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ABSTRACT

The case study on evidence-based practice at the University of California, Irvine Libraries, is a grassroots peer training initiative in reference and instruction. The team of volunteers addressed training starting with the critical connection of user inquiries and training needs. The agenda aimed to transcend clichés like, “this is how we’ve always done it,” and teach “why and how to improve public service?” They developed outcome-based guidelines for presenters to achieve baseline training standards and promoted the Libraries’ strategic goals. Embracing new hires, rethinking change, and replacing vendor training with peer partnerships, are seminal user-based evidence and criteria for excellent service outcomes.

BACKGROUND

Learning is often most effective when it takes place as a social activity. As John Seely Brown has noted in a variety of articles and books, “communities of practice” are effective learning groups within organizations because they link skills to the full context of on-the-job situations and leverage the experience of peers, thereby expanding upon mere training in operational procedures (Brown & Duguid, 1991). In the fall of 2004, the

University of California, Irvine (UCI) Libraries' reference departments had a chance to reconstruct its "community of reference practice" and experiment with how public service librarians could enrich their learning opportunities by linking them more closely to what happens during reference transactions.

During this same period, a transition occurred in the departmental leadership for the humanities and social sciences library. The Associate University Librarian for Public Services assumed the departmental leadership, acting as a peer with the heads of reference for the science library and the medical center library. This happened to coincide with several position vacancies in Reference, thus creating an urgent need to expand and strengthen competencies for both librarians and career staff. Many people assumed new interim subject assignments and covered more desk hours and research consultations. Also, we began to hire temporary librarians who needed to be trained quickly and socialized to the operations of the various departments. If learning occurs best as a response to a deeply felt need, this was definitely a UCI time of need!

Formerly the reference department training depended heavily on presentations by visiting vendor representatives. Although the vendors were experts in presenting best features of their products, this was never enough. Other more important aspects, such as questions on infusing critical thinking with teaching skills, were never addressed. It was often difficult to convey all the complexities experienced in using the database during interactions with users when asking questions to the vendor trainers. With the transition in leadership, and the call for a new training team, it was possible to recalibrate how the training program was structured. It was critical to develop a model that focused on customer service and presentation skills for the staff, not just skills with vendor tools. We needed a model that would focus learning on the 2 or 3 critical things that would come in handiest during a reference interview, not on esoteric "bells and whistles." And we needed a model that would bring all the staff together in a learning experience that developed cross-departmental, collaborative problem solving skills, not one that emphasized individual and solitary absorption of an "expert's" advice. We needed to become an "enacting organization" (Brown & Duguid, 1991) that can "ask new questions, develop a new view...." In this sense we were also laying the groundwork for evidence based librarianship by "utilizing the best available...evidence in conjunction with a pragmatic perspective developed from working experiences" (Eldridge, 2006) in order to become that new type of organization.

INTRODUCTION

This paper illustrates the UC Irvine on-the-job reference-training model, as a project that applies current best evidence and best practices to improve service delivery. The peer training program has evolved out of a need to tackle questions related to good customer service as well as to specific library users' information literacy skills, i.e. understanding core and tertiary resources and developing critical thinking skills. The program is inspired by the

growing movement to make decisions in reference and instruction based on understanding and valuing the users' needs from all disciplines and educational levels.

We learn from Booth that the first stage in evidence based practice is to formulate questions, "convert a precise, yet possibly vaguely expressed, information need from practice into an answerable, focused [research] question" (Booth, 2004). By posing a series of theoretical or philosophical questions, the reference training team uses peer collaboration to define a training structure that can expand librarian expertise to meet expected performance goals. This creative effort brings everyone together in reference departments to share the responsibilities and build ongoing knowledge improvement. The current staffing model builds on that of the "research librarian" who shares responsibilities for subject assignments for collection building, instruction, and reference, plus a cadre of Library Assistants who collaborate with librarians in some of these responsibilities. Through this group experience we have come to learn the value of what Lynn Westbrook has said: "putting these principles into action requires a somewhat flattened administrative hierarchy...based on the concept of learners taking control of much of their own learning" (Westbrook, 2005).

In response to the assertion that librarians do not use research findings when making decisions related to professional practice (Genoni, Haddow & Ritchei, 2004), this is an examination of a training program that is already in place, its policies and guidelines, to look for good evidence. The planning has led to scheduling unique training events, responding to questions on all topics encountered in reference and teaching by service providers and bibliographers at UC Irvine. Peers are exploring critical ways of thinking about new changes in information content and library resources and services. The scope and depth of a librarian's expertise is challenged. Everyone has to make preparations to present "new knowledge" to colleagues some time over the course of the year.

The presentations range from 20 to 30 minutes per resource or service. The process requires excellent presentation skills and promotes deeper pre-planning and time management by all players, especially the team and presenters. The program honors the Libraries' public services strategic goal to teach core methodologies. Hopefully, in contrast to "this is how we did it well syndrome" the project described in this paper depicts the value of reference training in the context of developing best practices in libraries throughout the world, which is one aspect of evidence based practice.

As indicated above, the UCI Libraries' reference training team was born in late 2004 to implement on-going skill building practices and to groom competent service providers in reference and instruction. The team members plan monthly training sessions, engaging their peers to participate as trainers. Training topics and guidelines are drawn collaboratively from three reference departments: the Science Library, Langson Library for Arts, Humanities & Social Sciences, and the Grunigen Library for Medicine and Health Sciences disciplines. Every member of the reference department is expected to provide a training session at regular intervals. Collection bibliographers and Access Services staff are invited to attend and provide training. Training time is also used to present pedagogical strategies for

education and outreach, review strategic goals progress for the division of Public Services, and other topics of cross-departmental interest. And, on occasion, members still invite a vendor to explain upgrades.

The instructions for the program stipulate outcomes and the responsibilities of both trainers and trainees. A major focus is sharpening service provider presentation skills, since this is an opportunity to gather confidence and improve in public speaking. By basing the training content on a list of questions solicited from peers, the training team hopes to heighten the commitment to being a reference expert as a major part of the skills set of a research librarian at UC Irvine. These essential skills drive the need to continually hone accuracy when analyzing users' questions and assessing which are the most important resources to provide for a user's research needs.

The subject of training reference service providers is key today for public relations, in the exploration of the relationship between research and library practice. A unique contributions to evidence-based librarianship, by Denise Koufogiannakis & Ellen Crumley, is encouraging librarians to think of ways they can incorporate research into daily practice in a way that is central to the operational practice of libraries (Koufogiannakis & Crumley, 2006). Similarly, we at UCI consider on-the-job training a lifetime commitment to continuous education for information professionals, because it fosters a belief in constantly sharing the best on-the-job practices and competency skills. The scope and depth of a librarian's expertise is challenged, presentation skills are polished, and core service methodologies are shared across departments. If well structured, such training can play an important role in achieving carefully considered outcomes that support many of the Libraries' strategic goals (AORN Online, 2007).

LITERATURE REVIEW

Libraries face endless change. This means that we are constantly looking around to uncover different ways to meet recurring demands with the conviction that services provided should be excellent at all times. In an effort to gain new ideas for continuous improvement, we often turn to the professional literature for both research findings and information about how colleagues have approached similar problems.

The professional literature underlying our research on the topic of reference and instruction training is divided into three critical aspects. First, there is literature that reviews the state of general training in academic libraries, and which covers new and old views about the need for training that improves communication skills of service providers. Reference and instruction training is especially shown as lacking. General training lacks planning and direction, and also specifically communication training. Secondly, there is general literature about evidence-based practice. This literature has its roots in the Health Sciences Librarianship; it is prolific, but somewhat abstract and less grounded in our practice. Finally, there is the literature of the movement to apply evidence-based practice to practicing librarianship. This literature less than 10 years old and is largely based on applications in libraries outside the United States. However, the spread to embrace evidence-base practice

(EBP) is rapidly taking place everywhere; there is a strong web presence with open access literature, blogging, listservs, facebook, etc. An important landmark in this literature will be the proceedings of the Fourth International Evidence-Based Library & Information Conference, May 6-11, 2007 which just took place at University of North Carolina, Chapel Hill (<http://www.eblip4.unc.edu/>).

The EBP movement speaks to all librarians, academics and practitioners alike, stressing theory and practice relationships. The works specifically reviewed for this project are a handful of resources; they do not include the body of work related to Health Sciences librarianship. We primarily focus on general academic library practice and attempts to use evidence or research in developing policy and decision making. The focus for this paper is on the potential applications of evidence-based methodology to innovation in library work. And what evidence to look for and the general barriers to the use of research in practice (Genomi, Haddow & Ritchie, 2004)

1. The Role of Peer Training

The study described by Dankert & Dempsey (2002) at the De Paul University Libraries is a rare example of an outcome-based peer-to-peer reference training program. They suggest that there are three types of peer staff development training programs: peer review, peer coaching, and peer training, defined as primarily concerned with co-workers teaching one another specific skills to enhance job performance and to increase productivity. Peer review and peer coaching are distinguished from peer training by their grounding in achieving the objectives of the administrative hierarchy's objectives rather than achieving the objectives of the individual staff member. From Dankert & Dempsey (2002), we learn that peer-to-peer training increases participants' camaraderie and self-confidence and also reduces burnout by helping to share the workload. Learning from peers yields optimum results on many fronts, according to this study.

Wu & Rocheleau (2001), also observe that a significant percentage of an individual's learning comes from assistance by co-workers and other informal sources, with training from peers ranking the highest in an evaluation of learning styles. Levene & Frank (1993) define peer coaching as an "informal arrangement between two (or more) librarians to improve their teaching skills in a non-threatening environment". According to these studies, one way to maintain one's own technological competencies and grow professionally is through seeking education amongst ones peers. Unfortunately, library literature on this topic contains few articles dedicated to peer training as a staff development tool for either the reference process or library instruction (Dankert & Dempsey, 2002). We find Ross and Dewdney's descriptions of skill development, useful as a form of micro training, aimed at novice librarians by prescribing actions. It is not sufficient for our case in this study (Ross & Dewdney, 1989).

The emphasis on librarian behavior and communication rather than the quality of the patron interview makes the so-called 55% rule a nagging training challenge in reference. This "rule" suggests that library reference services are often not accurate, although Isenstein (1991) reported a study of peer training programs in public libraries in Maryland that resulted in increased accuracy rates from the old 55% rule to 77%. Gers & Seward, (1988) and others have done similar more work on this topic. The potential for a solid, positive impact on user satisfaction of reference training lies in maintaining a focus on behavioral and

communication aspects at the same level as the focus on the factual quality of responses (Bauner, 1990). This is an ideal issue for academic libraries and LIS researchers who seek to address all three of these important areas to work on a complimentary a platform, with professional research and in-house training. Fagan (2000) focuses on training structures and long-term planning for reference training of new librarians to connect their LIS education with on the job successful performance.

Librarians are a group that is helping others find the information they need. Librarians should not be struggling with the question of the importance of having research influence their own performance and outcomes. “Librarianship is a social practice, and thus a social epistemology; it must account for “the close relationship between the way people construct their own individual identity and individual information seeking must be reflected in the concept of information that LIS embraces.” (Cornelius, 2004) In Marshall (2006) we gather that library and information professionals need to put evidence-based practice (EBP) to work for them.” (Marshall, 2006) EBP should become the primary set of principles and the main philosophical approach to day-to day decision-making, thoroughly compatible with the goal of utilizing quantitative measures to manage libraries and making “data-driven” decisions based on the best evidence regarding daily practice. (<http://librariesusingevidence.blogspot.com>)

2. Evidence-Based Practice

Andrew Booth defines evidence-based practice (EBP) as “an approach to information science that promotes the collection, interpretation, and integration of valid, important and applicable user-reported, librarian-observed, and research-derived evidence. The best available evidence moderated by user needs and preferences, is applied to improve the quality of professional judgments.” (Booth, 2004). The definition is widely adopted by different organizations and so are standards for evaluating evidence as seen in the example websites of the “Pocket-Guide to EBP on the Web” (SAHMSA, 2006). The diversity of methods and application makes plenty of room for creative implementation in projects such as our own UC Irvine training experiment.

What about the role of research in the library profession? The definition of research given by Peritz (1980) is an inquiry which is carried out by a systematic method with the purpose of eliciting some new facts, concepts or ideas. If we use this definition, who is responsible for continuing to build and use evidence based research to drive and inform decisions and policies in everyday library practice? And, how well grounded is the current research base in librarianship? Koufogiannakis and Crumley explore this question and reviews research that can contribute towards practical, professional decision making (Koufogiannakis & Crumley, 2006).

Despite the assertion that “librarians do not use research findings when making decisions related to professional practice” (Genoni, et al, 2004 p 49), reviewing some of the evidence-based methods literature does provide a combination of successes, and promises new cross-disciplinary strides to improve library services. This fresh attempt to investigate

evidence in library training programs, as well as library philosophy, goals and guidelines, outcomes and accomplishments is a strong promotion that connects library practice and research. Other professions like teaching, social work, business and medicine are diagnosing similar issues (Hemsley-Brown, 2003). Library Science is making great strides drawing lessons from some of these disciplines, like nursing, medicine, social work, to name a few. According to Marlene Asselin (Asselin, 2002) the effort to incorporate research into decision making and practice is critical for those who support “informed readers and users of research.”

According to David Smith, obtaining and using evidence can help to inform both “those that present evidence, from the authors’ own works and elsewhere, from which inferences about good practice might be drawn” and those that explore contextual and definitions issues about the nature or use of the evidence in different areas of ...practice.”(Smith, 2004). What librarians call “best practices” represent modest efforts to embrace EBP with evidence collected over years from a variety of settings?

Hallan and Partridge (2006) believe that “the value of research in the LIS discipline can be experienced on both the professional and personal levels.” An examination of the LIS research landscape by the CILIP study (date), also disclosed some of the benefits research in terms closely related to those of EBP. It stated that research should inform practice, assist future professional planning, and raise the LIS profile at the professional level. At the personal level, new horizons and individual development opportunities will then occur. However, the CILIP study suggested that EBP was at a low interest level among both library theorists and library practitioners. Accordingly, Genomi, Gaby & Ritchie (2004) warn librarians that “professions that divide between ‘practitioners’ (inevitably the numerically larger proportion) and ‘researchers’ (frequently university-based) may find difficulty in sustaining a culture of practice that incorporates research evidence into its decision making”(Genoni, Haddow & Ritchie 2004)

3. Combining Library Theory & Practice

The challenge in developing a true culture of EBP is to engage both the teaching of LIS and the practice of librarianship in demonstrating an appreciation of and skill in research methods. “Whilst formal LIS education can commence the process, success will only be achieved when all stakeholders in the profession actively work together to build the desired culture. This means collaboration of professionals, educators, employers and professional associations. (Hallan and Partridge, 90). The argument that much of library literature is not research based, and the amount of research-based publication is constrained by the lack of funding to support research projects (Genomi, Haddow and Ritchie, 2004).

According to Booth, one of the founders, EBL before 1997, was just a label with most of the research in librarianship being academic led and focused. Since then the United Kingdom has experienced a growth in practitioner interest through the increasing number of librarians who are collaborating in critical appraisal skills programmes (CRISP), as “retrievers of rigorous research and members of systemic review teams, and other work

panels and projects.” (2003). EBL has also proven effective in targeting information management (IM) problems –defined by Booth (2003) as information overload, poor specification, and problematic interpretation.

The effort to incorporate research in daily practices of library service, according to Koufogiannakis (2006), is guided by the three processes shown in Figure 1.

- User Reported – queries; user preferences/evaluations; user needs
- Librarian Observed – experience; best documentation of ideal methods
- Research Derived – from the literature and research experiments

Using Booth words in the EBP Toolkit (Booth, 2006), we sum up the above theorem in Figure 1, as follows:

“Asking answerable questions, finding, critically appraising, and then utilizing research evidence from relevant disciplines in daily practice.”

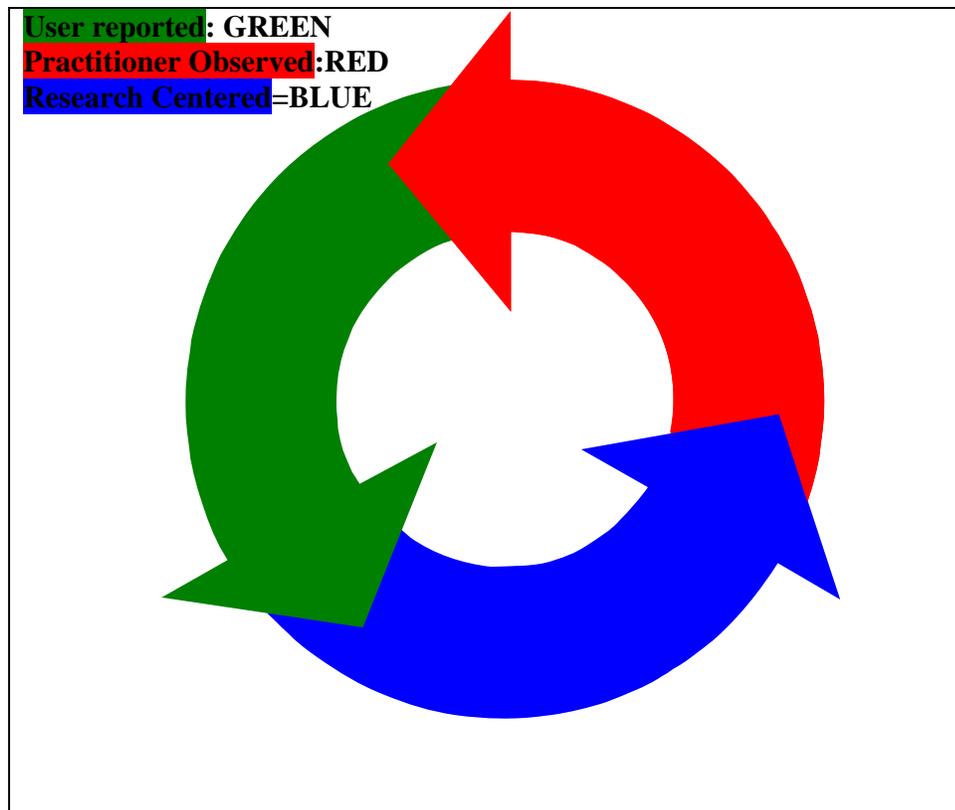


Figure 1

EBP = integrate best research evidence + librarian expertise + user questions = Improve services

There is reasonable flexibility in the way one finds, integrates and uses the best research and librarian expertise with user questions, and in how one promotes EBP decision making for practicing librarians on a daily basis. And the best possible research methodology to assess library practice can change drastically with different library projects. Assessing “best practices” is only one form of evidence that libraries can use where quantitative analysis is not relevant or appropriate. Accuracy of the data is very important, as Judith Segal’s study warns, especially when making comparisons with other professions (Segal, 2001).

Wendy Abbott at Bond University in Australia describes some library projects that illustrate “the benefits of evidence-based information practice to stimulate innovation and improve library services” (Abbott, 2006). One question they analyzed was whether the Library should open for 24 hours; another was an issue about managing a collection of videos and DVDs, and a third question was whether to teach EndNote to undergraduates. The author engaged three different methodologies, gathering the most appropriate data for each project. The project was successful because it clarified numerous questions about the applicability of EBL to this library’s unique situation..

THE UC IRVINE EXPERIENCE

“All Ref” training at UCI was our first application of evidence-based practice in support of innovation. The authors believe that practicing librarians need to apply theory in some projects in order to make valid decisions and achieve best outcomes. However, when the “All Ref” team began its function in 2004, such a lofty goal was an unintentional development; we only knew that we had to inculcate a philosophy of service excellence.

1. The Training Plan

Peer training at UCI focuses on reference and instruction. “Having peers teach one another is a solution with many benefits: sharing the training responsibilities among many and vesting all staff involved with a sense of ownership. (Dankert & Dempsey, 2002). “All Ref” training provides a venue for peer interaction and for co-workers to judge and evaluate peer performance. It promotes constructive criticism because it sharpens understanding of peer strengths and weaknesses on specific and varied skills.

The UCI “All Ref” peer training team created a long-term training program very similar to that proposed by Fagan (2002), to cultivate continuous education in a variety of ways. Despite its grassroots origins, the team’s training plan meets criteria that form a major part of the Libraries strategic goals. It promises to improve and maintain core competencies and excellence in disciplinary specialization, reference service, and instruction, for research librarians and public services staff. “All Ref” training also meets the following qualitative measures described by Lynn Westbrook (2005), which illustrate strategic difficulties to overcome when designing “staff development” programs:

- ❖ Having a plan that is directed and agreed upon.

- ❖ Taking collective responsibility for building and maintaining a knowledgeable, motivated, and confident cadre of librarians and paraprofessionals.”
- ❖ Learning the mechanics of new or updated systems not only consumes valuable training time, it also consumes valuable morale.”
- ❖ Taking advantage of adult learning theory to embrace genuine learning; “adult learning theory provides three principles which librarians employ fully when building instructional programs for patrons.”

With the hiring of a number of new research librarians in several disciplines, the training needs increased and changed in flavor. Besides the obvious need to introduce new librarians to the resources, the plan took advantage of their fresh perspectives to promote them as trainers and to encourage them to share their talent as well. This includes promoting tutorials they design or sharing information in disciplines that were temporarily assigned to other research librarians due to staff vacancies.

A. User Needs Assessment

Talking about the future of EBL, Koufogiannakis (2004) mentions the following criteria for effective implementation of EBP: questioning, critical thought process, moving into daily practice and moving to the international stage. All are integral factors in this analysis. At UCI peers have the opportunity to suggest topics and assess the type of training that is compatible to the topic for example, introducing a new database, showing a website, reviewing quick ways to find data on a topic, etc. The presenters are asked to state expected outcomes, by offering a goal to meet the user’s expressed need. Questions are used as a powerful tool. They guide how training needs are determined, direct evaluative teaching strategies to avoid reciting “do this, do that” steps, but encourage critical thinking about information resources.

The UCI peer training team sent questions in the form of a brief training survey in 2005 and 2006 to “All Ref” participants [See, Figure I and Figure II below]. This serves as a call for input on future training topics and an assessment of past activities. The questions are simple, and the process is very welcoming of new ideas. Service providers use their contacts to share users’ research needs, as well as to target important knowledge gaps, such as Chemistry, Business, or Statistics questions that are intimidating to librarians conducting chat reference. These shared questions match the participants’ own training needs and suggestions for the next programs and trainers. The planning team puts together a cumulative “wish list” and spends time critically appraising priorities. Although collected annually, a lot of trade-offs and negotiations go into the monthly planning to reflect a profile that is balanced. The team works very closely with the reference department head(s) to come up with training agendas.

B. Trainee/Trainer Outlined Resources and Goals

In 2006 the brief annual survey added to the call for training topics some assessment value focusing on the participants’ satisfaction with the training program. All Ref

participants were asked to state if they found the training program valuable.100% responded positively.

I. 2006 BRIEF SURVEY: ALL REFERENCE TRAINING SATISFACTION

100% RESPONDENTS VALUE ALL REF. TRAINING PROGRAM

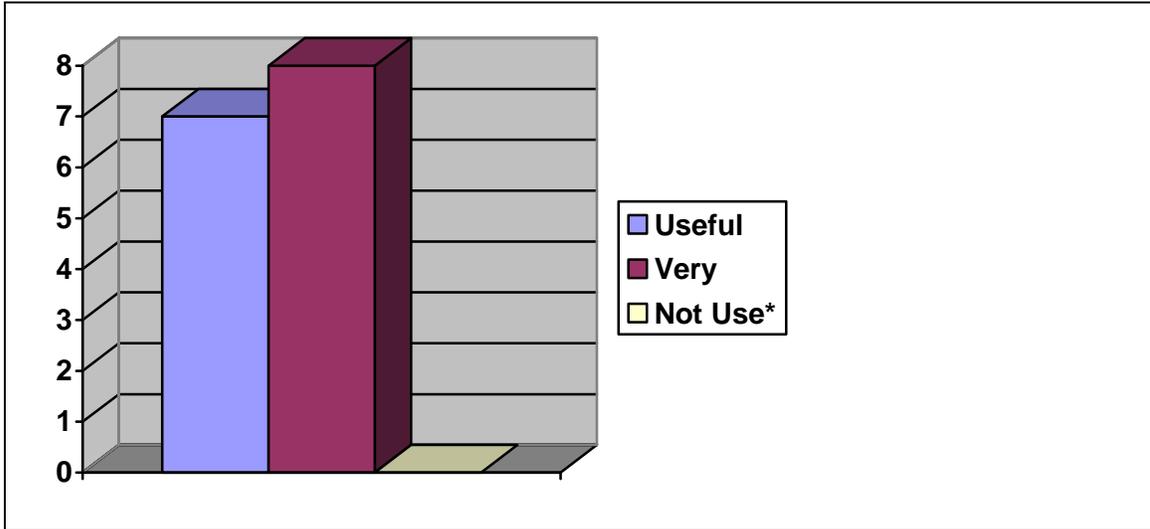


Figure 2

In 2006 the team wanted to explore a distinction between efficiency and effectiveness by determining how many staff, who were actual presenters, were satisfied with the training program. The total number of presenters who found the experience rewarding was great. This provided an impetus for those uncertain non-presenters, to suggest new topics and themselves as presenters. This effort was helpful in generating several more topics offers by staff to collaborate as future trainers. Additional comments were solicited to share information explaining what trainers found useful and suggestion for improvements on presentations.

100% OF THE PRESENTERS FOUND TRAINING EXPERIENCE VALUABLE

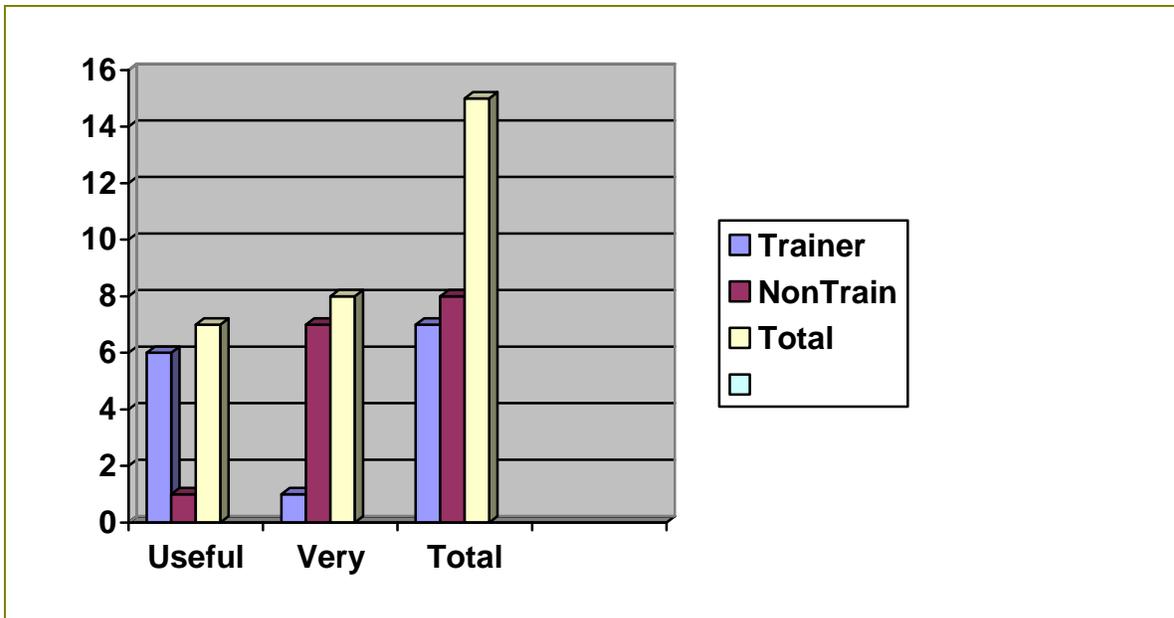


Figure 3

C. Effort to review/assess the training.

Overall, the brief surveys provided sufficient data needed by the team to decide and assess if the training project is worth the time and energy spent on it. This was not a major evaluation of the entire program, per se; the use of more rigorous assessment evidence in the future is needed. To bolster the training program means a major evaluation of the entire process to see if it has actually improved the teaching and skills of service providers. Plans to use other appropriate research-based assessment tools will include developing specific questions and techniques; or to administering another comprehensive survey which will address more specific aspects: goals of training reference and instruction service providers, baseline measures of successful training, and effective ways to implement newly acquired skills.

3. The Training Guidelines

The training guidelines are not a mere checklist of “to-do’s.” They are a guide to ideal behavior for peer presenters and the way by which we generate evidence for good practice. The guidelines were drawn up in 2005 and revised in 2006 to focus on the content outcomes and presenter behavior. Fagan (2000) applauds self-directed training when it incorporates aspects of self-motivation in directing the learning process, something which is very different from random learning. In keeping with this principle, the UCI training program empowers trainers to initiate the specific questions to be presented and to decide upon the content of their training. The guidelines merely set the parameters of the programmatic need to develop in the attendees’ skill of providing expert customer service.

What makes the UCI project unique is that the application of the guidelines above, the program’s training mission, and its approach are grounded in the American Library Association Reference and User Services Division reference service guidelines that everyone

at UCI understands and is expected to practice. This is the philosophical base which grounds the training in the library wide environment and which guides those who operate daily in reference and instruction.

We have learned to always leave room for open thinking about projects in library organizations, especially cutting edge initiatives. What is termed grassroots here is the ability to make ways to harness librarian creativity beyond administrative confines. Although the training team plans everything, its functions are closely connected and promote relations across library departments and numerous service points, such as Access Services, Technical Services, Collections, etc. The concept of grassroots relates mostly to the teams origin with volunteer members.

THE FUTURE

In this spirit of open mindedness to EBP, librarians should examine many of the projects we create to reassess how to bring research, or at least “best practice” into play, and also to aim at making global contributions in information science with our day to day practice. Asking questions is one way to begin. Deciding on the best possible type of research (evidence) to collect and appraise is the next step. Try taking long-time existing policies that seem ineffective and gather analyze new evidence by collecting new data. Reaching different conclusions may save the library from stifled creativity and move the practice of librarianship closer to constructing a philosophical acceptable arrangement of knowledge theory (Cornelius, 2004). According to Hallam and Partridge (2006), without research, “there is no profession, but only an occupation grounded in techniques, routine and common sense.” Library management that supports creative thinking and experimentation with new methodologies also helps to break down professional barriers within the library as well and beyond. Practicing librarians have an important place and role in setting the future research agenda of LIS through EBP.

The future of evidence based research for use by library professionals in daily practice is now. The changing world of Librarianship comes with new expectations imposed by users on many fronts. Much of the pressure to meet these needs is experienced by librarians serving as reference providers and teachers. EBP, fundamentally a pragmatic paradigm for practitioners, allows asking questions as “the beginning of a new way to collect new data to reach different conclusions, especially to avoid routine efforts that stifle creative approach to Librarianship”(Juznic & Urbanija, 2003). The UC Irvine training project has illustrated one of the ways to rise above this dilemma by participating in a project based in a service philosophy and guided by evidence of users’ needs to promulgate “new knowledge,” in training reference and instruction librarians.

CONCLUSION

Although some say that librarianship displays a culture gap between practice and research, the coming together of theory, research, and practice is a powerful force that is set in motion whenever librarians think outside the box and draw upon their experiences with users to experiment with new solutions. The international EBP movement offers depth in analyzing library practice and is worth the pursuit. There may be some problems with its “fluid” definition of research for librarians. There are still unanswered questions about what it might

mean for training in reference and instruction. Trying to ask different questions, and gathering new evidence on the same projects, yields new answers.

It is most rewarding to combine research with practice in addressing service challenges, to those who dare to move forward with EBP. We are joining an international movement and we will make the effort to take the ideas to other professional organizations and professional societies to continue narrowing the research gap in Librarianship. We want to reduce the obstacles of time and support for research; engage new debates on EBP in our immediate associations like the Association of College & Research Libraries, to better situate this interdisciplinary movement for ourselves and others and hopefully, increase contributions by many more librarians.

BIBLIOGRAPHY

- Abbott, W. A., (2006). Persuasive Evidence: Improving Customer Service through Evidence Base Librarianship. *Evidence Based Library and Information Practice*. 1(1):58-68.
- Asselin, M. (October, 2002). Evidence-based Practice. Literacy Links. *Teacher Librarian* 30: 53-54
- Bauner, R. (1990). Ready Reference beyond the M.L.S. *The Reference Librarian* 30: 45-58.
- Blenkinsopp, H. (1992). How's the Water? The Training of Reference Librarians, *The Reference Librarian*, 38(175-181).
- Booth, A., and Brice, A. (2004). *Evidence-Based Practice for Information Professionals: A handbook*. London, Facet Publishing.
- Brophy, P. (2007). Narrative Based Practice. Commentary. *Evidence Based Library and Information Practice* 2:149-158.
- Brown, J.S., and Duguid, P. (1991). *Organization Science* 2(1): 40-57.
- Cornelius, I. (Winter, 2004). Information Philosophy. *Library Trends*, 52(3):377-386
- Cottrell, J. R., and Eisenberg, M.B. (July, 2001). Applying an Information Problem-Solving Model to Academic Reference Work: Findings and Implications. *College & Research Libraries* 62(4): 334-347.
- Cleyle, S. (2006). EBL is Hot, Help it Sizzle. Commentary. *Evidence Based Library and Information Practice* 1: 95-97
- Dankert, H.S. and Dempsy, P.R. (2002). Building Reference Strength Through Peer Training. *Reference Service Review* 30:349-354
- Deese-Roberts, S., and Keating, K. (2000). Integrating a library strategies peer tutoring program. *Research Strategies*, 17: 223-229.

- Eldredge, J. (2006). Evidence-Based Librarianship: the EBL Process. *Library Hi Tech*, 24(3):341-354.
- Evidence-Based Practice FAQs. *AORN Online*. <http://63.123.143.66/research/ebpfaqs.htm>
- Fagan, J. C. (2000). Guidelines for Creating a Self-Directed Training Program for the New Reference Librarian: A Framework and Checklist of Activities. *The Reference Librarian* 71:59-70.
- Genoni, P., Haddow, G. and Ritchie, A. (2004). Why Don't Librarians Use Research? *Evidence –Based Practice for Information Professionals*, ed. Booth, A and Price, A. London, Facet Publishing, 49-60.
- Gers, R., and Seward, L. (1988). I Heard you Say....Peer Coaching for More Effective Reference Service, *The Reference Librarian* (22):245-260.
- Going beyond "Same Old, Same Old". (1997). *The Journal of Academic Librarianship*. 23: 169-176.
- Hallam, G. and Partridge, H. (2006). Evidence Based Library and Information Practice: Whose Responsibility is it anyway? *Evidence-based Library and Information Practice*, 1: 88-94
- Hemsley-Brown, J. and Sharp, C. (2003). The use of Research to Improve Professional Practice: a Systematic Review of the Literature. *Oxford Review of Education* 29 (4): 449-470
- Hiebing, D. (1990). Current Trends in the Continuing Education and Training of Reference Staff. *The Reference Librarian*, 30: 5-15.
- Intner, S.S. 1998. The Good Professional: a New Vision. *American Libraries* 29: 48-50.
- Isenstein, L. (199). On the Road to STARdom: Improving Reference Accuracy. *Illinois Libraries*,77:146-151
- Juznic, P. and Urbanija, J. (2003). Developing Research in Library and Information Studies. *Library Management*. 24 (6-7): 324-331.
- Kemp, J., & Dillon, D. (1989). Collaboration and the Accuracy Imperative: Improving Reference service now. *RQ*, 29(1):62-71
- Koufogiannakis, D., Slater, L. and Crumley, E. (2003). A Content Analysis of Librarianship Research. *Journal of Information Science*, 30(3):227-239.
- Koufogiannakis, D., and Crumley, E. (2006). Research In Librarianship: Issues to Consider. *Library Hi Tech* 24:324-340.

- Larson, M. E. (1990). Connecting to the Electronic Library: A Paradigm Shift in Training Reference Librarians. *The Reference Librarian*, 30: 97-104.
- Levene, L. and Frank, P. (1993). Peer Coaching: Professional Growth and Development for Instruction Librarians. *Reference Services Review*, 21(3):35-42
- Libraries Using Evidence-the Hub*. (Friday, February 16, 2007). Evidence-Based librarians on Facebook. <http://librariesusingevidence.blogspot.com>
- Marshall, J. G. (2006). Evidence-based Library and Information Practice: The Time is now. Commentary. *Evidence-based Library and Information Practice*, 1: 110-111
- Van House, N. A., Weil, B. and McClure, M.J. (1990). *Measuring Academic Library Performance: A Practical Approach*. Chicago: American Library Association.
- Nofsinger, Mary M. (1999). Training and retraining reference professionals: core competencies for the 21st century. *The Reference Librarian*, 64: 9-19.
- Peritz, B.C. (1980). The Methods of Library Science research: Some results from a Bibliometric Survey. *Library Research*, 2 (3): 251-268....
- Robles, K., and Wyatt, N. (1996). *Reference Training in Academic Libraries*. Chicago: American Libraries Association.
- Ross, C., and Dewdney, P. ((1989). *Communicating Professionally: How-To-Do-It Manual for Library Applications*. New York: Neal-Schumann Publishers.
- Ryan, P. (2006). EBL and Library Assessment: Two Solitudes? Commentary. *Evidence-Based Library and Information Practice*, 1: 77-80
- Segal, J.A. (2001). Collaboration between Theory and Evidence-based Practice-Two Cultures: Librarians and Professors. *IFLA Journal* 27(1): 24-27.
- Smith, D. (2004). *Social Work and Evidence-Based Practice*. London: Jessica-Kingsley Publishers.
- Stabler, K.Y. (1987). Introductory Training of Academic librarians: A Survey. *RQ*, 26:363-369.
- Reference & User Services. (2004). *RUSA: Electronic Information Sources Guidelines for Training Sessions*.
<http://www.ala.org/ala/rusa/rusaprotools/referenceguide/electronicinformation.htm>
- United States, SAMHSA. (2006). A pocket Guide to Evidence-based Practices on the Web, Washington, D.C. US General Accounting Office.
<http://www.nccbh.org/SERVICE/Newsletters/NCNews/May-June-2006/May-June.pdf>

- University of New Castle, Australia. (2006). EBLIP Toolkit. *Libraries Using Evidence*
<http://www.newcastle.edu.au/service/library/gosford/eb/>
- Westbrook, L. (2005). Problem-Based Learning: A Staff Development Model for Tight Budget Times. *Technical Services Review* 23:27-33
- Woodard, Beth S. 1989. A Selective Guide to Training Literature for the Reference Librarian/Trainer. *Reference Services Review* 17 (2): 41-51.
- Wu, L., and Rocheleau, B. (2001). Formal versus Informal End User Training in Public and Private Organizations. *Performance and Management Review* 24:312-321
- Zlotnick, J.L. and Solt, B.E. (May 3, 2007). The Institute for the Advancement of Social Work Research: Working to Increase Our Practice and Policy evidence Base. *Research on Social Practice* 16:534-539
<http://rsw.sagepub.com/cgi/reprint/16/5/534>