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Recommended Citation
Farrell, Thomas, "Supporting the curriculum with digital collections" (2009). *University Library*. Paper 35.
http://scholarcommons.scu.edu/library/35

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# Supporting the curriculum with digital collections

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**Abstract**: This presentation is based on our university's experiences creating two collections of digital items for classroom use. Each of these collections has entailed collaborating with a partner outside the university community, as well as faculty within the university, and each has presented a different set of opportunities and challenges. The first example is a collection of videos digitized from VHS tapes, composed of interviews with survivors of the 1939-1945 Holocaust. These are being used as source materials for students, who create themed A/V essays from edited portions of the). The second example is a set of sacramental mission records spanning the 17th to the 19th centuries. This population recorded included indigenous peoples, Spanish residents, and Anglo immigrants. They are being used as source material for students doing historical research on population trends in the area. Best practice/implementation issues include intellectual property, security, digitizing, and metadata.

## Supporting the curriculum with digital collections

Traditionally, libraries have furnished storage and organization of intellectual content, while providing public access to them. In the last couple of decades, though, this role has evolved, largely through the application of emerging technologies in networking, storage, and increasingly user-friendly discovery and retrieval interfaces (Franklin et al., 2006). Now they offer access both onsite and from remote locations, serve as preservation centers by digitizing materials, and disseminate items that they do not house themselves. This ability to organize and consolidate the discovery of materials from many locations has increased their value as centers of research.

Digital libraries are a recent product of this evolution. Vannaver Bush was probably the first to predict what we now consider the digital library, in his 1945 article *As We May Think*, but it wasn't until the 1990s, with the rise of the Internet and the graphical World Wide Web, that serious practical applications of digital libraries developed. The Library of Congress's American Memory (Mission and History, 2009) is an early example of the evolving ability to create a digital library of primary source material. In California, our local consolidation of source items is called Calisphere, a production of the University of California. This service draws content from many venues throughout the state, and is organized to serve K-12 educators, with themed collections, sample lesson plans, and links to further resources (Calisphere, n.d.).

While many digital libraries collect and present items of interest to educators, there are ways to expand the usefulness of such libraries. In an AACE symposium in 2006, Franklin et al. discussed how technological support was making it more feasible to provide primary materials for classroom use (Franklin et al., 2006). This presentation will offer examples of how Santa Clara University Library has begun to add this role to its mission.

## Library/Faculty partnerships

Academic libraries have a long history of partnering with faculty in such areas as material selection, information literacy teaching, and topic-focused research training modules. SCU Library, through its Digital Initiatives Department, has begun a different sort of partnering: constructing custom digital collections of digitized primary source materials for course use. Santa Clara is considered as primarily a teaching university, so while the Library has an ongoing commitment to the digital preservation of its archival and special collections materials, it also understands the need to support the teaching mission of the school. Two examples of this support, each with a unique set of opportunities and challenges, are the Holocaust Oral History Project and the Mission Santa Clara Sacramental Records.

## Holocaust Oral History Project

This collection was an outgrowth of collaboration between the SCU English Department and the Bay Area Holocaust Oral History Project (BAHOHP). BAHOHP had been conducting interviews with San Francisco Bay Area Holocaust survivors for nearly a decade, recording the interviews first on audiotapes and later on VHS videotapes. For several years, students in an advanced SCU writing class had been checking the VHS tapes out from BAHOHP's administrative office, watching them, and abstracting the interview content as a class assignment. This process had some limitations. The use of a variety of consumer-grade players used for playback was damaging to the tapes. As time went on, fewer students even had access to videotape players. The process of viewing analog tapes for abstracting purposes was cumbersome. The instructor felt there was more value to be gotten from such rich primary sources, but that this extra value was difficult to extract using the analog versions of the interviews.

The Library's Digital Initiatives department, in meetings with the instructor and BAHOHP representatives, developed a new model for using the interviews in the class. The Library agreed to create a collection of the tapes in streaming digital format, presenting the collection along with bibliographic and descriptive information to which the students could add their content abstracts. At the same time, DVD versions of the tapes would be produced. In addition to abstracting the tapes, students would utilize the digital versions of the interviews to create audio-visual essays on a particular survivor, or on a subject or theme drawn from interviews with several survivors. These digital essays would incorporate content from the interviews, as well as related photo, video, and audio reference material from other sources.

This project led to establishing another partnership, between the Library and Media Services, a university department specializing in implementing technologies for curriculum use. Media Services digitized the tapes using the H.264/MPEG-4 AVC compression standard, and placed them on SCU's streaming media server as QuickTime video files. Metadata was created using information derived from BAHOHP's FileMaker data fields; a study of emerging digital video metadata standards led to the choices for collection field names and the Dublin Core fields to which they were mapped. These fields would constitute the bibliographic records for the interviews:

Title: DC Map - Title; Interviewee: DC Map - Creator; Interview Date: DC Map - Date; Interviewer: DC Map - Contributors; Videographer: DC Map - Contributors; Interview Summary: DC Map - Description; Interview format; DC Map - Format; Digital format: DC Map - Format-Medium; Language: DC Map - Language; Type of experience;: DC Map - Description; Length of interview: DC Map - Format-Extent; Subject: DC Map - Subject; Publisher: DC Map - Publisher; Type: DC Map - Type; URL (of video on streaming server): DC Map - Format; Source: DC Map - Source; Copyright: DC Map - Rights; 18. Access: DC Map - Rights; Identifier: DC Map - Identifier.

This is the resulting appearance of a publicly accessible item record:

Mapping the metadata to standard Dublin Core fields was important. SCU exposes the metadata of its digital collections for harvesting by a variety of agents, including OCLC's WorldCat, which recreates digital collections on its website (What is WorldCat, 2009) and registries of Open Access repositories, which compile metadata and link to collections at their sources (Registry, n.d.). These harvesting agents depend on Dublin Core metadata as a lowest common denominator to organize the wide varieties of collections they gather. It is through agents like these (and, of course, Google) that intellectual content is disseminated throughout the world with groups of related items discoverable together.

During the first year of the initial phase of the project, its innovative nature exposed our areas of inexperience: Media Services was not used to working to spec on a timetable for a large number of items, our legal department had little experience in negotiating intellectual property agreements with an outside partner, the course instructor was not "tech-savvy", and the students had received no prior training in digital editing or the proper citing of the additional audio and video resources used in their essays. These issues were addressed in the second year of the project: there is now a digital lab module, taught by Media Services, included as a component of the course, a Subject Specialist from the Library offers training on research and citation, and serves as an on-call resource for students' questions on research, and Media Services has installed a new, automated digital video hardare/software workflow and server. The bibliographic records (including the student abstracts of interview contents) are available to the public on the collection website at http://contentdm.scu.edu/hohp, while the video interviews themselves are restricted to students and qualified researchers who can register to access the content - a solution worked out between the legal departments of SCU and the non-profit organization of which BAHOHP is now a part. This arrangement answers the Library's need to fulfill its role as a repository and access point for its intellectual resources, and the non-profit's concerns for interviewee privacy and security. Assessment scores for students have realized a significant increase since the start of the project, both in objective learning outcome scores and subjective evaluations of engagement with the subject and material. Many students have formed a strong emotional bond with “their” subjects through the experience of listening to their stories in the interviews and creating their video essays based on the subjects.

## Mission Santa Clara Sacramental Records

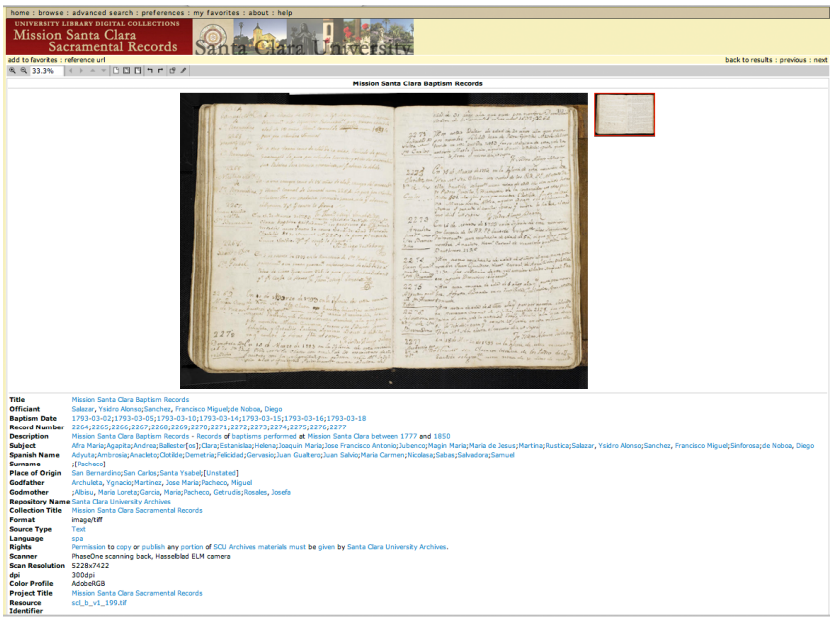
This collection was the result of collaboration among SCU's Library, Archives and Special Collections Department, and History Department, and the Huntington Library and Research Center in San Marino, California. The Huntington has a web-accessible relational database of records from various California missions, called the Early California Population Project, primarily targeted to genealogical and historical researchers. SCU Archives and Special Collections Department has handwritten volumes of the records of sacramental ceremonies performed at the Mission between 1777 and 1850. These include baptisms, marriages, and burials. SCU and the Huntington reached an agreement in which the Huntington digitized these records, giving SCU a copy of the digital versions as well as metadata spreadsheets drawn from their complex relational database of record information. The digital images were supplied in .tif, .jpg, and pdf format. The Huntington’s copies of the digital image versions have enriched the ECPP, which until the inclusion of the images offered only transcriptions of the records in response to database queries.

The major challenge for SCU on this project was to determine, from the Huntington's set of complex relational database fields and tables, which information we could extract and translate into metadata for use in our flat field, text-indexed image collection software. Collaboration between Archives and Special Collections and Digital Initiatives produced a rich set of bibliographic and technical metadata describing the records:

Title: DC - Title; Officiant: DC - Creator; Baptism Date: DC - Date; Record Number: DC - None; Description: DC - Description; Marriage Date: DC - Date; Burial Date: DC - Date; Subject: DC - Subject; Spanish Name: DC - Subject; Surname: DC - Subject; Groom Spanish Name: DC - Subject; Groom Surname: DC - Subject; Bride Spanish Name: DC - Subject; Bride Surname: DC - Subject; Geographic Location: DC - Coverage-Spatial; Place of Origin: DC - Coverage-Spatial; Groom's Place of Origin: DC - Relation; Bride's Place of Origin: DC - Relation; Sacramental Officiant: DC - Subject; Godfather: DC - Subject; Godmother: DC - Coverage; Repository Name: DC - Publisher; Notes: DC - None; Collection Title: DC - Relation-Is Part Of; Format: DC - Format-Medium; Source ID: DC - Source; Source Type: DC - Type; Language: DC - Language; Rights: DC - Rights; Scanner: DC - None;

Scan Resolution: DC - None; Dpi: DC - None; Color Profile: DC - None; Project Title: DC - None; Resource Identifier: DC - Identifier.

Here is an item record:




We decided to link the results of a search on any of these fields, or any combination of them, to a full two-page spread image display of the records, using a 3000x2237 dpi jpeg image for close viewing of the handwriting, marginalia, and document details. In this way the results can be seen in context - a snapshot of ceremonies performed over a relatively short period of time. The accompanying bibliographic record includes all the information pertinent to the sacramental records illustrated in the image. This can be useful for following the career of an officiant, for noting clusters of ceremonies focused on a particular place of origin, and so forth.

The History Department requested this collection for use in classes that will examine the data from different perspectives, for instance: following the course of a family's history or the career of an officiant, calculating average life spans by comparing birth/burial data, or gaining a perspective on the shifting location centers of ethnic populations. The software platform we use to mount our collections, CONTENTdm, aids this type of coursework use by allowing instructors or students to create persistant customized sub-collections from the main collection, based on a series of simple or complex queries. Instructors can use these mini-collections in teaching modules; students can create them to use as resources for thematic research (Overview, 2009). We expected this collection to be more user friendly than the traditional database model employed by the Huntington, especially for non-expert researchers, and this is indeed the case. Interestingly, initial user testing has shown that expert users also find the retrieval capabilities of this collection to be more powerful than the more complex traditional database.

There are additional synergies made possible by these types of collections. SCU's Anthropology Department has expressed interest in the Sacramental Records collection, suggesting that combining GIS (Geographic Information Systems) data with the records could visually enhance the depiction of geographical ethnic population shifts over the time span covered by the records. The Religion Department has conferred with the English instructor using the Oral History collection to examine the possibility of using the interviews in other classes.

## Conclusion

Preserving the intellectual content of archival or special collections material through digitization is in itself a worthy goal for academic libraries. It allows a wide dissemination of the material through networked interfaces, and protects the original rare or fragile items from overuse. But the value of the materials, and of the library, is enhanced when these items can be directed toward a specific curricular use. The library becomes an active and engaged educational partner, and the materials take on a new life and purpose.

## References


Bush, V. (1945, July). As we may think. *Atlantic Monthly,* 176 (1), 101-108.

*Calisphere - About Calisphere*. (2009). Retrieved September 18, 2009, from http://www.calisphere.universityofcalifornia.edu/about-cs.html

Franklin, C., Bolick, C., Lee, J., Friedman, A., Molebash, P., Hicks, D., Waring, S., Doolittle, P. & Snediker, T. (2006). Teaching Teachers to Use Digital Primary Source Materials in Social Studies: A Symposium, Part 2. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2006,* 4093-4097. Chesapeake, VA: AACE.

*General Information*. (2006). Early California Population Project. Retrieved September 16, 2009, from http://www.huntington.org/Information/ECPPmain.htm

*Holocaust Oral History Project*. (2009). Santa Clara University Library Digital Collections. Retrieved September 14, 2009, from http://Contentdm.scu.edu/hohp

*Mission and History (American Memory from the Library of Congress)*. (n.d.). Retrieved September 15, 2009, from http://memory.loc.gov/ammem/about/index.html

*Mission Santa Clara Sacramental Records*. (2009). Santa Clara University Library Digital Collections. Retrieved September 16, 2009, from http://Contentdm.scu.edu/mission

*Overview – CONTENTdm.* (2009). OCLC. Retrieved September 16, 2009, from http://www.oclc.org/contentdm/overview/default.htm

*Registry of Open Access Repositories (ROAR)*. (n.d.). Retrieved September 16, 2009, from http://roar.eprints.org/

*What is WorldCat? [WorldCat.org]*. (2009). Retrieved September 16, 2009, from http://www.worldcat.org/whatis/default.jsp