Developing theory-based, practical information literacy training for adults

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Abstract   Teaching librarians seeking to educate people to be lifelong, information literate learners, often employ training sessions to introduce new skill sets to patrons. To create and deliver effective training, one must first understand how training differs from traditional education, how adults learn (andragogy) in different ways than do children, and how using instructional design can yield effective, low cost information literacy programs. A wealth of on-line, open source resources is available on how to learn more about and implement training, andragogical teaching principles, and instructional design. Librarians interested in honing their teaching skills can access these resources to expand and improve their under-standing of how to be better educators and trainers.
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Librarians as teachers/trainers

As the information age exponentially grows, so does the need for skilled librarians and others who can teach adults how to be information literate. The 21st century demands that learners know how to intelligently access and use dynamic, expansive, and de-centralized information sources such as the Internet and other social media. "Students need a set of abilities that they can employ independently in finding their way through this part-wilderness, partly charted territory of ever-shifting views and uncertain horizons" (Cox & Lindsay, 2008, 11). Librarians are needed more than ever to guide patrons to finding reliable and valid information.

Using business models of training, librarians can teach researchers to be information literate (IL) by being able to:

- determine their need for information,
- access and evaluate reliable sources of information,
- use the information gathered in a purposeful and ethical way,
- manage and store the wealth of valid information they have, and
- build on that knowledge in a way that makes them lifelong learners.

The Association of College and Research Libraries (ACRL, 2000) has researched and developed a set of carefully outlined guidelines and standards that are posted its website. Using business models of training, librarians can use the ACRL guidelines to structure, present, and assess information literacy programs.

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The UNESCO Training-the-trainers workshops (UNESCO, 2007) recognized and captured an opportunity to advance librarianship by successfully hosting a series of workshops around the globe. The premised of the meetings was that 21st century librarians can be leaders in "building… knowledge societies where access to information plays a key role in empowering people and improving their daily lives." Librarians who participated in the workshops learned training basics and built networks for sharing training materials. Detailed reports on the workshops and a comprehensive discussion of them appeared in a special issue of the *International Information and Library Review Journal (IILR)* in December of 2009 (Horton).

Exabytes and 21st century information models

Statistical studies cannot keep pace in measuring how much information is being created on the Internet. As shocking as the following statistic are, they are already outdated. Peter Lyman, professor of information science, noted that "The world's total yearly production of print, film, optical, and magnetic content would require roughly 1.5 billion gigabytes of storage. This is the equivalent of 250 megabytes per person for each man, woman, and child on earth-…Print, film, magnetic, and optical storage media produced about 5 exabytes of new information in 2002…Five exabytes of information is equivalent to 37,000 digitized copies of all seventeen million books in the Library of Congress" (Lyman & Varian, 2000, 1) Exabyte? Is the word even in our daily vocabulary yet? Authors are already writing about the "exaflood" of information that is sweeping knowledge societies. With the exponential growth of knowledge, librarians are more important than ever.

Libraries are more than repositories of information. They are dynamic and diverse pathways, gateways, and guides to traditional and emerging information. Librarians, therefore, need to be able to teach a variety of people to skillfully use and understand the new models of and resources for knowledge so that patrons can manage the "Exabyte flood" of facts, discoveries, and opinions that saturates society. With information being the driving force of many emerging and traditional industries and professions, knowledge becomes a type of currency that builds into intellectual property. Understanding the relationship between the need for the most current knowledge as a fuel of industry, librarians can train knowledge workers using the same models that business uses to develop "just-in-time" training in other skill areas.

Information as capital

Recognizing that information drives industry, successful businesses have designed ways to respond rapidly to commercial challenges with rapid response training models that teach people the information skills they need right now to manage immediate problems and possibilities. Business has been a leader in designing successful training models.

In tough economic times, successful industries have learned to re-tool, re-train, and respond in a short time span and in economical ways in order to outpace the competition. Some of the best examples of training strategies come from industry instead of traditional educational institutions that are typically slow or reluctant to change because their immediate survival does not depend on their adaptability to rapid change, immediate challenge, or fierce competition.

Business has long valued the return on investment (ROI) offered by training programs that provide responsive, thoughtful, and easily shared learning that helps workers to quickly and efficiently improve performance, be more satisfied in their work, or use communication tools and knowledge networks to expedite improved productivity or quality of work.

Responsive training and traditional pedagogy differ

Training is a "short-cut" to quick, discrete "chunks" of learning. Educational models, by comparison, are more structured, cumulative, and complex because they closely follow traditional educational theory. Trainers know that developing flexible, lifelong learners who can keep pace with the rapid expansion of information, requires flexible training that is also thoughtfully and purposefully responsive to the dynamic nature of new information tools and resources. To be responsive to the Exabyte flood, librarians need to move from traditional models of education and incorporate business models of training into their tool kit of teaching tactics.

Compared to training, education is a long-term investment that seeks to build a solid foundation for continual learning that is systematic, cumulative, sustained, and periodically graded for achievement. Education is shaped from diverse subjects that are inter-connected and balanced to create a comprehensive general and specialized curriculum.

By contrast, training typically focuses on an immediate need or opportunity and builds on the existing expertise, education, or interest of the targeted learner. Training can provide a one-time learning event or a progressive series of teaching units and does not necessarily require accreditation, certification, assessment, or matriculation the way education usually does.

Education is broader in scope than training and requires people to use general information to continually expand their knowledge base, improve their professional and personal skills, and develop individual character. While not limited to teaching institutions, formal education usually takes place in controlled, traditional settings with professional educators and administrators guiding a long term, planned, comprehensive curriculum with periodic individual and programmatic assessments that measure desired outcomes compared to achievements using entry and exit competencies. Education provides a foundation upon which training can be built.

Benefits of training

Training can be developed quickly to instruct people in specific skills that they need right away. It uses educational competencies or native intelligences such as critical thinking, problem-solving, communication skills, decision-