

The Keystone Principles - Creation and Influence

by LAURA J. BENDER

INTRODUCTION

On September 25, 1999, 80 academic library leaders got together at the American Research Libraries/Online Computer Library Center (ARL/OCLC) Director's Summit in Keystone, Colorado, USA. They challenged themselves to plan for the future of libraries in the digital environment. They all believed that to remain viable in the global economy, libraries and librarians need to assert the underlying values of librarianship as a way to redefine the rules of the playing field in this new environment. An informal working group agreed to write a statement articulating the values of academic libraries and how those values could be reflected in the digital arena. As Carla Stoffle, Dean of University Libraries and the Center of Creative Photography at the University of Arizona states, "We must all become activists, seize the initiative, and gain control of the 'rules' which are now in the hands of others" (Stoffle, 2003). The 'others' are publishers, software producers, information technology professionals, etc. At Keystone participants tackled the following topics:

- How to create and support new learning and research environments
- How to work creatively with information providers to develop strong responses to needs
- How to engage in the changing aspects of teaching and learning in higher education
- How to expand their library's knowledge management role within the university
- How to connect the values of libraries with the technological environment (Stoffle, 2000).

So the Keystone Principles require explicit action based on three specified user-centered principles and twenty-two action items rooted in our values.

THE KEYSTONE PRINCIPLES

Principle One

Scholarly and government information is a 'public good' and must be available free of marketing bias, commercial motives, and cost to the individual user.

Action Items

1. Libraries will direct resources to mobilize the academic community to adopt Principle One and act in accordance with its spirit.
2. Libraries will direct resources and establish coalitions to create local, state, and national legislation consistent with Principle One.
3. Libraries will direct resources to create outlets for academic institutions, government agencies, and scholarly societies for their information products that operate by policies consistent with Principle One.
4. Libraries will support academic institutions, government agencies, and scholarly societies that maintain outlets that operate consistently with Principle One.
5. Libraries will make purchasing decisions and licensing agreements that embrace the concepts embodied in Principle One.
6. Libraries will create only those software and hardware products that embody the concepts espoused in Principle One.
7. Libraries will support aggressively colleague institutions or colleagues in institutions that challenge unfair licensing and copyright restrictions.
8. Libraries will direct resources to implement this principle by:
 - a) establishing true collaborative resource development and programs;
 - b) establishing buying consortia; and
 - c) partnering with other libraries, publishers, societies, faculty groups, etc., to create a more competitive information environment thereby reducing the cost of commercial information.

Principle Two

Libraries are responsible for creating innovative information systems for the dissemination and preservation of information and new knowledge regardless of format.

Action Items

1. Libraries will direct resources from traditional library budgets to create a digital publishing capability and new access systems.
2. Libraries will direct resources to create new access systems free of bias and ulterior motive and based on customer information seeking patterns.
3. Libraries will partner with faculty, other libraries, and/or other entities to quickly identify, create, manage, and disseminate new digital content critical to learning and research programs of their institutions.
4. Libraries will create interoperability in the systems they develop and create open source software for the access, dissemination, and management of information.
5. Libraries will accept responsibility for campus "information" management as extension of their traditional role.

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6. Libraries will foster the development of systems that ensure long-term access to scholarly knowledge.
7. Libraries will develop new measures of quality and educate the campus, accrediting agencies, and profession to the need for these new measures.
8. Libraries will develop assessment techniques and identify outcome measures that help streamline and redirect resources for these activities.

Principle Three

The academic library is the intellectual commons for the community where people and ideas interact in both the real and virtual environments to expand learning and facilitate the creation of new knowledge.

Action Items

1. Libraries will direct librarian activities to establish partnerships with faculty in the design of the learning activities of the institution.
2. Libraries will direct new and existing resources to create real and virtual environments to support research and learning activities, e.g., electronic reserves, online content, access tools, etc.
3. Libraries will create spaces where people and ideas can interact regardless of format or location.
4. Libraries will direct resources and create partnerships that ensure 24 x 7 availability of expertise in support of student and faculty research needs.
5. Through their own efforts and in collaborative endeavors, libraries will create new learning materials and web-based instructional packages to teach users the skills needed for successful information searches.
6. Libraries will create new measures that demonstrate the value-added contributions of the library to the learning and research programs.

To summarize this section we have the principles:

1. *Access to information as a public good*
2. *Need for bias-free systems and for libraries to create these new systems*
3. *Affirm the idea of the library as a nexus for learning and the sharing of knowledge* (Keystone Principles, 1999).

One of the inspirations for the working group who drafted the principles was the keynote address delivered by Jonathan Zittrain of The Berkman Center for Internet & Society at Harvard Law School. He spoke on: "Negotiating Between the Proprietary and Open Domains of Law, Technology and Education". Dr. Zittrain, along with fellow professor, Dr. Charles Nessen, teaches classes about digital property, privacy and speech, and the role of what he terms 'middlepeople' in Internet architecture. He is a strong believer in the creative use of technology in the classroom and currently teaches "Internet &

Society: The Technologies and Politics of Control". The Berkman Center provides leadership and a forum for advocates of open code as a new foundation for the Internet. The Center articulates the importance of the public's stake in the Internet and its active participation in it (Zittrain, 2001). He challenged the subgroup at Keystone to find a way to design, fund and develop a site called library.org - a site designed for the public good (Stoffle, 2000). Libraries and the values they champion must play a part in the politics of control. If they are to establish and maintain a foothold in the environment of the Internet and be providers of information in the future, then they must pay particular attention to the spirit of public domain, how we deliver our services - reference, access to information (collection development) and instruction. We must challenge the roles of publishers - both traditional and electronic -, as well as other technology professionals. Academic libraries will not be given sufficient funding for the cost of increased technology and personnel if we do not demonstrate their value to our constituents. For the first time in history, libraries are facing competition for services. As author Ron Feemster tells us, outside companies calling themselves content aggregators, course-pack providers, or online libraries are offering products to students and faculty (Feemster, 2001, p. 36).

If we constantly react to outside changes instead of creating and preparing for those changes ourselves, then we will no longer be viable on campus or in the community. Some university officers are already predicting that automated systems will replace our reference and cataloging/access services. Amos Lakos and Chris Gray of the University of Waterloo, Canada, express this danger very eloquently in their article on personalized library portals:

"The continuing viability of libraries is in finding new means for discharging their core purposes of collecting, organizing, and disseminating information and teaching literacy. The Web is the preferred tool used by most users to search for information, to communicate, to be entertained, to shop, etc. Customers prefer to interact with libraries via the Web. Ignoring this fundamental fact will make libraries irrelevant -or at best, less effective..... Libraries and universities have to make access to information seamless, relevant, and personally useful to clients and stake-holders - while at the same time competing with new information providers." (Lakos & Gray, 2000, p.4).

These authors advocate the design of personalized library portals to allow users to customize their Web information. They call on the expertise of libraries to customize the content of these portals. Carolyn Allen and Bob Smith of the University of Arkansas, USA, provide an excellent description of what a scholar's library portal would look like: "... a website or its equivalent customized to a given scholar's needs - complete with links to online journals and targeted digitized resources located throughout the world. Imagine also, services that update the scholar's portal and provide notices automatically about new resources and services." (Allen & Smith, 2001, p. 2). The University of Arizona, USA is embarking on a project to design a scholar's portal. It has obtained

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agreement of support (expertise) from five other peer institutions in the Association of Research Libraries (ARL) in the United States. Work will begin this fiscal year, 2002/2003. The concept of library portals speaks to numbers two and three of the Keystone Principles: Need for bias-free systems and for libraries to create these new systems; and The library as a nexus for learning and the sharing of knowledge (Keystone Principles, 1999).

In terms of the first Keystone Principle - Access to information as a public good -, two important initiatives come to mind. The first of these is SPARC, the Scholarly Publishing and Academic Resources Coalition, sponsored by the Association of Research Libraries, USA. This coalition, which also supports Principle Two (bias-free systems), advocates cost containment and the effective use of technology to streamline publishing functions, while keeping rights and control of the process in the hands of the authors. There are now over 200 libraries and academic communities contributing to the SPARC process, including the University of Arizona's Michael Rosenzweig and Henry Hagedorn, editors of *Evolutionary Ecology Research* and the *Journal of Insect Science*, respectively. Other examples are the American Chemical Society's *Organic Letters*, and Columbia University's Earthscape project.

Other partnerships in the United States that promote the Keystone Principles are the California Digital Library (CDL), AgNIC (Agriculture Network Information Center) of which the University of Arizona is a part, HighWire at Stanford University, and the American Memory project at the Library of Congress (American History in Words, Sound and Pictures). These projects showcase libraries as knowledge creators as well as creators of access.

THE TEMPE PRINCIPLES

Also advancing the ideas inherent in the Keystone agenda are the Principles for Emerging Systems of Scholarly Publishing, issued by the Association of Research Libraries (ARL), the Association of American Universities (AAU), and the Merrill Advanced Studies Center of the University of Kansas during a meeting held in Tempe, Arizona on March 2-4, 2000. They were issued to stimulate discussion across the academic community in North America and abroad. The participants of this meeting recognized that the advancement of knowledge and scholarly publishing is an international enterprise. They were designed to stimulate collaboration among academic libraries that can no longer sustain the costly system of scholarly publishing. The nine principles are as follows:

1. The cost to the academy of published research should be contained so that access to relevant research publications for faculty and students can be maintained and even expanded.

2. Electronic capabilities should be used, among other things, to provide access to scholarship, to encourage interdisciplinary research, and to enhance interoperability and searchability. Development of common standards will be particularly important in the electronic environment.
3. Scholarly publications must be archived in a secure manner so as to remain permanently available and, in the case of electronic works, a permanent identifier for citation and linking should be provided.
4. The system of scholarly publication must continue to include processes for evaluating the quality of scholarly work and every publication should provide the reader with information about evaluation the work has undergone.
5. The academic community embraces the concepts of copyright and fair use and seeks a balance in the interest of owners and users in the digital environment. Universities, colleges, and especially their faculties should manage copyright and its limitations and exceptions in a manner that assures the faculty access to and use of their own published works in their research and teaching.
6. In negotiating publishing agreements, faculty should assign the rights to their work in a manner that promotes the ready use of their work and choose journals that support the goal of making scholarly publications available at reasonable cost.
7. The time from submission to publication should be reduced in a manner consistent with the requirements for quality control.
8. To assure quality and reduce proliferation of publications, the evaluation of faculty should place a greater emphasis on quality of publications and a reduced emphasis on quantity.
9. In electronic as well as print environments, scholars and students should be assured privacy with regard to their use of materials.

In the licensing arena there are several organizations fighting commercial efforts to limit fair use and access. ARL, the Special Libraries Association (SLA), and the American Library Association (ALA), etc. are fighting the Uniform Computer Information Transactions Act (UCITA). Through this Act vendors want to establish a uniform contract template that may not serve the needs of libraries. UCITA calls for the use of shrink-wrap and 'click-on' licenses where consumers do not know the terms of the license until after they purchase the product. So far, this Act has only passed in a few states, but library staff must be alert to this legislation when ordering updates to existing products (Case, 2000; UCITA, 2003). The University of Arizona has taken steps to pay attention to users' rights. We have a librarian whose job includes the negotiation of licenses for new electronic databases. We also have a copyright librarian who advises campus entities as well as the Library.

Services supporting these principles and Keystone Principle Three include the 24 hr.- 7 days/week reference service piloted by the Library of Congress, USA, Collaborative Digital Reference Service (CRDS) with 40 major library partners. Many other

institutions are initiating real-time reference using chat rooms and varied interactive communication utilities. Also, as mentioned earlier in this article, personalized library portals are being explored in ARL; in this case a program called Scholar's Portal (Stoffle, 2001).

The Tempe Principles (Emerging Systems of Scholarly Publishing) influenced other initiatives that advocate open access to scientific and scholarly literature. One of the most notable is the Budapest Open Access Initiative (BOAI) which arose out of the Open Society Institute's (George Soros, founder) meeting in Budapest on December 1-2, 2001. The Institute supports a movement known as Free Online Scholarship (Morrison and Suber, 2002), with BOAI supporting all academic fields. It focuses on peer-reviewed research literature and does not apply to other formats such as software, music or movies. It seeks open access for texts (including unreviewed preprints) that authors provide to publishers and readers without asking for payment or royalties. If payment is expected, then those items will not be put online. For purposes of this article, open access means: "free availability on the public Internet permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles ... authors must be properly acknowledged or cited." (Case, 2002, p. 10-11).

On a more local level, the University of Arizona is encouraging and planning activities that support the Tempe Principles. According to the Chair of the Scholarly Communications Team, we do it in two ways:

1. Formal program - usually with a keynote speaker and other local contributors / respondents. This year the program focused on Managing Copyright in a Digital Environment, which had a copyright expert from the Law College as a keynote speaker, followed by the director of the UA Press, a faculty member who has started a new, online-only journal, and the senior legal counsel of the University. Next year we hope to do 2 programs; the Fall topic will probably be on "Trends in Scholarly Publishing" to explore the various new approaches being developed for communicating scholarly information.
2. Luncheons with faculty who are editors of journals. We see these individuals as being in key positions to influence the direction of scholarly communication. This year we have had 2 luncheons - one dealing with copyright following the program mentioned above, and a second focusing on peer review in the electronic environment (Tempe Principle 4).

Within the Library we have established a group called the Scholarly Communication Resource Group comprised primarily of librarians from our different subject teams. The group meets monthly to discuss a topic related to scholarly communication with 1-2 background readings. The goal is to build a knowledgeable core of library staff who will be able to work with faculty and help other librarians work with faculty in understanding the various issues surrounding scholarly communication.

NEW MEASURES

Supporting all of the Keystone Principles is the Association of Research Libraries' New Measures program. Accrediting associations are demanding accountability in all learning programs, including libraries. They are no longer looking at the number of volumes owned or the number of reference questions answered. They are looking for evidence of the value added through our services - how the library is contributing to the educational programs and student learning.

ARL is piloting five projects through its Committee on Statistics and Assessment to measure the value added by libraries:

1. Designing library learning and research outcome measures
2. Measuring user expectations and satisfaction through an adopted LibQual instrument, and use and effectiveness of electronic resources through E-metrics
3. Study how to develop statistics and performance measures that address the delivery of networked information resources and services
4. Producing measures that provide benchmarks for determining the effective use of resources
5. Measuring document delivery effectiveness

In addition, Judy Luther of the Council on Information and Library Resources (CLIR) has written a white paper on electronic journal usage statistics that speaks to identified concerns around the availability of usage data (Luther, 2000). Denise Troll of the Digital Library Federation (DLF) wrote a white paper entitled "How and Why Libraries are Changing". She alludes to an important partnership with a private company to study information used by students and faculty across campus. This white paper underscores the importance of collaboration with entities outside of the library itself. We need to leverage our resources and our knowledge in order to create the services of the future - we will need to work with vendors and software developers as well as community organizations to help prepare future citizens and solve societal problems (Troll, 2001). We must keep up with new technologies and ensure that librarians develop the competencies to play a part in a changing world with changing demands.

There are many efforts at the national and international levels to establish standards for effective performance measures. In the United Kingdom, for example, the four Northumbria conferences have dealt with this issue and it is further discussed in the journal *Performance Measurement and Metrics*.

There is a clarion call for action on the part of academic libraries. We need to move forward to embrace the future while upholding our traditional values of access to

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information, intellectual freedom, individual privacy, and equity of service regardless of ability to pay.

It is heartening to see the increasing number of actions being taken in various institutions as a direct or indirect result of the Keystone Principles. Progress notwithstanding, these principles have drawn their share of controversy. Principle One, referring to information as a 'public good' was thought to be too divisive by some library directors. However, the word 'free' as used in that principle refers to the end-user. It does not stipulate that there should be no charge for information. It suggests that the presentation of the retrieved information should not be biased by commercial motive. The same suggestion goes for unbiased systems in the Web-based environment. Search engines, for example, should not present results that emphasize a certain point of view without notifying the user of that view. Ideally systems would be free of bias, but if not, the user should be made aware of the bias (Stoffle, 2000).

In summary, we are facing rapid changes in this global economy. We can no longer sit back and not make a case for our values of access, equity, privacy and fair use of information. Ignoring these core values will imperil our viability in the information economy. The Keystone Principles should embolden academic libraries/librarians to create the future together. Let us go forward to meet this challenge.

NOTES

This paper is based on work begun by Dean Carla J. Stoffle, Dean of the University of Arizona, Tucson, Arizona, USA

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http://www.ala.org/Content/NavigationMenu/Our_Association/Offices/ALA_Washington/Issues2/Copyright1/UCITA/Impact.htm

WEB SITES REFERRED TO IN THE TEXT

AGNic - Agriculture Network Information Center. <http://www.agnic.org/>

ALA - American Library Association. <http://www.ala.org/>

American Memory: Historical Collections for the National Digital Library.
<http://memory.loc.gov/>

ARL - Association of Research Libraries. <http://www.arl.org/>

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Berkman - The Berkman Center for Internet & Society at Harvard Law School.
<http://cyber.law.harvard.edu/home/>

BOAI - Budapest Open Access Initiative. <http://www.soros.org/openaccess/>

CDL - California Digital Library. <http://www.cdlib.org/>

CLIR - Council on Information and Library Resources. <http://www.clir.org/>

Columbia Earthscape. An online resource on the global environment.
<http://www.earthscape.org/>

DLF - Digital Library Federation. <http://www.diglib.org/dlfhomepage.htm>

HighWire. <http://highwire.stanford.edu/>

The Keystone Principles, 1999. <http://www.arl.org/newsltr/207/keystone.html>

Managing Copyright in a Digital Environment.
<http://digital.library.arizona.edu/copyright/>

Performance Measurement and Metrics. <http://www.aslib.co.uk/pmm/index.html>

SPARC - Scholarly Publishing and Academic Resources Coalition:
<http://www.arl.org/sparc/>

The SPARC Open Access Newsletter. Formerly, The *Free Online Scholarship (FOS) Newsletter*. <http://www.earlham.edu/~peters/fos/index.htm>

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