Overview

In the fall of 2007, the Kennedy Library launched DigitalCommons@CalPoly, the university’s first institutional repository (IR), as a centralized location for digitized research and scholarship completed by Cal Poly faculty and students. The site’s URL is http://digitalcommons.calpoly.edu/.

The Kennedy Library deliberately chose a hosted software solution from Berkeley Electronic Press (bepress) both to keep new staffing at minimum and to focus on contributor recruitment and content management. A digital repository librarian was added to reach out to contributors and to manage digital assets and their metadata. A support staff position was added to secure intellectual property permissions and communicate with publishers. Using student assistants, the repository staff members manage the internal process of bibliographic searching and digitizing articles for ingest into the repository. Organizationally, DigitalCommons staff is located in Special Collections & University Archives to benefit from existing collections and knowledge of the campus.

DigitalCommons operated the first year in a pilot phase, working with selected faculty from each college to understand their needs and the content they would provide, and with the software vendor to fully realize the benefits of the software platform. As the second year of operation begins, DigitalCommons staff are rolling out IR services to all faculty and graduate students. Our successes and challenges are similar to those experienced by other universities that have made a substantial commitment to developing and sustaining an IR.

Quantitative Measures of Success

In the first year of operation, there are:

- 1,675 total items uploaded in the repository
  - 1st among Digital Commons repositories opened in the past year
  - 14th out of 80 Digital Commons repositories in total items
  - 200 new items waiting for permissions before upload
- 10,738 full-text downloads to users worldwide
- 4 online journals added showcasing student work and campus news, including:
  - Moebius, College of Liberal Arts
  - Focus: Journal of the City and Regional Planning Department
  - Cal Poly Honors Undergraduate Research Journal
  - Cal Poly Magazine
- Cal Poly Institutes, Centers, Programs and Conferences, including:
  - Collaborative Agent Design (CAD) Research Center
  - CENG’s Project-Based Learning Institute
  - UC/CSU/CCC Sustainability Conference 2008
- Digital Master’s Theses, launched a year ahead of schedule
First Year Pilot Phase

Initial planning revealed the need to work closely with faculty to secure content and build individual faculty profile pages during the first year. Our success with individual faculty facilitated expansion of the pilot within three months of the project’s launch.

Contribution and use rates for the first year are illustrated below:

DigitalCommons@CalPoly now has the broadest assortment of academic and institutional content among all DigitalCommons repositories. Content includes:

- Peer-reviewed journal articles
- Architectural plans
- Master plans
- WASC reports
- Master’s theses
- Undergraduate essays
- eBooks
- Campus periodicals
- Annual reports
- Press releases
• Staff publications
• PowerPoint presentations
• Abstracts
• Conference proceedings
• Alumni publications
• Finding aids

Berkeley Electronic Press now uses Cal Poly for sales and other demonstrations, showcasing it to over 100 institutions contemplating launching IRs. They state:

*Cal Poly has started one of the most ambitious and successful repository programs that we know about. In less than a year it has amassed a great amount of scholarship – most of it previously unavailable online – and now publishes it for the benefit of researchers both on and off campus. Over 10,000 downloads testify to its utility, but more importantly, the “seed” content now on the site suggests how much more content may be exposed if the repository program continues at its current or at an accelerated rate. Many repositories we've observed tend to focus on a small number of content types, most commonly focusing on faculty postprints. By broadening the definition of what comprises a successful repository, Cal Poly has created the start of a site that many will look to as a success for both the library and the campus.*

**Challenges**

During the pilot phase, the following issues arose:

• Contributors seldom have copies of their work, leading to delays before content can be ingested. Staff time to conduct bibliographic searches and interlibrary loan requests is greater than originally anticipated.

• Some academic publishers fail to respond quickly or refuse to grant non-exclusive licenses for IR use, delaying and/or limiting content ingestion.

• Faculty cite their teaching loads as the primary reason for non-response; most want to participate, but lack vitas current enough for repository staff to work from. An average of five contacts by repository staff are necessary before vitas are supplied, with a greater number of contacts for actual provision of articles and other content.

• Some colleges and academic departments have launched their own faculty profiles and regard DigitalCommons as duplicative.

• Open access benefits of DigitalCommons are sometimes perceived as redundant by faculty who practice other forms of information dissemination in professional organizations, or are considered risky by the standards of some disciplinary cultures.
• Adding undergraduate work to DigitalCommons will be challenging because there are few campus standards governing senior projects.

• Duplication of software functionality between repository module and profile module causes confusion for contributors and prevents self-submission, increasing staff time to manage profiles.

• Scalability of the project with existing staff is a concern, given the length of time necessary to locate, secure rights, and ingest content and the number of unserved faculty and students.

Opportunities

During the pilot phase, the following advantages were noted:

• DigitalCommons is solving chronic information management issues for individual faculty members and key academic units on campus. The IR reduces the need for digital asset management at the unit level across campus.

• Present use is over 700 downloads per week; this rate should increase rapidly as content grows and as class assignments and other direct uses are implemented.

• Centralized and convenient access to full-text research at Cal Poly is seen as a vehicle for improving the quality of graduate and undergraduate student work.

• Response to contributors is viral rather than organizational. As we continue to populate the IR and its use rates continue to climb, new contributors are contacting DigitalCommons first and asking to participate.

• DigitalCommons is ADA-compliant, providing campus units with a quick and convenient way of making their scholarly content universally accessible.

• Use of DigitalCommons extends beyond traditional scholarly uses. Advancement, Alumni, Public Affairs, faculty and administrator search committees, and campus units outside Academic Affairs all use DigitalCommons illustrate Cal Poly’s intellectual capital.

• Because repositories are a new and emerging area, the library faculty members who manage the DigitalCommons@CalPoly are also serving as leaders by sharing technical and technological advances that have broader application for the CSU and the professional community.

• The DigitalCommons also became a registered data contributor to large-scale digital library projects including OAIster.org, Open Archives Initiative, and Scientific Commons.
Cal Poly has joined its peers in higher education by contributing to the emerging model of distributed, interoperable repositories that provide the foundation for the new model of scholarly publishing.

Conclusion

The Cal Poly repository was originally envisioned as a way to improve access to scholarship and extend the traditional position of the library as the collector and disseminator of scholarly collections and related services in the university.

However, it quickly became apparent that the DigitalCommons@CalPoly is first and foremost as a service for faculty, students, and staff. There are strong indications that DigitalCommons@CalPoly can make important contributions to scholarship, particularly in solving specific information visibility, management, or access problems experienced by faculty and others across the campus. As we begin the coming year, DigitalCommons staff will continue to assess faculty and campus needs, customize and deliver repository functionalities, and find new ways to support the information needs of the campus.

DigitalCommons@CalPoly is facilitating information sharing on campus and in the larger academic community in new and dynamic ways.