Open Access Policy Background¹

IP&T 692R² :: Summer 2009

Why Open Access?

Ye are the light of the world. A city that is set on an hill cannot be hid. Neither do men light a candle, and put it under a bushel, but on a candlestick; and it giveth light unto all that are in the house. Let your light so shine before men, that they may see your good works, and glorify your Father which is in heaven. ($\underbrace{\text{Matthew 5:14-16}}$)

The Mission of Brigham Young University is to "assist individuals in their quest for perfection and eternal life." This mission is pursued in large part by providing undergraduate students "a period of intensive learning in a stimulating setting where a commitment to excellence is expected and the full realization of human potential is pursued"—so these students will in turn be empowered to assist many others in their intellectual and spiritual progression. The "Aims of a BYU Education" are that each student's experience at BYU will be spiritually strengthening, intellectually enlarging, and character building, leading to lifelong learning and service. Consistent with the pursuit of these objectives, the Board of Trustees has directed BYU's faculty, staff, students, and administrators to "be anxious to make their service and scholarship available to The Church of Jesus Christ of Latter-day Saints in furthering its work worldwide. In an era of limited enrollments, BYU can continue to expand its influence both by encouraging programs that are central to the Church's purposes and by making its resources available to the Church when called upon to do so."

BYU faculty members, undergraduate, graduate students, and staff conduct research on a wide range of topics thare are "central to the Church's purposes." This work has blessed and continues to bless the Church and its membership in countless ways. The purpose of this policy backgrounder is to explain and establish the current context of academic publishing, and explore approaches by which the BYU community might make its research and scholarly output even more open and accessible to the Church community and the larger world that is its "campus," thereby extending its influence even further.

An Open-Closed Model

BYU scholars and researchers participate actively in their various academic disciplines. To

¹ This document is licensed under the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/). Please attribute this document to "Members of the IPT 692R class at BYU."

² This document was produced by students and faculty in IPT 692R: Open Education Policy Seminar, including Michelle Baron, Darin Oviatt, Jared Stein, Kimball Thomson, and David Wiley. The opinions expressed herein do not necessarily represent those of Brigham Young University, the David O. McKay School of Education, or the Instructional Psychology and Technology Department.

affirm the quality and credibility of their work, their reports, white papers, and articles are subjected to a rigorous peer review process. When their work is reviewed favorably, it is published in academic journals, thereby providing broader access to the BYU community's wisdom, innovation, and creativity. These activities are consistent with the Board's charge to "make [its] service and scholarship available" to those beyond the borders of its campus, particularly members of the broader academic community.

However, publication of BYU's research in scholarly journals can also have the effect of making it *harder* for members of the Church community to access it. Traditionally authors (the creators of new scholarship and research results) are required contractually to forfeit the intellectual property rights in their articles to the publisher of the academic journal in which their work is published, giving the publisher perpetual, exclusive control over who has access to it.

Due to the rising costs of academic journal subscriptions and pressures on the budgets of university libraries, a growing number of faculty members have access to progressively smaller collections of journals. A growing portion of the academic community are coming to feel that academic journals are "bushels" placed over their research, restricting the distribution of their ideas to only the wealthy or privileged. For the average member of the Church, who may or may not have ready access to a university library, access to BYU's scholarly publications is even more severely restricted. BYU alumni can be particularly frustrated by the sudden loss of access to BYU's scholarly output the day after graduation.

This steady decrease in the availability of BYU's own research to alumni and the broader Church membership is at odds with the <u>institutional objectives</u> of BYU.

It is increasingly expensive to "educate the minds and spirits of students" when BYU faculty must purchase copies of their own research articles to distribute to BYU students. It becomes very difficult to either "advance truth and knowledge to enhance the education of students, enrich the quality of life and contribute to a resolution of world problems" or "extend the blessings of learning to members of the Church in all parts of the world" when BYU has no legal authority to disseminate its own faculty's research findings to faculty, students, members of the Church, or others throughout the world. And without the ability to share the fruits of faculty and student intellectual effort, the university's significant investment in student mentoring and research is unavailable to help BYU "develop friends for the University and the Church." In short, the current state of academic publishing does not advance BYU's stated desire to "greatly enlarge Brigham Young University's influence in a world we wish to improve."

"Open access" is a relatively new term describing the practice of providing free online access to research articles that have been vetted through the peer review process. Some peer reviewed journals have changed their intellectual property policies and business models in order to provide free, online public access to the articles they accept for publication. These journals are called "open access journals."

Most academic journals continue to require the forfeiture of author rights before they will publish an article – or at least create this impression (many faculty members are not aware that many commercial publishers are willing to accept less substitute contracts that preserve some author rights). In a growing number of cases, authors can use contract addenda to assert their rights to place a copy of their article online for free public access. Initially, publishers refused to accept these amended contracts, and individual faculty and students found contract negotiations with multi-million dollar corporations difficult. In order to strengthen author negotiating positions, a number of institutions have adopted "open access mandates" – policies which require research articles to be placed online for free public access. In this background paper we briefly review national, institutional, funder, and other open access mandates, their effects on the dissemination of research, the current scholarly communications context at BYU, and the implications for BYU of the growing trend toward open access mandates.

What's Happening Today

As of July 2009, forty-one organizations in the United States have open access mandates: seventeen at the institutional level, ten at the departmental level, four at the college level, and six at the funder level. These mandates deal with issues of access (i.e., access to scholarly works by faculty, students, and administrators), cost (i.e., the price of continuing to subscribe to increasingly expensive journals), copyright (i.e., the common practice where faculty members relinquish their rights to the written work), and tenure (i.e., the manner in which current tenure review procedures consider open access publications). Table 1 summarizes these organizations' open access policy highlights.

Table 1: Open Access Policy Highlights

Mandates	Total	Access	Cost	Copyright	Tenure
Total Mandates	41	All (100%)	8 (19%)	16 (39%)	1 (2%)
Institutional	17	All (100%)	8 (47%)	6 (35%)	1 (6%)
Case Western Reserve University		X	X	X	X
Columbia University		X		X	
Cornell University		X	X	X	
Indiana University System (2)		X	X		
Massachusetts Institute of Technology (MIT)		X		X	
Temple University		X			
Triangle Research Libraries Network		X	X		
University of California System (4)		X	X		
University of Connecticut		X	X		
University of Kansas		X		X	
University of Maryland		X	X		
University of North Carolina		X	X	X	

University of Wisconsin		X	
Departmental	10	All (100%)	9 (90%)
Harvard University (6)		X	X
Oregon State University (Library Faculty)		X	
Stanford University (School of Education)		X	Х
University of Oregon (2)		X	Х
College	4	All (100%)	
Minnesota College System (4)		X	
Thesis	4	All (100%)	
California Polytechnic State University		X	
Duke University (Graduate School)		X	
Oregon State University		Х	
University of Florida		X	
Funder	5	All (100%)	1 (17%)
Autism Speaks		X	
Howard Hughes Medical Institute (HHMI)		X	
Institute of Education Sciences		X	
MacArthur Foundation		X	Х
National Institutes of Health (NIH)		х	

The US National Institutes of Health (NIH) mandate, which requires all peer-reviewed articles resulting from NIH grants to be placed in an open access repository, is especially noteworthy for the way that it has revolutionized access to medical research. More recently, the US Department of Education's Institute for Education Sciences has begun including similar language in their Request for Applications. While individual federal entities work toward promoting open access, broader policy work is underway as well. Senators Lieberman (I-CT) and Cornyn (R-TX) recently introduced \$\frac{\text{S.1373}}{2}\$: Federal Research Public Access Act of 2009. FRPAA would expand the NIH and IES mandates to cover all peer-reviewed research papers funded by federal agencies that spend over \$100 million per year on external research (including the Department of Agriculture, Department of Commerce, Department of Defense, Department of Education, Department of Energy, Department of Health and Human Services, Department of Homeland Security, Department of Transportation, Environmental Protection Agency, National Aeronautics and Space Administration, and the National Science Foundation).

Brief Comparative Analysis

Details of Open Access Policy Mandates Across the US

As indicated in the table above, a number of US institutions have open access policy mandates that require their faculty to either deposit their research articles in an openly accessible institutional archive or formally "opt-out" of the deposit requirement. The primary reason for opting out would be when a prestigious journal absolutely refuses to publish an article that comes with the deposit requirement attached.

Case Western Reserve University has what can be considered the nation's most comprehensive open access policy, covering all four issues of access, cost, copyright, and tenure. The university's open access policy "represents a fundamental shift in the dissemination of scholarly knowledge." The policy cites numerous factors as motivating the institutional mandate. Included are the rising cost of publication from often-inflexible publishers (e.g., the decision to limit contracts made with Elsevier and other publishers), the need to change the current protocol whereby faculty members must transfer their publication copyright control to the publisher, and an attempt to change the current tenure guidelines whereby open access publications are counted toward the faculty tenure process.

Oregon State University is noted for creating "the first open access mandate adopted by a library faculty in the United States." This means that as a department, the library faculty agree to submit their publications to an open access repository called ScholarsArchive@OSU in order to widen the access window.

Cornell University's open access policy challenges faculty to take an active role in where and how they publish journal articles and other scholarly works. They call on faculty to become aware of the pricing habits of publishers who often try to "exploit their market power", and to negotiate with those publishers for copyright retention and publication submission in open access repositories.

The University of North Carolina's open access policy seeks to "educate their faculty about 'the problems of scholarly communications'", including retention of copyright ownership and seeking out increased involvement in open access publications. Most noteworthy is UNC's decision to create two task forces: one to address the results of a campus-wide convocation on open access, which included issues of open access repository submission, tenure review issues, and copyright retention; and another to establish an institutional repository for their own open access materials.

Opt-In Institutional Repositories at Utah Institutions

Some institutions employ an "opt-in" service, whereby individual faculty elect to participate in open access publication in digital repositories. Schools maintain the opt-in status in order to garner support for open access while not forcing mandates on faculty that may not be ready for such an endeavor.

The four largest Utah institutions, Brigham Young University, the University of Utah, Utah State University, and Utah Valley University have initiated institutional repositories. This is due in part to the desire to overcome publisher pricing challenges, which, since 1986, have

resulted in an average 6% decrease in library journal acquisitions, together with a 26% decrease in book acquisitions by research libraries in North America (http://uspace.utah.edu/what.php). The repositories also serve to catalyze greater publication citations, in which studies have shown a 50-250% increase in open access citations over traditional publications (http://uspace.utah.edu/forauthors.php).

The State of Open Access at BYU

BYU's Harold B. Lee Library (HBLL) established its institutional repository in 2004, within the context of its involvement in the Association of Research Libraries and the Coalition for Networked Information, and in recognition of the growing momentum at universities throughout the U.S. to build repositories that further the work and reputations of scholars, faculties and universities. The HBLL continues to expand the repository in keeping with the Library's growing influence in national efforts to enhance the dissemination of meaningful research being produced at U.S. universities. Randy Olsen, University Librarian at HBLL, currently sits on the steering committee of the prominent national organization SPARC (Scholarly Publishing and Academic Resources Coalition).

The HBLL launched its digital institutional repository (IR) using DSpace, a prominent IR software program developed at MIT and utilized by numerous academic, non-profit, and commercial organizations for building open digital repositories. BYU's IR program was originally guided by MIT's assumption that faculty would aggressively pursue opportunities to populate the institutional repository with their scholarly contributions. However, at the end of its first year the library had received only about 50 submissions, primarily from the Mechanical Engineering and the Electrical and Computer Engineering departments, in part because these departments had been chosen as pilots for the HBLL institutional repository launch.

In 2008, the HBLL switched from DSpace to ContentDM, a software program already in use in other parts of the library and with which library staff were already intimately familiar. In addition, the Library shifted its IR model from self-deposit (where faculty do all the work) to one of providing service and assistance to faculty members in placing their documents in the IR. Signaling the importance that it places on the benefits of open access, the HBLL has re-purposed the equivalent of two FTE to support BYU faculty in placing their research in the institutional repository, and has indicated its willingness to utilize other employees as faculty/staff demand increases. The move to a service model has significantly increased faculty participation in the program, although many BYU faculty still do not participate because they are unaware of the program.

The HBLL is currently in the process of drafting an open access policy for library faculty and staff, which would require that all eligible scholarly works published while individuals have been on the HBLL faculty be deposited in the IR for free public access. University Counsel Paul Angerhofer of the BYU General Counsel's office has reviewed the proposed HBLL policy and provided positive feedback to Library leadership. The David O. McKay School of Education is using the HBLL draft as a starting point for conversations about an

open access policy.

Summary and Recommendations

The primary motivation of open access policies - increasing the reach and impact of faculty, staff, and students' intellectual efforts - is well aligned with the mission and institutional objectives Brigham Young University. Several institutions across the country (and dozens more around the world) are implementing open access policies that achieve this increase in reach and impact. Some federal agencies are also placing similar mandates on their grantees, while policy conversations are underway that would place an open access mandate on essentially all federally funded research. BYU, like other institutions in Utah and across the country, currently provides an optional service to faculty, staff, and students that publishes journal articles and pre-prints for free public access. The HBLL currently has technology and personnel in place supporting this service.

In terms of alignment with organizational goals; the state, national, and international political climate; and available, deployed technology and human resources, BYU is well positioned to engage in an open access program. Some BYU units have already begun discussions about adopting an open access mandate. With a number of individual unit initiatives already underway, a campus-wide conversation about open access and scholarly publishing would be timely and constructive. Some institutions, like Harvard, have taken the path of individual unit mandates; while others, like MIT, have taken the path of a single, campus-wide mandate. A proactive, open discussion about the best path forward for BYU with regard to open access policies (including deciding to adopt no policy at all) seems prudent. We recommend that the conversation address ways in which open access policies may or may not support the institution in achieving its mission and accomplishing its objectives.