E-learning:
Annotated Bibliography for Library Training Programs

The following annotated bibliography provides resources for anyone who is currently involved or planning to be involved in e-learning offerings for libraries. It was prepared under the guidance of Philip Turner, Vice Provost for Learning Enhancement and Professor in the School of Library and Information Sciences at the University of North Texas as part of a semester-long project I completed in May 2009 to document and recommend best practices for library e-learning projects.

Substantial portions of the paper were published in the Winter 2011 digital online edition of *American Libraries*; an html version is available at http://americanlibrariesmagazine.org/features/02152011/e-learning-product-risk-lesson, and a PDF is accessible at http://americanlibrariesmagazine.org/archives/issue/winter-2011-digital-supplement-0.

E-learning – General Overview

Burd, B. & Buchanan, L. (2004). Teaching the Teachers: Teaching and Learning Online. *Reference Services Review*. 32(4), pp. 404-412. Accessed March 30, 2009 through Emerald.

Barbara Burd, head of reference and information literacy at Colgate University in Hamilton, New York, and Lori Buchanan, instructional services librarian at Austin Peay University in Clarksville, Tennessee, manage to succinctly summarize some of the most frequently cited learning theories still being discussed; place them in the context of e-learning; and apply them to e-learning without losing focus on the students they are meant to reach. Online learning, they maintain, "requires a student-centered approach" (p. 408); can be used to create a community of learners (pp. 408-409); and benefits from effective use of online discussion boards and chats (pp. 409-410), experiential activities (pp. 410-411), and an instructor's willingness to serve as "facilitator or guide" rather than solely as "authority or sage" (p. 411). The article concludes with a strong list of references for those interested in exploring the topic more completely.

Clark, R. & Mayer, R. (2003). *e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*. San Francisco: Pfeiffer.

Ruth Clark and Richard Mayer bring peer-reviewed research and a clean writing style to this well organized introduction to e-learning principles and practices. They make connections to earlier, decades-old learning formats including instructional films to show that "what we are seeing under the e-learning label is not new" (p. 20). They effectively use chapter headings and subheadings to offer helpful tips—"use words and graphics rather than words alone" (p. 51); "place corresponding words and graphics near each other" (p. 67); "present words as audio narration rather than onscreen text" (p. 83); and "use conversational style and virtual coaches" (p. 131)—as part of their own instructional techniques. Furthermore, their inclusion of numerous screenshots to provide examples of effective and ineffective e-learning serves as a model of how those providing or producing e-learning modules can approach their work. Their section on "how people learn from e-courses" (Chapter 2) serves as a brief introduction to a subject covered more thoroughly in James Zull's *The Art of Changing the Brain: Enriching Teaching by Exploring the Biology of Learning*, and Chapter 3 ("Applying the Multimedia Principle: Use Words and Graphics Rather than Words Alone") is a brief introduction to a topic covered in greater detail in Cliff Atkinson's *Beyond Bullet Points: Using Microsoft® Office PowerPoint® 2007 to Create Presentations That Inform, Motivate, and Inspire.*

Elbaum, B., McIntyre, C., & Smith, A. (2002) *Essential Elements: Prepare, Design, and Teach Your Online Course*. Madison: Atwood Publishing.

Bonnie Elbaum, Cynthia McIntyre, and Alese Smith, all affiliated with the Concord Consortium in Massachusetts at the time their book was published, offer what they consider to be the seventeen essential steps of preparing online learning sessions which will keep instructors and learners equally engaged. The book opens with a section on preparing an online course and includes tips on how to build a course outline, set clear deadlines to encourage effective learning, and planning for quality. The middle section of the book moves into elements of designing a course which helps students maintain their focus, develop effective collaborations which foster learning, and literally stay on course. The concluding section on how to teach online is followed by an extensive checklist which summarizes the contents of the entire book for anyone involved in developing and delivering online learning opportunities.

Kuhlmann, T. (2007). *The Insider's Guide to Becoming a Rapid E-Learning Pro.* Retrieved February 26, 2009 at http://www.articulate.com/rapid-elearning/free-ebook/

With a strong focus on meeting learners' needs, Tom Kuhlmann uses his more than fifteen years of experience in the training industry to explore the benefits of using rapid e-learning tools. He briefly reviews topics including e-learning vs. e-information; designing effective quizzes which contribute to the learning process; providing just enough information to inspire learners while inspiring them to "locate additional

resources when they need them" (p. 27); and creating effective performance-based courses. In the context of describing rapid e-learning authoring tools provided by the company for which he works, he offers guidelines to anyone interested in producing their own e-learning modules: use a tool which "leverages" PowerPoint (p. 34); use a quiz tool; add interactions; obtain more than one product; and value "quality ease of use" (p. 35). Sections on audio, video, and graphics complete this introduction to rapid e-learning techniques and leave readers with the foundations for further exploration in the field of e-learning.

Pugh, L. (2001). *Leadership and Learning: Helping Libraries and Librarians Reach Their Potential*. Lanham, Maryland, and London: The Scarecrow Press, Inc.

Lyndon Pugh, a consultant and trainer with three decades of experience as a librarian and library manager, offers a clear, concise, and effectively targeted overview of learning principles for those working in libraries. The table of contents effectively captures the spirit and content of the book by promising sections on learning, development, and the organization; self-development; and key techniques and issues. Well annotated philosophical discussions backed up by case studies provide the core of what Pugh offers here on a variety of topics including how to create a learning structure in libraries and manage learning in libraries; how staff members in libraries learn; and the role of coaching, mentoring, learning in teams, and motivation in creating a learning organization. The extensive bibliography is virtually a guide to best practices in the design of workplace learning and performance programs.

Rossett, A. (ed.) (2002). *The ASTD E-Learning Handbook: Best Practices, Strategies, and Case Studies for an Emerging Field.* New York: McGraw-Hill.

This American Society for Training & Development handbook is a comprehensive introduction to every imaginable aspect of e-learning from America's premier professional organization for those involved in workplace learning and performance. The more than fifty articles by a variety of e-learning practitioners give a breadth and scope beyond what is found in most volumes and provide an introduction to well respected writers and trainers including *Handbook* editor Allison Rossett; Masie Center president Elliott Masie; Marc Rosenberg, author of *E-Learning: Strategies for Delivering Knowledge in the Digital Age*; and ASTD executive editor Patricia Galagan. Among the highlights in a book filled with well written articles are Rosenberg's "The Four C's of Success: Culture, Champions, Communication, and Change" (an entire chapter from his book); Masie's "Blended Learning: The Magic Is in the Mix" (which argues against making e-learning the only mode available to learners); Brandon Hall's "Six Steps to Developing a Successful E-Learning Initiative: Excerpts from the E-Learning Guidebook"; and Nory Jones and James Laffey's "How to Facilitate E-Collaboration and E-Learning in Organizations."

Simon, M. (2009). E-Learning No How. *T+D*. 63(1), pp. 34-39. Accessed January 17, 2009 at
http://www.astd.org/TD/Archives/2009/Jan/0901_E-Learning_No_How.htm

"What could go wrong" in the delivery of an e-learning lesson is at the heart of this
thought-provoking article by Mark Simon, an e-learning designer and instructor with
more than 20 years of experience in non-library settings, and those of us working with or
for libraries are well advised to learn from the list of seven "disastrous decisions sure to
sink any e-learning implementation." The advice is straightforward: give learners plenty
of time to prepare for the beginning of the program; make assessment an integral part of
the process; recognize the importance of informal learning in the workplace; test and
retest the interfaces of the learning management system being used to deliver the
program; prepare tools which will help learners learn how to learn while using what is
being offered; make access to the program easy; and be familiar with the workstation
configurations which will be used by learners.

Case Studies and Surveys

DeLuca, D., & Valacich, J. (2006). Virtual Teams in and out of Synchronicity. *Information
Technology & People*. 19(4), pp. 323-344. Accessed August 13, 2007 through Emerald.

Although addressing how teams are created and nurtured online through synchronous and
asynchronous methods, this detailed study can also serve as a first-rate primer for anyone
considering how to best deliver e-learning lessons. Examining various methods for online
communication between members of a team (or, for our purposes, a community of
learners), the writers show how a combination of listservs, e-mails, bulletin boards, and
synchronous and asynchronous online sessions meets the varying needs of the online
teams (or community of learners). Particularly noteworthy is the description of an
asynchronous offering which began with a face-to-face meeting of all participants
(DeLuca & Valacich, p. 329)—an idea which appears to lead to much better online
learning experiences for those initially unfamiliar with how it works. An extensive list of
references at the end of the article provides plenty of resources for those interested in
pursuing this topic.

Leacock, T. (2005). Building a Sustainable E-Learning Development Culture. *The Learning
Organization*. 12(4), pp. 355-367. Accessed March 30, 2009 through Emerald.

Tracey Leacock's description of how staff at a Canadian university's School of
Interactive Arts and Technology created an effective and sustainable system for
producing e-learning content is a well organized guide and case study for anyone
interested in best-of-class e-learning practices. The section headings themselves serve as
an outline to the topic: the "guiding principles" section headings suggest that course
designers should ensure that graduates are workplace-ready, programs are learner
centered, a culture of collaboration is fostered, and economic sustainability is considered
(pp. 356-357). Best practices include orientation; a formal "Mastering Educational
Technology and Learning" course and ongoing workshops for those involved in course

development; work clusters which bring together up to ten developers along with an instructional designer and project manager; and an "eLearning Innovation Centre" to support the work of those producing e-learning content (pp. 359-363). The result, Leacock suggests, is a model which "can be applied in any educational or training program or organization" (p. 366) and which "will lead to the building of a successful e-learning organization."

OCLC. (2006). *Trends in E-learning for Library Staff: A Summary of Research Findings*. Retrieved March 13, 2009 at http://www.webjunction.org/c/document_library/get_file?folderId=443860&name=DLFE-12345.pdf

OCLC's *Trends in E-learning for Library Staff*, based on a survey which drew 651 responses from across the United States in 2005 and which was published in 2006, suggests that e-learning in the library field "is still young" (p. 4); is attracting interest from a majority of those who responded to the survey; and is somewhat more likely to be purchased rather than produced by most libraries interested in e-learning because of the cost involved in producing original content and the level of expertise needed. Those who expressed most interest in adopting e-learning during the year immediately following the survey cited "convenience for learners," "ability to reach more learners," and "cost-effectiveness" as reasons they were interested in e-learning, while approximately twenty-five percent of the potential developers and ten percent of the potential purchasers cited "instructional effectiveness" as a reason for proceeding (p. 16).

Quinlan, N., & Hegarty, N. (2006). Librarians Outside the Box: Waterford Institute of Technology's Library-Based Virtual Learning Environment (VLE) Training and Development Programme. *New Library World*. 107(1220/1221), pp. 37-47. Accessed August 13, 2007 through Emerald.

This case study from the Waterford Institute of Technology Libraries in Waterford, Ireland, is a virtual compendium of e-learning best practices in action. The writers begin with the reminder that implementing e-learning systems "without significant investment in developing staff will almost certainly not produce good results" (p. 38), and they help to establish a context for anyone attempting to begin this process without adequate resources. They continue by documenting the process of building a team capable of producing effective e-learning for their library constituents, discussing the importance of developing adequate support services for the program and its users, documenting how the program continued to evolve, and concluding that "(s)uccessful integration of e-learning into an institution in the longer term requires a coherent institute wide e-learning strategy and support from senior management" (p. 46)

Turner, P., & Dalston, T. (2008). IMPACT in Public Libraries: Initiative to Measure Personal Assimilation of Computer-mediated Training. Retrieved April 2, 2009 at http://www.leadonline.info/IMPACT/documents.htm

> The positive role of facilitators in online learning within libraries is documented in this final report on an Institute of Museum and Library Services grant-funded project at the University of North Texas. The researchers, working with more than four hundred participants from more than two hundred libraries in twenty-seven different states, determined that facilitated e-learning is more effective than "canned, self-paced e-training" (p. 7); that trainees preferred to interact with facilitators in the workplace rather than online (p. 8); and that e-learning, "even with facilitation, is not effective as a 'one-shot' inoculation to boost staff confidence, especially as it relates to a complex topic, such as managing difficult patrons" (p. 8). Follow-ups to the experiment of offering the same online difficult-patrons workshop with and without facilitation showed that fewer than a third of the participants "reviewed, revised, or created policy manuals at their library" after participating in the training and that neither group—facilitated or non-facilitated—reported "significantly higher levels of on-the-job integration" (p. 9).

The Brain as Learning Organ

Bennet, A. & Bennet, D. (2008). E-Learning as Energetic Learning. *VINE: The Journal of Information and Knowledge Management Systems*. 38(2), pp. 206-220. Accessed March 30, 2009 through Emerald.

> Alex and David Bennett, through a contemporary examination of how the human brain processes information, document ways in which e-learning becomes effective through learners' emotional engagement with material being taught. Drawing from the work of James Zull and many others, they refer to passion and engagement as "the entry point" to effective e-learning (p. 210); cite the importance of e-learning which is "interactive and specifically tailored to each individual" (p. 211); discuss the importance of "collaborative environments" in successful e-learning (pp. 211-213); and conclude that "(l)earning is a very private affair, dependent upon the needs, feelings, history and expectations of the self-organizing system made up of the mind, the brain, the body, the spirit, the conscious self, and…the e-learning system" (p. 216). A list of more than fifty citations at the end of the article provides valuable resources for anyone interested in further exploring the topic.

Pink, Daniel. (2005). *A Whole New Mind: Why Right-Brainers Will Rule the Future*. New York: Riverhead Books.

> While Daniel Pink's work focuses on showing readers that new creative skills are needed to survive in the contemporary workplace, his readers will also find plenty of useful material to be applied to e-learning projects. His discussions of the importance of design and the use of story in providing lessons which will be memorable highlight essential elements of any successful learning experience, and can easily be incorporated into e-learning programs. His reminder to remain empathetic and playful will also help e-

learning designers and instructors keep their audiences in mind as they proceed—to the benefit of all involved. The book itself is well designed, empathetic, and playful, so provides an example of what he is attempting to teach.

Zull, J. (2002). *The Art of Changing the Brain: Enriching Teaching by Exploring the Biology of Learning*. Sterling: Stylus Publishing, LLC.

James Zull takes readers deeply into the learner-centric world in this self-effacing and appealing approach to a highly technical subject, and he offers something for anyone interested in understanding how we learn. Those new to training-teaching-learning will find well written summaries of the elements of successful learning sprinkled throughout the book: knowing how to avoid overwhelming learners with too much information; understanding the importance of building on what learners already know; and helping them retain what is learned through emotional engagement, stories, and opportunities to reflect upon and apply what they have learned. More experienced trainer-teacher-learners will benefit from those summaries and from Zull's explanations of how the human brain functions in the learning process. For those who are familiar with Cliff Atkinson's *Beyond Bullet Points* and Daniel Pink's *A Whole New Mind*, the insights into how the brain works will deepen their appreciation for those writers' work and suggest additional ways to incorporate Atkinson's and Pink's ideas into successful training-teaching-learning efforts.

Leaders' Role in Learning

Zepeda, S. (1999). *Staff Development: Practices That Promote Leadership in Learning Communities*. Larchmont: Eye on Education.

Although Sally Zepeda (a prolific writer and a member of the University of Georgia's Department of Lifelong Education, Administration, and Policy) writes about school principals rather than library directors as leaders in workplace learning, the parallels between what she describes and what we see in libraries is striking: organizational leaders play a critical role not only in encouraging effective learning but in serving as role models to everyone within an organization. Those who agree that the support of organizational leaders is critically important to success in e-learning will find plenty of support in Zepeda's general overview of how communities of learning thrive when school principals are active participants. They will also find more room for exploring this aspect of learning through Zepeda's copious references to other works.

Effective Presentation Techniques

Atkinson, C. (2008). *Beyond Bullet Points: Using Microsoft® Office PowerPoint® 2007 to Create Presentations That Inform, Motivate, and Inspire.* Redmond: Microsoft Press.

Cliff Atkinson's visual approach to PowerPoint slide presentations has become a virtual industry centered around this second edition of his book; his Beyond Bullet Points web

site (http://www.beyondbulletpoints.com/) with a blog, free templates, and links to updated material; and plenty of samples being created and posted online by those who have learned what he is teaching. Showing readers how to avoid slides which are text-laden and full of bullet-point items read to bored learners by substandard presenters, Atkinson provides inspiration for anyone who wants to create online lessons which will be effective, memorable, and fun for everyone involved in e-learning.

Assessment, Evaluation, and Return on Investment

Brinkerhoff, R. (2006). *Telling Training's Story: Evaluation Made Simple, Credible, and Effective.* San Francisco: Berrett-Koehler Publishers, Inc.

Robert Brinkerhoff, in describing his "Success Case Method to Improve Learning and Performance," accomplishes at least two important objectives: he provides an easy-to-replicate method for determining whether training is producing measurable results, and he argues for evaluations which recognize that "training is only one of many contributors to the goals that we seek to achieve from training" (p. 7). His entire evaluation system is built on the proposition that what occurs in a training session is a small part of what is needed to produce effective learning opportunities, and the sample surveys and case studies he includes in the book provide templates and models for anyone interested in implementing a similar system to change "non-successes" into successes.

Jefferson, A., Pollock, R., & Wick. C. (2009). *Getting Your Money's Worth from Training & Development: A Guide to Breakthrough Learning for* Managers and *A Guide to Breakthrough Learning for Participants*. San Francisco: Pfeiffer.

This follow-up volume to Wick, Pollock, Jefferson, and Flanagan's *The Six Disciplines of Breakthrough Learning* literally offers flip sides to what managers and learners need to know and do to increase the chances that workplace learning will be effective. One side of this two-sided book is directed to managers and the other side—accessed by turning the book over and reading from the opposite direction—is directed toward learners, allowing both groups to work from a single volume and gain the additional perspective of seeing what the other party's role is in the learning process. Since this first-rate study guide is firmly grounded in the lessons of *The Six Disciplines*, it offers a succinct summary of the longer work while reminding learners that they will gain the most from learning opportunities if they "get ready, get engaged, and get results" (p. 7 of the participants' guide) and reminding managers that they are more effective with learners if they are "more up-front," "more engaged," and "more results-driven" in their interactions with those whose training they are sponsoring and approving (p. 11 of the managers' guide).

Rubin, R. (2006). *Demonstrating Results: Using Outcome Measurement in Your Library*. Chicago: American Library Association.

Rhea Rubin's contribution to the "PLA Results" series, designed to provide "pragmatic information" that can be used to improve any sort of program designed and offered by

libraries (p. 11), is essential reading for those trying to document and advocate for the importance of library workplace learning and performance programs. She focuses on measuring outcomes—documenting "the quality and effectiveness of a program…to quantify our users' success stories" (p. 2)—and takes a common-sense approach—always asking "so what?" in response to what libraries do. Exercises, tool kits, and work forms which can easily be adapted to the design and implementation of training programs and the measurement of their effectiveness serve as a continual reminder that measurement must be built into offerings from the moment those offerings are designed. "Training," she notes, "is, by definition, an outcome-based activity since the goal is always impact on the trainees; the purpose is to stimulate or contribute to a change" (p. 29).

Wick, C., Pollock, R., Jefferson, A., & Flanagan, R. (2006). *The Six Disciplines of Breakthrough Learning: How to Turn Training and Development into Business Results*. San Francisco: Bernett-Kohler Publishers, Inc.

Although Wick, Pollock, Jefferson, and Flanagan are writing for a corporate audience, much of what they suggest and report could easily be applied to workplace learning and performance programs for libraries. They document, through their own research and experiences, the importance and overall effectiveness of having managers and supervisors involved in employee training programs on a continuing basis; how an online system (Friday5s®) of follow-up exercises and reports substantially increases retention and on-the-job application of lessons learned during the learning process; and how pre- and post-event activities help establish the sort of workplace communities of learners which produce positive results which can be documented and replicated. Their *Getting Your Money's Worth from Training & Development* is a follow-up guide for managers and employees interested in applying the principles outlined in *The Six Disciplines*.

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