not significant, in addition to pointing in conflicting directions. Were student responses our only measurement, they would not justify the extra expense to continue our EBSCOhost subscription.

The analysis of faculty-supplied journal titles, however, tells a different story. Of the 30 titles deemed by faculty to be “vital” or “important” to have in full-text online for their discipline, 14 are available in EBSCOhost. Only 4 are available in Gale and all 4 of those titles are also available in EBSCOhost. For our faculty, there is a clear benefit to maintaining a subscription to EBSCOhost, in addition to the state-supplied subscription to Gale.

EBSCOhost and Gale both provide COUNTER version 3-compliant usage reports. A comparative chart (see fig. 1) shows how our students have been using each provider, month by month.

There are many factors that may help to explain the size of the disparity in usage. Chief among these would be the “newness” of the Gale databases to our established users, who are accustomed to turning to EBSCOhost for every request. Secondarily, we have added a number of specialized databases to the base EBSCOhost package, which we have not done for the Gale package. Accounting for these “extra” packages would be time-consuming and difficult; so far as we can determine fulltext results are not reported by database, but only as a total or by journal title. Additionally, EBSCOhost integrates databases so that full text content is cross-linked across their subscribed databases.

Considering that we were not comparing the databases, but determining the added value of EBSCOhost, and that the specialized databases had no direct parallels available from Gale, the LAC made note of these disparities but ultimately decided that the usage statistics were still valid and useful. The end result is that, for us, the EBSCOhost platform currently
Fig. 1. COUNTER Usage Reports
(Data for this chart are available at Google Docs, via http://bit.ly/cVyGY9) The calculated results for the average number of successful fulltext requests per search (green lines at the bottom of the chart, below the dates) show the greatest disparity for the two vendors. The darker green line, representing EBSCOhost, shows that EBSCO databases fulfill fulltext requests roughly twice as often as the Gale databases for our students during the time for which data are available.
provides significantly more full text articles for our users, on both a per-search and an absolute basis.

Though the results of the student survey are inconclusive, the usage statistics and faculty journal title list results demonstrate a clear added benefit to maintaining our EBSCOhost subscription. But does this added benefit justify the significant extra expense? This is a more difficult question to answer. Since the Gale package is provided by the state at no charge to NCU, a comparison of cost per journal title or cost per accessed article is not possible. Such an analysis would only compare Gale to EBSCOhost and not really answer the question of the added value of having of both. The committee also reviewed options for obtaining at least some of the content available in EBSCOhost through other vendors, but ultimately determined that these options held no advantage in either cost or access. In the end, the committee had no strong recommendation regarding EBSCOhost and left the decision up to the library. A drop off in attendance by faculty on the committee and the lack of success in engaging student members possibly contributed to this indecision. A more engaged and proactive committee membership may have aided our process and resulted in a stronger recommendation.

Based on the information we were able to gather, the library decided to include the EBSCOhost subscription in our budget request for the 2010–11 fiscal year. The list of titles provided by faculty as “vital” or “important” to their disciplines has been provided to Gale for consideration as titles to add. Sufficient improvements in Gale’s content may prompt another review in the future. Continued instruction and experience with Gale will also build a stronger user base and perhaps increase the usage statistics over time. A review of this question may be warranted in the future, but for the time being we are resigned to paying significantly more for the academic content our faculty and students require, while enjoying the added benefit of additional content in the state-funded Gale databases.
Our patrons’ expectations of the library and the services we offer are shifting. They use technology differently, and ask us to help them use their gadgets to access our collections and services. Our patrons also have an increasing appetite for online interaction with the library. In response, the librarians in the Adult Services division at the Corvallis-Benton County Public Library have evolved our reference service to include local chat, increased our social media presence, and have started a collection of popular devices for staff training.

We were the first public library in Oregon to take the opportunity to use L-Net’s software (Spark) for local chat reference service. Launched in May 2009, use of the service is increasing: we currently average 77 chat sessions per month. We wanted to pursue a local chat reference service to better serve our patrons at their point of need on our Web site. John Meier writes in *Computers in Libraries* that “[o]ur Web sites are frequently the first—or only—point of contact with users, but even with our best usability studies and universal design, the sites can still be confusing” (11). He continues that we need to be in that virtual space ourselves, as “[a]n instant response is what [patrons] want and need” (Meier 11). The sort of questions we answer using chat reference reinforces Meier’s argument. Most questions are related to holds, accounts, or database access, all things which are very particular to our library, our Web site, or a specific resource a patron is having trouble accessing. Our chat patrons show great enthusiasm for the service; much of the feedback we receive includes comments such as “Thank you, this chat opportunity is a GREAT service!” and “Thank you! I love this service. Online chat is great.”

The option to use L-Net’s software for a local chat service came up as we were looking into the various options for local chat. We jumped at the chance to be able to provide the service we wanted to our patrons, plus having all the benefits of using L-Net, including great support and easy access to statistics and transcripts. It was important to us that our local chat service was one where patron privacy was valued and protected, and where transcripts and user data aren’t owned by a commercial entity. Also, by using a product that most staff already knew how to use, we were able to save some of the time we would have spent on training staff on new software.

Caleb Tucker-Raymond, the Service Coordinator at L-Net, set everything up for us. He created our own Corvallis queue for us to log into and monitor using the Spark software we already use to staff our L-Net shifts. He also coded a chat box widget where patrons enter their questions. We can link to this widget anywhere, meaning we can give patrons as many chances as possible to chat with us from our various web pages. In addition to our homepage and our contact pages, we have also put chat links on our Facebook page, our blog, and on all of our subject guides. We monitor the queue at the reference desk, but most Adult Services librarians also log into the queue in the workroom as well, so that we have more than one or two librarians monitoring it. If we are not online, patron questions are routed to L-Net for assistance 24/7.

The challenges we faced in offering this service have been relatively minor. There was a period of a few weeks where we were getting swamped by class visits at the same time each day. We were able to determine that the questions were coming from a school in another county. We decided to let students know that our local chat service was for our patrons in Benton County, and that there was a link to L-Net on their local library’s homepage. If we
were using a service not tied to L-Net, we would not have necessarily known where the questions were coming from, and we would not have been able to direct these students to the resources that are available through their local library.

Our local chat service enables us to answer questions from our own Web site, but we also want to make ourselves visible in more locations online. Like many libraries, we try to maintain an active and engaged presence on a number of social networks. In the Adult Services division, we focus our efforts on maintaining our blog, updating the library’s Facebook fan page, and posting to Twitter. Some may wonder how this fits into an article about reference service, but we believe that having a dynamic social media presence is a necessary part of our job, because our patron expectations are no longer what they used to be. Social media has changed how many of our patrons seek out and consume information, and we need to keep up.

Lee Rainie of the Pew Research Center’s Internet and American Life Project encourages libraries to “embrace the move toward mobility, constant connectivity, [and] perpetual contact.” He argues this because many of our patrons are what the Pew Center calls networked individuals. These are people who “have a different sense of information availability—it’s ambient.” Their sense of time is “oriented around continuous partial attention,” and their “sense of community and connection” is of “absent presence” (Rainie). In this distributed information environment, having a presence in a place that our patrons frequent is important. Rather than limiting our patrons to contacting us at the reference desk, we can take the opportunity to reach out and be visible and available in their Facebook or Twitter feed. Why not take advantage of the ability to have our information “ambiently available” in a place where patrons are already spending a lot of their time? We are also giving our networked patrons the opportunity to feel a “sense of community and connection” with their library, and to participate in that community online (Rainie). The result is that we build goodwill with our patrons, share information with them, and receive feedback in return.

We think that reference work doesn’t need to be about us passively waiting for people to ask us questions. Via social networking, we try to be active as reference staff and share information we think might be useful to our networked patrons. It also markets reference staff as being knowledgeable and relevant in the new information environment. Examples of topics we have posted include online search tips, recommended reads, or information to help people use the web safely. We also try to build a positive sense of community by posting about light-hearted or uplifting topics. We hope to facilitate patrons asking us questions via social media by encouraging comments and dialogue. Queries we have received range from dates for storytime, to purchase requests, to people asking what the library thinks about ebooks and digital rights management.

There is a fairly significant time commitment involved in maintaining our social media presence. We try to post to our blog twice a week and update Facebook and Twitter every other day, but sometimes more often than that. On top of posting, we also make sure to monitor Facebook and Twitter throughout the day, looking for comments, feedback, and any opportunities to interact with our fans or followers. There are a number of rewards in return for the time commitment. One payoff is a steady increase in the number of our fans and followers. This is a sign that patrons find value in what we post, but also means that we are fostering a group of people who are interested enough in the library to have our informa-
tion available in their personal online space—a 2.0 mailing list of sorts.

Another reward for our social media presence is the information we gain about what most interests our patrons. By looking at blog post statistics, the numbers of retweets on Twitter, or the amounts of comments and “likes” on Facebook, we are able to see what people find interesting or appealing about the library, the services we offer, and our online presence. When thinking about these sorts of statistics, it’s also important to remember that user demographics vary between different social networks. For example, 31% (the largest demographic group) of our Facebook fans are women 55 and over. In contrast, the average Twitter user is 31 years old, according to the Pew Internet and American Life Project (Lenhart). So by diversifying our social media presence, we are able to reach different user groups. As new networks and services develop, we try to be in those places as well; we recently added the library as a venue on Foursquare, and are seeing usage there steadily increase.

Just as our patron expectations about information and online interaction are changing, the way our patrons use technology is changing as well. They are using many different devices to access our services, and the popularity of the Oregon Digital Library Consortium’s Library2Go service (and the myriad of devices patrons use to access it) only compounds this. An increasing number of our reference questions are from patrons who need assistance using their devices to access online collections and services. This becomes challenging for staff, especially when we’ve never used a particular device. Examples of the devices we’re asked to help troubleshoot include smartphones (including iPhones), laptops and netbooks, mp3 players and iPods, ebook readers, iPads and more. Some of our librarians attended a Management of Technology workshop in November 2009, and another attended the Technology Petting Zoo at the Tualatin Public Library in the same month. Taking inspiration from these two events, we hatched the idea of developing a “gadget lab” to help us get familiar with different devices.

After securing funding for the project from our Friends of the Library group, we worked on creating a list of devices to buy. We decided to focus on the gadgets that a large number of people have, and the ones we are asked to troubleshoot most often. Another consideration was getting gadgets that we could potentially use in other situations and settings. With these things in mind, we opted to start with a Macbook laptop and an iPod Touch. There are no Macintosh computers at the library, but we are asked regularly to help patrons with theirs, often to use the Library2Go download service, or to troubleshoot problems connecting to our wifi. Overdrive, the vendor behind Library2Go, recently released its smartphone app for audiobook downloads, and we have begun to get questions from patrons about it. For this reason, we purchased an iPod Touch, which is essentially an iPhone without the phone; a more economical way to get the same device. We will be downloading the Overdrive app on the iPod Touch, so that we can download audio books and understand how the process works. We still have funds remaining for the gadget lab project, and don’t have immediate plans to buy any additional gadgets at the moment. Since technology changes so quickly, we will wait to see what we may want to buy in the future.

We just acquired the devices at the time of writing this article, so they have not been used extensively yet. The biggest advantage we anticipate from this project is being able to better assist patrons. Rather than saying simply “the directions say to do this,” we will now be able to tell patrons, “Yes, I’ve downloaded an mp3 using the iPhone app, and I can help
you troubleshoot this.” The more comfortable staff feels working with a variety of devices and platforms, the better we’ll be able to serve our patrons. We feel comfortable answering traditional reference questions because we know we have a lot of knowledge and experience to rely on. However, with technology questions, we often don’t feel as empowered to answer them and service to our patrons suffers as a result. We hope this growing gadget lab will address some of these issues, and that we will be able to assist our patrons with technology questions as well as we can assist them in traditional reference transactions.

The more flexible we can be as Adult Services librarians, the better we can expand our services to meet the expectations of our patrons. We can meet them and help them where they are at. They may not visit our reference desk as often, but they welcome us into their personal spaces via social media. We should welcome questions about troubleshooting technology—it means our patrons think librarians are expert enough to assist with the latest gadgets. Extending our reference service can be challenging, especially in a time of budget cuts and increased workload for staff, but meeting and exceeding our patrons’ expectations is a great way to ensure community support for their library.

Works Cited


t times, reference work is like playing centerfield—standing ready in position, pounding a fist into your mitt, and waiting for a question instead of a ball to be hit your way. But there is a difference between just standing out in centerfield waiting for something to happen and playing the position with the intention of making a play. Similarly, there is a difference between going out and sitting at the reference desk and going out prepared with the intention of providing assistance and improving your game. Playing centerfield and fielding the position professionally require forethought and mindfulness. Reference is much the same and requires a thoughtful, intentional approach to make good service better.

According to scholars such as Robert Slavin, a primary characteristic of an outstanding teacher is intentionality—having a purpose with which to cultivate informed reflection. If we consider reference work in the same way we consider teaching, then would it not make sense to approach what we do with the same kind of intentionality that a teacher does when entering a classroom? Being intentional is being purposeful, directed, mindful, present, and pointed towards a target or objective. More than anything, intentionality is a prime characteristic of being outstanding, not just good, at something. Why? Although we may learn by doing, we learn more by reflecting upon what we do (Farrell 7).

Donald Schön describes three different levels of consciousness or thinking within professional practice:

1. **Knowing in action** – thinking embedded in the act of doing. Knowing in action is the act of using what we have learned to navigate a present or future experience. It is at this level that we articulate intention, anticipating and visualizing what we want to occur. Intentionality is important in framing an approach to new situations based on past experiences and acquired knowledge.

2. **Reflection in action** – thinking informed by the interpretation of an immediate action or situation. Reflection in action is perhaps the most demanding type of reflection because it requires thinking about an experience as it occurs and creating a sense of order. As we reflect in action, we need to be present in the moment and use all our faculties to correctly interpret the situation.

3. **Reflection on action** – thinking about what happened and articulating thoughts afterwards. Reflection on action allows us time to think about what has occurred, then use past experiences to inform future decisions. As such, reflection on action will generally prepare us to better clarify real-time experiences based on what was done in the past. The reflective thoughts on our past experiences help to guide future intentions.

Most of what librarians do in reference work is reflection in action because we never know exactly what kind of question will be asked or who will ask the question. Even after an effective reference interview, when we begin to work with an individual, we are constantly trying to interpret what the individual needs and whether or not we are successfully moving toward that end. We make multiple decisions—some of which can be made based on a simple facial expression or verbal utterance. Reference requires the creativity and flexibility necessary to adapt and change our approach.
Brookfield called the adaptations or changes that we make during an activity or experience “critical incidents” (147–148). They are critical because we enter into an unplanned realm that is a mixture of informed trial and error. These moments can serve as our personal textbook if we reflect upon what we did, what worked, what did not work, and how the experience affected us. Yet, critical incidents can be unsettling for the best of us. Functioning in relative uncertainty is difficult at best especially in a situation in which librarian and the person seeking assistance are often striving to find something specific. Reference being an inexact science then evolves into “working with” an individual rather than answering a question. To go one step further, reference is about creating relationships rather than encounters when our approach is deliberate and intentional from the start and reflective afterwards.

Get Your Head in the Game

In any game, coaches will often remind the players to “get their head in the game.” They remind the players to be present and think about what they are doing and what they are trying to do. Players often try to visualize what will occur and how to best approach any particular situation. Good players want the ball to be hit their way. Similarly, good librarians want to encounter an individual with a question or an information need. They want to offer assistance and help individuals.

So how can we approach reference work in the same way as a professional player? Reference does not happen by accident. It does not happen when we go to the desk with an armload of work from our offices nor when we bury ourselves behind oversized computer monitors that can wall us off from individuals with information needs. Reference happens when we are active recipients and willing participants. Do we gather work to do before we go to reference, or do we gather ourselves for the work we will do at reference?

Imagine asking yourself the following questions prior to working at reference:

- What do you intend to do to make the session productive and meaningful?
- What skills will you focus on to improve the reference process?
- What will you do to engage and connect with individuals at reference?

Equally as important, do you ever take the time to reflect upon what happened during a reference session? If the objective is to become more purposeful in our approach to reference, then taking the time to reflect upon what occurs during reference work lets us think of our work as a transformative learning experience that helps us improve our craft.

The following questions are designed to help you focus on what you want to achieve during an upcoming reference session. You can use these questions to prompt yourself, or you can work with a colleague to answer these as a team. Working with a colleague can provide extra benefits as you share ideas and approaches together. Collegial teamwork can often produce much more than the sum of your individual ideas and work. More importantly, colleagues can complete both the questioning strategies prior to and those after in about ten or fifteen minutes, or you can take a few moments to answer the questions yourself. You could record your intentions and reflections on paper or on an audio file, so you can check back and reflect upon what you wanted to achieve.
Sample Questioning Strategies Prior to Reference Work

- As you think about your next reference shift, what do you intend to do to make the session productive and meaningful?
- What skills will you focus on to improve your personal reference practice?
- What will you do to maintain your focus on reference? How will you avoid distractions such as other work or conversations with colleagues?
- What will you do to engage and connect with the individuals in the reference area?
- How will you determine if an individual’s research needs were satisfied or that you achieved the intended outcomes?
- What verbal and nonverbal cues will make your reference transactions more successful?

Sample Questioning Strategies After Reference Work

- How do you feel about your reference session?
- What happened during the session? How did you work on reference skills?
- Did you accomplish what you intended? How did what you planned to do compare with what actually happened? Were you able to avoid distractions?
- Did you have a reference transaction? How did the transaction occur? How was contact initiated?
- How did you interact with individuals in the reference area?
- What did you learn from this reference session and how will you use this experience to inform future reference sessions?

Further Activities to Promote Intentionality and Reflection

The following are additional activities that can help librarians become more intentional and reflective in their approach to reference work:

- Outline your personal reference philosophy:
  - What do you value?
  - What is important?
  - How do you make yourself available and approachable?
  - What do you want to achieve during your reference work?
- Write a journal containing intentions and reflections about your reference work.
- Use self-assessment inventories that can help you monitor what you value and how well you accomplish what you value.
- Record and observe reference activities.
- Assess reference interactions with a self-designed questionnaire that addresses what you value.
- Follow-up assessments with individuals that you have helped. Simple follow-up activities can not only help our practice, but they can demonstrate the value of our work to the individuals with whom we are interacting.

Reference work is an art that necessitates mindfulness and practice. The more we do will not necessarily make us better in and of itself. The more we think and reflect upon what we do is the key to perfecting our art. If we step behind the desk without our intentions and
experiences to guide us, then chances are we will not make the big play when opportunity arrives. We may have our head down, checking an e-mail or reading an article, or concentrating on our other work, when an individual decides to risk asking for a moment of our time, a moment of our day, and a moment of our career for assistance. That moment is our opportunity, but will we be ready … pounding a fist into our mitt, poised, and available for what will come our way?

Works Cited


About the author: Anne Billeter was Head of Reference Services at Jackson County Library Services from 1985–1997 and Josephine County Library from 1981–1985. During this time she witnessed the installation of the first fax machine in Jackson County government (at the library), the transition from card catalog to computer catalog to Internet accessible electronic catalog, the change from logging every long distance phone call to answering questions via phone, fax, e-mail, and over the Internet. She developed and directed SOLIC (Southern Oregon Libraries Information Cooperative), one of the regional reference services that evolved into L-net.

Reference hasn’t changed at all:

• People ask questions because they need answers.

• People don’t know how to ask questions.

• The people who ask questions come with a wide range of expectations, knowledge, and understanding of information.

• People lack the critical skills necessary to evaluate information.

• People don’t know libraries provide reference services.

• People don’t know libraries provide access to reference resources not easily available elsewhere.

• Reference questions are asked anywhere and everywhere: librarians recognize they are being asked a reference question and seize the opportunity.

• A good reference interview is essential.

• Reference librarians LOVE discovering reliable, accurate, easy-to-use reference resources and explain them to patrons.

• Most librarians don’t know much about genealogy (or care to know).

• Most academic reference librarians and public reference librarians have erroneous ideas about the types of reference questions and services provided by their counterparts.

• School libraries vary widely in staffing levels and in size and currency of the collection.
Reference has changed a LOT:

THE QUESTIONS
- Most of the “easy” reference questions aren’t asked anymore, because people find the answers for themselves on the Internet.

- People are overwhelmed by the information provided on the Internet.

COMMUNICATION
- Communication methods have changed radically. In the past, many reference librarians had access only to the resources of their collection. Long distance phone calls were a tool available to only some reference librarians. Now reference librarians use fax, e-mail, live chat, and cell phones, and have the ability simultaneously to transmit and confer about documents and graphics.

- In the past, workshops and meetings were available only by traveling to a specific location, and time and money were spent traveling. Now online tutorials, virtual workshops, meetings, conferences, podcasts and other forms of electronic communication have made education and collaboration more easily available, even to geographically remote librarians.

EXPECTATIONS AND AVAILABILITY
- People expect to have access to information (and assistance in finding it) 24/7.

- People expect their answers faster.

- Reference services were only available when the library was open; today, with services such as L-Net, reference librarians are available 24/7.

- Libraries and library staff were isolated by geography and by limited communication capabilities (e.g. long distance telephone, fax, and text-only e-mail, inability to send full-color images, text, and documents).

- Library patrons had immediate access only to materials in their local library; they had slow access to materials in other libraries only via a slow and complex interlibrary loan (ILL) procedure. In Oregon, requests were first sent via US mail for materials known to be at the Oregon State Library (OSL). If not in the OSL catalog (originally in multi-volume book form, later on microfiche), requests were sent via US mail to libraries that MIGHT own the requested item. Later, through OCLC, items could be requested via computer serially to five libraries known to own the item and who had agreed to lend available materials. Now, patrons of the Oregon and Washington Summit libraries can place their own ILL requests online with guaranteed four-day delivery to their library. Further, many items are now available full-text via the Internet, sometimes available to anyone, in other cases available only to patrons of libraries with database subscriptions.
• Originally materials were sent slowly by US Mail, now they are sent more rapidly through a Courier system that travels among Oregon and Washington libraries.

• Many libraries formed consortia with shared electronic catalogs, so that local patrons had access to the library materials in all of the consortium libraries.

• Libraries which accepted hold requests (then often called “reserves”) used a cumbersome paper tracking system to fill a hold request, and notified the patron by phone or mail when the requested item had arrived at the library. Then computers began to track and fill hold requests, but notification was still by phone or mail. Now computers send e-mail notices that requested items are available or place automated phone notices. Some libraries now deliver hold requests directly to the patron.

CATALOGS
• Library catalogs were in card form and index terms were limited to authors, titles, and subjects. Many catalogs did not indicate that a book was on order. Catalogs did NOT indicate whether a book was “in” or checked out. Catalogs were accessible only by going to the library. Today catalogs are electronic, available via the Internet, and provide keyword, Boolean and multi-faceted search strategies. Catalogs now indicate whether or not an item is on order, available, or if checked out, when it is due. Some catalogs now provide graphics of book covers, excerpts from books, book reviews, suggestions for additional titles that might be of interest to the reader, and links to Internet sites with related information and/or a full-text versions of some of the books.

PERIODICALS
• Periodical articles were identified by using print indexes in libraries, primarily Readers’ Guide to Periodical Literature and the entire family of H.W. Wilson’s specialized indexes. If the specific periodical was not in the library’s collection, the cumbersome and slow ILL process was used … or not. (Many patrons chose not to request items by ILL.) Then articles began to be available via Courier service and/or fax. Now many are available instantly from anywhere with Internet access through full-text subscription databases and services. Many current newspapers are available online and some provide online access to archived issues.

GENEALOGY
• Genealogists are being better served by libraries, through the provision of access to subscription services such as Heritage Quest and Ancestry.com.

• Many books of interest to genealogists are available full-text on the Internet.
SCHOOL LIBRARIES

- There are many fewer school librarians.

- K-12 students were limited to the resources in their local school and public libraries. Today K-12 students account for one-half to three-quarters of L-Net’s questions, and they have access to a wide range of databases and other resources through OSLIS, statewide database licensing, and the Internet.

So What Does This Mean for Reference Librarians Today?

- It is essential to promote reference services.
- It is essential to conduct a good reference interview.
- It is essential to be able to communicate using a wide variety of communication devices.
- It is essential to learn continuously about reliable and accurate reference resources.
### Advertising Rates

<table>
<thead>
<tr>
<th>Space</th>
<th>Size</th>
<th>Single Issue</th>
<th>Multiple Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full page</td>
<td>6.375” wide x 10” high</td>
<td>$200</td>
<td>$175</td>
</tr>
<tr>
<td>1/2 page (horizontal)</td>
<td>6.375” wide x 4.25” high</td>
<td>$115</td>
<td>$100</td>
</tr>
<tr>
<td>1/4 page</td>
<td>3.5” wide x 4.25” high</td>
<td>$60</td>
<td>$50</td>
</tr>
</tbody>
</table>

Contact: Margaret Dull  dull@up.edu  503-943-7685 (Phone)  503-943-7491 (Fax)
The *OLA Quarterly* (OLAQ) is the official publication of the Oregon Library Association. The OLAQ is indexed by *Library Literature & Information Science* and *Library, Information Science & Technology Abstracts*. To view PDFs of issues, visit the OLAQ Archive on the OLA Web site. Full text is also available through HW Wilson’s *Library Literature and Information Science Full Text* and EBSCO Publishing’s *Library, Information Science and Technology Abstracts* (LISTA) with Full Text.

Each issue is developed around a theme determined by the Publications Committee and Guest Editor(s). To suggest future topics for the *OLA Quarterly*, or to volunteer/nominate a Guest Editor, contact the Publications Committee by visiting [http://www.olaweb.org/](http://www.olaweb.org/)

### OLA Quarterly Publication Schedule 2010–11

<table>
<thead>
<tr>
<th>Vol./No.</th>
<th>Theme</th>
<th>Deadline</th>
<th>Pub. Date</th>
<th>Guest Editor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vol 16 • No 3</td>
<td><em>Openness in Libraries</em></td>
<td>August 1, 2010</td>
<td>September 15, 2010</td>
<td>Buzzy Nielsen  North Bend Public Library</td>
</tr>
<tr>
<td>Fall 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vol 16 • No 4</td>
<td><em>Doing More With Less: Creative Strategies in the New Economy</em></td>
<td>November 1, 2010</td>
<td>December 15, 2010</td>
<td>Tricia Juettemeyer  Art Institute of Portland</td>
</tr>
<tr>
<td>Winter 2010</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vol 17 • No 1</td>
<td><em>Library Vacations &amp; Travels</em></td>
<td>February 1, 2011</td>
<td>March 15, 2011</td>
<td>Pam North  Sherwood Public Library</td>
</tr>
<tr>
<td>Spring 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>