Introduction

In January 2008, Harvard’s Faculty of Arts & Sciences (FAS) became the first university faculty in the United States to approve an institutional self-archiving policy. The policy pertains specifically to deposit of the author’s final manuscript – the pre-publication version that the journal has accepted for publication, including any revisions that the author has made during the peer-review process. As of 2011, Seven of Harvard’s nine faculties had voted to grant the University permission to make their scholarly articles openly available in this way. The six professional Schools at Harvard with self-archiving resolutions – worded in terms very similar to those of the FAS policy – are Law, Government, Education, Business, Divinity, and Design. Policy details are available at http://osc.hul.harvard.edu/authors/policy_guide. Harvard’s Office for Scholarly Communication (OSC) was created in May 2008 to implement relevant policy measures on campus, and in September 2009 launched DASH (for Digital Access to Scholarship at Harvard, at http://dash.harvard.edu) Harvard’s open access DSpace repository.

This article provides a case study of Harvard’s approach, and considers further ways to engage faculty members in depositing scholarly articles in their institution’s digital repository. The article begins by examining current approaches to self-archiving at Harvard, measures that are proving successful according to the number of participating faculty but require a high degree of mediation; a model for integrating self-archiving into the academic authoring workflow is proposed – the model has the added benefit of creating a comprehensive institutional ‘view’ or record of published scholarship along with other efficiencies for faculty authors.
Overview of Harvard's open access policies

Harvard's open-access policies (OAPs) are collective faculty resolutions, rather than top-down administrative mandates. The policies’ three key components are the non-exclusive license granted by the faculty member to the University, the opt-out provision, and the deposit commitment. These provisions are worded as follows in the FAS OAP:

**License:** Each Faculty member grants to the President and Fellows of Harvard College permission to make available his or her scholarly articles and to exercise the copyright in those articles.

**Opt-out:** The Dean or the Dean’s designee will waive application of the policy for a particular article upon written request by a Faculty member explaining the need.

**Deposit:** Each Faculty member will provide an electronic copy of the final version of the article at no charge to the appropriate representative of the Provost's Office in an appropriate format... no later than the date of its publication. The Provost's Office may make the article available to the public in an open-access repository.

Because the policies were voted in by faculty members, they are interpreted as binding only the group of voting-eligible faculty members, a group roughly equivalent to the tenured and tenure-track faculty of the relevant School, as opposed to the much larger population of instructional and research staff who may produce scholarly articles in the course of their work at the School. The repository is nonetheless available for deposit of scholarly works by any member of the Harvard research community.

As a result of the license, the University becomes a joint rights-holder in scholarly articles authored (after the relevant vote) for publication by faculty members. As such, the University has the right to distribute the deposited works. Faculty authors still retain ownership and complete control of the copyright in their writings, subject only to Harvard’s prior, nonexclusive license. Authors can exercise their copyrights in any way they see fit, including transferring them to a publisher. However, Harvard still retains its license and the right to distribute the article from its repository unless that prior license had been waived at the author’s request. An online waiver request form created by the OSC for this purpose makes it very easy for faculty members to obtain a waiver. Upon submission of the completed waiver request form, the author can consider the waiver granted.

If an author does not opt out a particular article, Harvard’s license applies. This is true whether or not the author accordingly amends the publication or copyright transfer agreement (CTA) he or she signs with the publisher. However, faculty are strongly encouraged to use the Harvard CTA addendum—again, easily generated using a web-based tool—in order to avoid misrepresenting the rights that can be transferred to the publisher in light of the University’s prior license.

Note that the policy does not target the published version of the article, and the DASH record for the article always includes a DOI link to the published version of the work where available. Harvard’s license covers any version of the article to which the author holds copyright (or held copyright before it was transferred) or to which the author otherwise has the right to allow Harvard to use in this way. This is usually the version of the article accepted by the journal, including all modifications from the publishing peer-review process (what is often referred to as the ‘author’s final version’).

The OAP deposit provision specifies that deposit be made no later than the date of publication, and that it is the deposited version that the repository will make available. However, because faculty members are not, strictly speaking, obligated to submit their articles to DASH, even when they have opted not to waive Harvard’s prior license, decisions about self-archiving remain under faculty control. There are no consequences for failing to comply. In the case of co-authored papers, each joint author of an article (where joint authors are those who participate in the preparation of the article with the intention that their contributions be merged into inseparable or interdepen-
dent parts of the whole) holds copyright in the article and, individually, has the authority to grant Harvard a nonexclusive license. Because faculty members must consciously choose whether or not to waive Harvard’s license, and whether or not to deposit, they are in effect gradually being ‘nudged’ towards more proactive rights retention and self-archiving. Rates of deposit and faculty participation indicate that the policy is having the intended effect. As of August 2011, over 1,100 unique Harvard-affiliated authors, including over 50% of Harvard’s FAS faculty, had contributed scholarly works to the DASH repository. Nevertheless, given the limited availability of faculty time and attention for activities outside of academics’ core research and teaching responsibilities, the majority of deposits to DASH are mediated in some form. The OSC currently employs several Open Access Fellows – Harvard undergraduate or graduate students trained to assist faculty with the self-archiving process. These student employees perform most of the hands-on metadata entry required for contributions to DASH, as well as faculty outreach, education, and support. Many submissions arrive via email to a fellow or OSC staff member, or through the use of a quick-submit form created to facilitate faculty deposits. These mediated submissions require that someone other than the author upload the article in question and enter the associated metadata.

Another key step in the submission process is the selection of an appropriate license for the archived work. The DASH submission interface presents the user with three distribution license options. The first is an agreement that is only appropriate if the item is subject to the OAP and Harvard’s license has not been waived; the second is called the ‘Limited Author Agreement’ and applies when an author wishes to upload a work for open access distribution to the repository but Harvard’s license does not apply or has been waived; and the third is a metadata-only submission, with optional deposit of a ‘dark’ file for preservation purposes only. The repository also supports automated embargo lift dates, so that an item may be deposited ‘dark’ before it is intended for open access, where the depositor specifies the date on which the item will be made available for download.

Because the agreement selection process itself proved to be a barrier to participation in early testing, the OSC created a work-around for faculty authorization and license selection during the submission process. The deposit workflow included an automatically generated email to the faculty member after one of their articles was uploaded into a repository approval queue. This approach resulted in an electronic record of the faculty author’s instruction for each deposit. More recently, the OSC created a one-time author assistance form that faculty member signs to empower a proxy to make deposits on his or her behalf, without the need to confirm the license for each deposit.

Changing faculty behavior

The primary rationale for institutional self-archiving is to expand access to the scholarship produced at the institution, largely for the benefit of scholars outside the institution. One consideration that can work against efforts to promote self-archiving on campus is that faculty at privileged institutions have historically not suffered from lack of access to the scholarly information they need.

Another trend that may work against engaging faculty in self-archiving is the growing prevalence of open access by other means. Many authors who do not post to their institution’s repository are nonetheless actively posting their papers in subject repositories and providing access to their publications through their personal websites. The majority of academic journal publishers already permit authors to self-archive a pre-publication version of their published articles, either upon publication or after a specified embargo period (see www.sherpa.ac.uk/romeo/). Even when posting to a personal website is not permitted by a publisher’s policy, many authors – whether knowingly in violation of the CTA or not – persist in providing the published PDF via their own website. At the same time, there is an ever-expanding list of open access jour-
nals (www.doaj.org/), along with growth in institutional funds to cover publication service fees for faculty members publishing in open access journals (www.oacompact.org/compact/) and institutional support for public access policies (www.arl.org/sparc/advocacy/frpaa/institutions.shtml). Open access to much of the journal literature may indeed appear, to many scholars, to be inevitable.

Because researchers are much more likely to discover and access journal articles using a search engine rather than via the front-end of a repository or a colleague’s website (or at a publisher or journal website for that matter), the digital location of the full-text article is typically not of primary concern to the researcher. From the perspective of an institution invested in self-archiving, however, an article posted at a faculty website may be a lost opportunity for long-term, coordinated preservation of the faculty member’s scholarly record (and as of this writing, there are no Harvard-wide policies governing the preservation of faculty websites). It may also be a legal liability for the institution if the personal or departmental posting is on a university-managed server and in violation of copyright law. That said, reports of takedown requests from publishers appear to be extremely rare.

From the perspective of the faculty member, posting articles to their individual website aligns with their authoring workflow, since their website is where they maintain CV information and showcase their research activities in a variety of ways. An online CV containing an up-to-date listing of the author’s publications is a fixture on faculty websites, and links to full-text publications are common. Even faculty members who are not open access enthusiasts are compelled by mere technical efficiency to participate more fully than they would have in the print-only era in the dissemination, repurposing, and networking of their own written scholarship, by virtue of authoring and sharing their work online. Indeed, maintaining an electronic record of your own publications, with or without links to full text, serves many functions for the faculty author and is crucial for visibility and career advancement. Yet the relationship between institutionally sponsored self-archiving and maintenance of a personal bibliographic record has yet to be fully exploited in efforts to promote self-archiving on campuses.

One step Harvard’s OSC has taken in partnership with the University’s FAS Faculty Affairs Office is the inclusion of an upload-to-DASH capability within the FAS Faculty Activity Report application; FAS, like many faculties and institutions, has an online platform via which faculty fulfill their obligation to report on their publications and other scholarly activities on an annual basis, as a critical step in allocation of salary increases. Although faculty members are not compelled to deposit to the repository, locating the upload function within the Activity Report Application is expected to increase direct submissions to the repository. (No data are yet available.)

The faculty activity report tool is not the only application managed or hosted by a university IT office that features the aggregation of bibliographic metadata. Some institutions offer a centralized faculty profiles platform; still others use web-based services to manage the flow of academic credentials and related information through appointments and promotions processes. One can envision an all-purpose publication management tool for faculty that serves as the one place where the faculty member needs to key in updates to his or her record of publications. The tool would push this bibliographic metadata out to the faculty member’s public website(s) in the appropriate format; generate a CV upon request; contain a function for uploading full-text articles to institutional and appropriate subject repositories; and feed the faculty member’s annual activity report and other appointment-related document workflows.

Such a system would not only put self-archiving on the faculty member’s critical path. By making it convenient for faculty to manage the electronic record of their own scholarship within a central IT service, the system would also engage the faculty member in co-creating a comprehensive institutional record of published scholarship. This institutional aggregation would serve many functions, ranging from providing uni-
form, pan-university snapshots of scholarly output for the historical record that the university archives may maintain, to serving as the basis for calculating a variety of metrics.

Aggregation of bibliographic metadata customized for universities is now a growth industry in the commercial research information sector. These services (which include, among others, Thomson Reuters’s research analytics product suite, Elsevier’s SciVal suite, and Academic Analytics) feature citation analysis and a range of internal and comparative institutional metrics. There is related growth in commercial applications for local social (or socio-academic) networking based on ‘mined’ bibliographic metadata, as in the widespread university adoptions of the Collexis Expert Profiles platform, now part of the Elsevier SciVal suite.

Purveyors of these services are realizing new value from the publication metadata, completely apart from the value that publishers experience from the distribution of full-text articles. Hence, if institutional self-archiving efforts focus exclusively on the aggregation of full-text content, they may miss ripe opportunities for local development of research infrastructure based on metadata, metrics, and mining, with the result that they will more likely have to purchase these services from a commercial intermediary. Universities need to determine the extent to which they wish to outsource aspects of their institutional research functions, their faculty information systems, and platforms that feed the faculty appointments and promotions process or that otherwise create efficiencies for faculty members.

Computation over metadata clearly creates opportunities for both business and academia. Institutions with an established self-archiving culture may be better suited to aggregate faculty bibliographic metadata on their own, and they are certainly better suited than an external entity to integrate with local IT infrastructure such as human resource systems, course information systems, and library-run services, creating a richer information environment for the purposes of mining, to surface the socio-academic networks that help promote collaboration across campus.

In sum, institutions that have invested in self-archiving to expand access to their scholarship also need to anticipate how the scholarly information marketplace is evolving, given new trends in the use and potential monetization of research information. Self-archiving of full-text articles may ultimately prove to be more significant for purposes of long-term preservation of scholarship than for providing real-time open access. In the near term, universities may also reap direct benefits from aggregation of comprehensive bibliographic metadata from their faculty. If, along the way, they manage to create efficiencies for researchers in the management of bibliographic information, this may prove to be the needed complement to an institutional mandate or faculty commitment that successfully integrates self-archiving into faculty authoring behavior.

Reference


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