The Librarian As Essential Key to Connecting Open Educational Resources

and Information Literacy in the Academic World

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Abstract

The librarian today, caught up in the growing seas of information, is challenged to rise up and give meaningful direction to the information seeker. The digital divide question goes deeper than the simple description of the problem that pits those who have access to technology against those who don't. The parameters of the divide must be explored in depth in order to begin to close the divide. The librarian holds key possibilities for helping to close this divide and bridge the gap. This paper will focus on the contributions that Open Educational Resources movement can make towards the development of information literacy from yet another angle, the contribution of the librarian. New opportunities for more effective collaboration between librarians, students and instructors can promote greater engagement of the student, resulting in mastery of the literacy challenges presented by the changing world of technology. The educational climate is experiencing a paradigm shift that is familiar territory to the librarian. The librarian as a key initiator in connecting patrons with resources is in a unique position to give leadership to the Open movement, which includes Open Educational Resources,

Open Access and Open Source. This paper will explore the contribution the librarian brings to OER and the Open movement.

New Literacies

Focus has been given to the structural world of libraries and literacy as described by the terminologies of information, computer and digital literacies. According to Semali, L. (2001) "'new literacies' refer to those literacies that have emerged in the post-typographic era. To highlight the different effects of electronic and visual communication, various writers have used the term 'post-typographic' to mark an intellectual and cultural shift in the way information is designed, communicated, and retrieved." This shift in thinking is expressed in the Open movement. To break away from familiar modes of instruction and learning into the era of new structures of information presentation marks the tasks that are before us, already begun but still in stages of transition. Few know better than the librarian the immense landscape of the retrieval of information. Who is better fitted, then, to give needed leadership into the new territorial waters of current representations of information in the Open movement than the librarian?

The JISC Market Research Team (2008) released a survey that reveals that a key concern for the future of librarianship involves managing the increasing volume of information.

> The research, supported by SCONUL3, the Society of College, National and University Libraries, found that in both the higher (HE) and further education (FE) sectors, the perceived shift away from print to a dependence on e-resources creates other challenges such as how to manage the volume of material, how users can access it and how libraries and learning resource centres (LRC) can provide or promote such resources. It also highlights financial issues such as potential funding sources for the increasing amounts of new technology, electronic materials and subscriptions likely to be needed by the learning institutions of the future.

Rather than being pushed aside by the sweep of the constant technological advances that suggest the idea that the book is out and technology is in, the librarian is challenged to connect the more familiar historical landscape of established library resources typified by the storage and retrieval of traditional printed resources on the one side, to the rapidly changing world of the Open Educational Resources movement on the other. The librarian today is challenged not only to be aware of the constantly changing landscape, but also to be skilled in finding the right information at the right time in order to effectively respond to the information needs of patrons.

The Philosophy of Librarianship and OER

Today's librarian stands in a unique position to capitalize on the philosophy of librarianship defined by key historic elements. To begin to define librarianship is in itself a challenge. Joseph Nitecki (1993), who coined the term "metalibrarianship" writes

> Recently there has been a noticeable shift of interest away from the acquisition of data, toward access to them, and from the preservation of recorded messages to their utilization. Yet the basic role of librarians as mediators, linking the sources of information with their recipients, although not changed, is not yet fully understood by many librarians and most library patrons. (1.4.1 Focus of the argument, para. 5)

He describes the evolving nature of librarianship and refers to the all but vanished stereotype of the librarian as the time "when librarians struggled for a professional self-identity, by combating a stereotype of a librarian presented as a glorified clerk, dedicated only to the physical processing of books, and encouraging their reading in a perfectly quiet library." (9.1.1 Introduction). Nazli, A. (2008) writes on the importance of developing philosophical thinking, stating that librarians need a clear sense of purpose. "There is a close relationship between librarians' realization of PT [philosophical thinking] and their credibility in society. Librarians can build their reputation in society by making use of theory, and with the self-confidence they gain from knowing what role they play and why." (section Why does PT matter today? Para 12). The librarian who is able to employ philosophical thinking to the understanding of the role information plays

in gaining and utilizing knowledge will bring new energy and vision to the library as place and will recognize the contributions of the Open movement.

OER and Life-long Learning

The librarian who has integrated Open thinking will recognise a learning culture where there is increased desire in pursuing and achieving mastery of the many aspects of information available to us. Lynch, C. (2008) refers to the difference between learning and gaining an education: "access to education is not the same thing as access to information, although the two are intimately related and might often reasonably be viewed as two endpoints of a continuum." (Para 2) He continues by recognizing that while libraries contain or have access to inexhaustible information the library is uniquely different from the classroom insofar as learning is concerned. This begs the question of just how learning takes place. Does learning happen because an instructor organizes materials to present, even using a variety of methods, maybe even utilizing the latest in technology, applying requirements and deadlines for students to meet? Lynch raises further questions of how learning can be acquired in an age where there is so much information to access. He states that while social interaction is an essential part of learning where technology plays a key part, the challenge to evaluate information has become even more complex. He recognizes that ongoing education is now a part of our culture. We can expect the need to incorporate ongoing education, often termed as becoming a life-long learner, in every area of expertise and aspect of living in today's world (Lynch, C. 208).

The advent of OER presents just one piece of the Open movement that gives direction to our response to the challenge of creating and becoming life-long learners. Lynch sees increasing involvement of teachers, educators, and scholars who "will likely form the nexus of new teaching communities that want to exploit these information resources in their own teaching. Similarly, those authoring Open Education Resources will likely offer to manage and moderate teaching communities forming around these resources." Lynch (sec. Meeting the Needs of Learners). The need for increased modules of learning raises more questions about certification and degrees to give evidence of learning.

**Open Educational Resources and the Open Course Ware Movement
are Changing the Way We Experience Education**

Open Educational Resources and Open Course Ware are part of the trend to make software, educational materials, and entire courses, freely available and accessible via the Internet primarily to under-resourced nations or individuals, but also to any individual who wants free access to information. The Hewlett Foundation provided significant funding and support to make this happen. For example, MIT (2008), funded by the Hewlett Foundation, reached 1800 undergraduate and graduate courses freely available on the Internet by 2007 and is adding or updating courses at about 200 per year. The Hewlett Foundation reports that nearly half of their 12,000 hits per day are coming from outside North America. [Hewlett brochure].

A recent publication by the Centre for Educational Research and Innovation, (CERI, 2007) showed that 300 universities around the world provide more than 3000 open access courses, freely available online. Universities include MIT, Rice University, John Hopkins Bloomberg School of Public Health, Tufts University, Carnegie Mellon University, University of Notre Dame, and Utah State University. (Giving Knowledge for Free, 2007, ch. 3). The movement is growing with new universities joining in and courses being added regularly. According the MIT's Open Courseware website they have now reached a record of 2 million hits per month (MIT 2008).

Collaboration for Information Literacy

Today academic librarians have become increasingly involved in a variety of collaborative efforts with professors and students to develop information literacy skills. They are collaborating with professors/instructors and students by accessing, evaluating and utilizing information resources that develop information literacy. Reed, M., Kinder, D., & Farnum, C. (2007) in their study on collaboration at One Ontario University cite Lindstrom & Shonrock (2006), and concluded that in order to develop students with information literacy skills there must be a "strong collaboration between university librarians and teaching faculty, where librarians and faculty are jointly responsible for curriculum development, assignment development, teaching, and follow-up with students following student assessment" (Reed, introduction, ¶ 7).

Further study of the actual experiences of collaboration between librarians and faculty give mixed results. Some schools and universities have made great progress not only with giving librarians faculty status and regarding them as research co-horts while others remain in past traditional models of regarding the library as support staff that fill many menial to complex functions according to academic needs determined by the institution. Owusu-Ansah (2004) describe a common scenario this way

> Librarians, doubting their ability to achieve any far reaching results and conceding the lack of institutional, human, and monetary resources to proceed with any ambitious programs, often attempt limited solutions or, wors[t] still, continue to debate the purportedly unresolved nature of information literacy. Administrators struggle with what it is they really hope for. Faculty marches on as though no concerns existed. (¶ 3)

Open Educational Resources present opportunity for faculty and librarian to move towards collaboration. The Open movement is new. Unless the librarian is aware of resources and opportunities and how to access them it is not likely that busy professors will access and use them. As librarians develop working connections with faculty to approach developing information literacy from a team effort, particularly in developing critical thinking skills in evaluating resources for course assignments, awareness of Open Educational Resources and Open Access journals will increase. Awareness is a key factor in the Open movement.

Technology Impacts Literacy

The National Council of Teachers of English, (February, 2008) presented a comprehensive analysis of 21st century literacies that recognize the interwoven aspect of the threads of literacy. They recognize that today's students need to:

- Develop proficiency with the tools of technology
- Build relationships with others to pose and solve problems collaboratively and cross-culturally
- Design and share information for global communities to meet a variety of purposes

- Manage, analyze and synthesize multiple streams of simultaneous information
- Create, critique, analyze, and evaluate multi-media texts
- Attend to the ethical responsibilities required by these complex environments

The Open Educational Resources and Open Course Ware movements are marked by a bottom up approach to learning and creating knowledge as compared to the top-down format of passing on information from the learned to the unlearned, which has been the staple of our foundational understanding of education. Steven Downs (2007), of the National Research Council of Canada, and a proponent of the Open Educational Resources Movement, describes the paradigm shift in the changing landscape of the way technology is impacting how we experience education. He begins with five steps of the educational process as related by Hanley (2005);

1. Discovery & Research for Teaching

2. Designing the Learning Experience

3. Teaching

4. Learning

5. Feedback, Assessment, & Evaluation

He states that "[w]e need to rethink the workflow just described. Rather than think of each of these five steps as something that is done for learners, and supported through some sort of sustainable (or commercial) program, we need to think of each of these five steps as something that learners do for themselves." This implies a shift in educational philosophy that is exemplified by the learner who is a self starter, who sees the value of learning, and also has a well developed work ethic.

Collaboration to Close the Generational Gap: Co-creative Learning

The Internet provides opportunities for collaboration not done before in the established halls of learning. To move into mastery of resources involves not only gaining awareness of those resources and expertise in handling them, but also gaining the ability to close the gap and bridge the digital divide. To see the challenge from a different perspective helps. Perhaps for the first time in history we are presented with an

opportunity to close the so-named generational gap as never before. Not only can we learn from the abilities of the so-called millennial generation through new levels of collaboration provided to us by increasingly adaptable and available new technologies, but we can also become co-creators with them in remixing and repurposing of essential knowledge in the discovery of new answers to old problems facing our world. This philosophical approach is expressed in Web 2.0 technology, or the interactive social/learning environment. Adler, R. and Brown, J. (2008) refer to the emergent quality of learning in their discussion of Open Learning—they refer to Learning 2.0—by talking about how group learning ignites the student's passion to go deeper into a subject, not only learning "about" the subject but learning "to be" through peer-based learning. "These communities are harbingers of the emergence of a new form of technology-enhanced learning—Learning 2.0—which goes beyond providing free access to traditional course materials and educational tools and creates a participatory architecture for supporting communities of learners. (sec. The Long Tail in Learning)

The librarian needs great diplomatic skill and vision in order to give supportive leadership to an educational system mired in traditional views of education into this new experience of learning broadly described by Web 2.0 technology. The inspiration for change arises from the awareness of today's student, who are referred to as digital natives. However, the librarian by nature of his/her understanding of the world of information is in a better position to make the shift in thinking about education than the typical faculty member who may have to attend numerous workshops in order to understand and incorporate the advantages of interactive education.

Teaching Students to Evaluate Information

Initially educators have taken a negative stance on students' reliance upon the internet to cite information gathered in research. The movement to develop information literacy has grown out of the need to help students evaluate the quality of information they find. Often they are content to turn in anything they find that appears relevant. Tomaiuolo, N (2005) writes about research done that measures faculty satisfaction with student use of the Web for research purposes. It was found that overall faculty felt that students did not

make adequate use of library databases and tended to rely on Web resources that lacked authority. He concludes

> The findings have implications for library instruction as well as subscription database budget allocations. Possible mitigating measures that librarians may wish to accentuate include intense promotion of subscription resources while integrating examples of appropriate open Web use as a complement to subscription resource use during library instruction, and finally reducing the number of subscription database offerings to bare essentials.

Social Learning Contributes to the Development of Information Literacy

Interactive learning or social learning, while becoming a philosophy much under discussion and clearly associated with the Open Educational Resources movement, has been around in other forms for a long time. Libraries have remained a stable part of our communities while at the same time, if given the respect and consideration they deserve, can be leaders in the change process by the very nature of their existence. It is the librarian who brings the library alive. He/she is in a key position to contribute important connections to the social learning environment. The librarian is in a position to contribute information and assist faculty in implementing new ways of acquiring information literacy through an interactive medium such as College 2.0. Young, J. (2008) describes the latest version of educational technology he refers to as College 2.0 as another step in letting go of the familiar top down traditional approaches to education and introducing new versions of the interactive educational experience. One program, Google docs, is an example of how a document or spreadsheet can be worked on collaboratively by students because it is stored on the Internet.

The students all contributed to a shared document using Google Docs, which anyone

in the group could edit online from anywhere. All of the students were essentially logged in to the same computer (in this case off at Google somewhere), one adding a paragraph at the end, another changing the font, and another rewriting the title. There

was no longer any need to worry about getting everyone in the same room at the same time (Young, 2008).

In the literature focused on the Open movement a question rises that is only alluded to in most of the articles. Where is the librarian in the picture? Mention is made of the library, often as a relic of another age, but a visit to libraries today reveals them to be a significant part of the community, either public or academic; they are busy places where learning is a tangibly felt activity. Wikipedia, in their discussion of Library 2.0, describes the change in focus technology brings to traditional library services

> With Library 2.0, library services are constantly updated and reevaluated to best serve library users. Library 2.0 also attempts to harness the library user in the design and implementation of library services by encouraging feedback and participation. Proponents of this concept expect that ultimately the Library 2.0 model for service will replace traditional, one-directional service offerings that have characterized libraries for centuries. With information and ideas flowing in both directions – from the library to the user and from the user to the library – library services have the ability to evolve and improve on a constant and rapid basis. The user is participant, co-creator, builder and consultant – whether the product is virtual or physical.

Additionally, knowledge of technology tools encourages the integration of individual and social learning. For example, blogging offers an online interactive writing experience that, when engaged, fulfills the social need for the establishment of voice, while it also fosters the development of writing skills. Social written expression can be refined grammatically by clarifying ideas, first by writing freely with simple practice, and, as knowledge increases, which then contributes to more scholarly expression. By writing in a social context the student may be motivated to improve his expression as opposed to writing strictly to meet the expectations of an instructor. When librarians are familiar with these technologies, and have an open door to collaborate with professors in creating learning activities that increase information literacy skills, achievement becomes an exciting reality that fosters more learning and greater knowledge.

The Librarian Brings It All Together

While learning resources continue to increase and more universities follow the example set at MIT in 2002 and contribute to OpenCourseWare, a nagging question must be addressed. How is the connection made between resources, instructors or learning facilitators and students? Who brings it all together? Where education has been institutionalized and held together by campus life, change is often approached as one more thing to be harnessed, analyzed and controlled through endless meetings and discussions of theories and the mechanics of education, after which classes continue to operate more or less as usual. This is not the climate where OER will flourish. It may receive a passing glance or sections, learning modules, may be incorporated into the curriculum, but generally it is likely to be business as usual. It is not hard to recognize that most textbooks cover much more information than can be covered thoroughly in a given semester. It will take the deliberate effort of the many to bring OER into the center of a solution that brings new life to students, educators and librarians. The librarian is in a unique position to give the Open movement the necessary thrust to bring its various components and resources into the mainstream of the educational experience of both students and educators today.

Conclusion

In a global economy impacted by accessible information via the Internet, independent, self sustained learning is rapidly becoming more common and enhanced by the Open Educational Resources and other aspects of the Open movement. While we consider becoming a life-long learner a goal for our students, technology has opened the door, creating endless possibilities to facilitate the achievement of this goal, by giving us tools that foster learning as a way of life, rather than, or perhaps in addition to, the lofty goal of education achieved with supporting degrees. The resourceful librarian with vision, who stays abreast and remains open to the changing trends in the educational world, who is knowledgeable of available resources both print and online, and also gains experience with changing technologies, becomes an essential partner in the collaborative educational efforts of both instructor and student. The academic library remains a place where student and instructor are patrons by choice, engaging with

information and experiencing education. The librarian is both leader and servant, a co-creator with students and educators in the social learning community.

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