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Authors

Mankita, Isaac
Meltzer, Ellen
Harris, James

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A Handful of Things

Calisphere's Themed Collections from the California Digital Library

[Isaac Mankita](#)

University of California, Berkeley
<imankita@berkeley.edu>

[Ellen Meltzer](#)

University of California Office of the President
<ellen.meltzer@ucop.edu>

[James Harris](#)

University of California, Berkeley
<jharris@berkeley.edu>

How do large digital libraries transform collections intended for university-level research and teaching into accessible resources for multiple audiences? How do universities leverage their collections to fulfill their public service missions? The University of California, California Digital Library (CDL) is developing and implementing strategies that will modify its university- and research-oriented digital collections to make them available to non-university audiences in an attractive and usable format.

Within CDL's work in this area, the *Calisphere Themed Collection Project* (CTC) had the specific charge of transforming selections from the University of California's (UC's) systemwide digital materials to make them useful for K-12 teachers. The goal of the CTC Project was to create a modest number of online collections of a distinct type: *themed collections*. A *themed collection* is an easy-to-use, flexible set of digital primary resources organized around a specific theme.

CTC Project work was performed in a partnership with the CDL and UC Berkeley's Interactive University (IU). The concepts that inform and shape a themed collection grew out of research, development, and assessment at both the CDL and the IU. In 2004, the CDL had commissioned – and the IU had separately undertaken – research to

assess and document teacher needs and practices.

During the spring and summer of 2005, a small team was formed to conceptualize, design, and create a few dozen themed collections of primary digital resources from selected collections hosted by CDL. These new collections respond to many of the needs high-school teachers had identified during assessments and are specifically designed for a K-12 teacher audience. To that end, items within the collections are aligned with California's State Board of Education Content Standards – standards that define and describe the knowledge, concepts, and skills that each student should acquire at each grade level.¹

This article describes the process, products, and findings of the Calisphere Themed Collection Project; it provides brief background information about the CDL and the IU, followed by a discussion of the teacher assessments and other work that helped identify areas of challenge and potential opportunities for CTC work. The focus then turns to the actual scope of the project and the work process: What were the proposed solutions? What strategies were employed to implement solutions? How did the process work? Finally, there is a discussion of lessons learned and envisioned next steps.

The California Digital Library & the Interactive University

Established in 1997, the California Digital Library (<http://www.cdlib.org/>) is administered by the University of California's Office of the President and serves all 10 UC campuses. The CDL is one of the world's largest digital libraries – it develops tools and services for the UC campus libraries, provides access to licensed and publicly available materials, and is responsible for a number of other programs, projects and services.

As part of the University's public service mission, the CDL works to share its publicly available content with users worldwide.² To better serve the public, in 2003 the CDL launched a minimally developed website where portions of its freely available materials could be accessed. This site was intended as a first step toward transforming the University of California's digital research and teaching collections into easily accessible online resources of significant value to the public.

Since 1996, UC Berkeley's Interactive University has explored ways to use the Internet and information technologies to make university, library, and museum resources accessible to a larger public, with a focus on opening Berkeley's resources for the improvement of teaching and learning in California's K-12 schools and public institutions.

A partnership evolved, as both CDL and IU moved toward a common goal of opening the richness of UC's digital collections to a broader community.

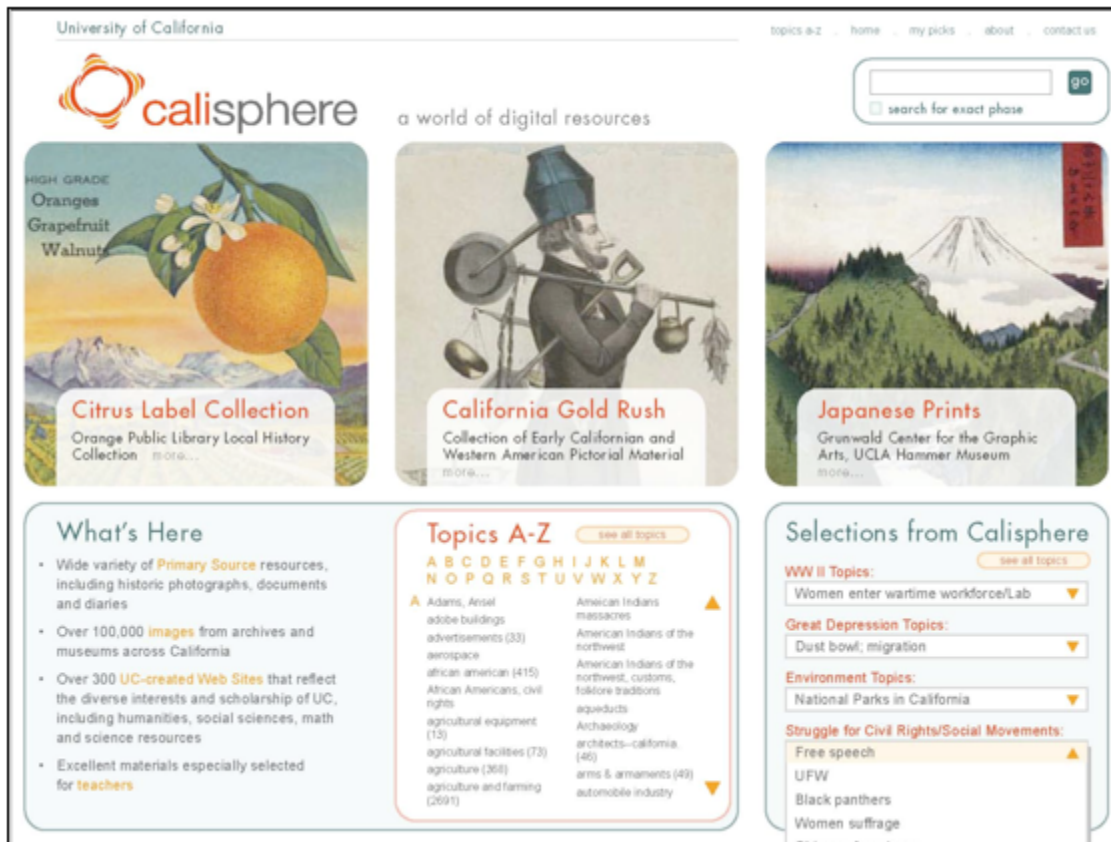


Figure 1: Calisphere Prototype Home Page

Groundwork and Origins of the Project

Before work began on the CTC Project, the CDL was actively improving and expanding the initial public website it had launched in 2003. A project manager was assigned to guide this work. One immediate need was to create a recognizable identity. CDL staff outlined concepts and ideas for a desired look and feel, then a graphic design company was hired to develop these into an attractive website. In addition, a marketing firm was engaged to create a name and tagline for the website, emphasizing the University of California brand.

A major challenge in the drive to improve CDL's public site involved matching the extensive and diverse content in the archive – a vast amount of information from many distinct collections – with targeted audiences and user communities. To meet this challenge, work proceeded on two fronts. The first set out to better understand the many discrete collections that comprise the CDL aggregate by reviewing the quality and usability of its contents. The original public site included the following:

- The Online Archive of California (OAC), a digital collection of primary sources held in libraries, museums, and archives across California. OAC includes over 150,000 images; 50,000 pages of documents, letters, and oral histories; and

8,000 links to finding aids to collections. While these focus chiefly on California, they are also international in scope. Since these collections are built in large part from what the libraries, museums, historical societies, and archives have collected over many years, they do not cover all historical time periods or geographical areas.

- Finding Aids – textual documents that describe the holdings of archives, libraries or museums – originally created by the archivists within UC. These collections were built over time, and some were added as a result of Library Services and Technology (LSTA) grants. These finding aids may not meet the needs of a general audience.
- A link to statistics about California (Counting California).
- eScholarship Editions – selected online books from the University of California Press.
- A collection of hundreds of websites from across the University of California, described by the Librarians' Internet Index (lii.org).

Because CDL holdings are vast and the potential uses and audiences for the archived information enormous, a second effort focused on understanding intended audiences in order to develop strategies that best enable selecting and presenting the most useful parts of the repository.

Assessment

Since the launch of CDL's initial public site in 2003, user assessment has been central to the process of making digital collections more accessible and usable. A recurring loop of assessment followed by design, leading to further assessment and appropriate re-design, is standard CDL practice.

In fact, research and ideas for the CTC Project coalesced around assessment findings presented in two studies connected to other CDL work. These studies made it clear that targeting a K-12 teacher audience was a good investment.

The first of these studies [1], conducted by a contractor in 2004 on behalf of the CDL, sought to generate in a series of user interviews, qualitative insights that could help guide future development at CDL; it explored user needs, behaviors, and expectations for online research tools. The study found that users place a high premium on access to primary resources and they desire better search features.

Also in 2004, the IU conducted a study for the CDL that focused on teachers' use of digital objects in the classroom. [2] The goal of the IU study was to better understand and assess the practices and needs of K-12 teachers and bring to light the benefits and challenges teachers experience using (or attempting to use) digital resources and Internet technologies. The IU study collected information about what tools teachers use and would like to have, how teachers prepare lesson plans, and what processes they use to incorporate digital materials into teaching and learning. The study captured details of teachers' efforts to search for, find, gather, save, and use digital objects in the

classroom.

Findings from these two studies include the following:

- Teachers are overwhelmed by what is available on the Web and would like navigation and discovery aids.
- Teachers suggested that to facilitate investigation into particular questions or themes, resource sites use guiding questions to organize and cluster materials.
- University websites, along with other college-sponsored or hosted websites whose domain-names end in *.edu*, are perceived as trustworthy resources.
- Once high-quality materials are found, teachers prefer to create their own teaching materials rather than rely on the structured activities often found in traditional "lesson plans."

With these research findings in hand, interest focused around the prospect of transforming digital resources in a particular way for the specific audience of teachers, and the CTC Project began to take shape.

First, an advisory board, comprised of K-12 teachers, a school librarian, and a public librarian, was created to work with the CTC Project. Early on, the advisory board made it clear that California teachers' curriculum is circumscribed by the California State Board of Education standards. Resources not aligned with the standards are unlikely to find much of a teacher audience.

Although many teachers reported that the increasing focus on standards and testing based on these standards create an additional burden, teachers cannot avoid incorporating them. On the one hand, standards provide a baseline, structure and consistency in the study of specific disciplines; on the other, many teachers believe that teaching to the standards (and to the test) constrains the flexibility needed to be an effective and inspiring teacher. Since the use of standards seems to be ubiquitous, the themed collections were created to reference standards where possible.

In addition, the advisory board confirmed some of the assessment studies' findings:

- Smaller collections organized around themes are needed.
- There is a need to provide printer-friendly versions of objects.
- Teachers want a few good things to supplement their lessons, not everything on a topic.
- The attribution of materials is of critical importance, as is the context in which the digital objects reside.

Advisory board members also described two distinct types of teacher preparation: the "Sunday night" approach and the "plan-ahead" approach. Themed collections may be used for either type of preparation; while each collection provides a few, compelling visual resources with sufficient context to quickly determine applicability in learning activities, it also contains enough information to support further delving into the site if

time allows. Throughout development of the CTC materials, advisory board members have provided valuable insight on the visual design, navigation, and object-level views for each primary source. For example, while it remains crucial to have provenance information of images for citations and teachers' own edification, teachers also requested a view with minimal information to invite original critique and analysis in the classroom.

Ongoing assessment, conducted by the CDL assessment team, and subsequent re-design continue to guide the CTC Project. At the outset, assessment revealed the project's target audience, and it continues to shape the project's direction. In October 2005, the CDL assessment team and Calisphere project manager conducted usability testing at one of the advisory board member's institutions, Chico (California) High School. [3] Seven teachers participated in usability testing on two versions of the prototype site. Additional rounds of usability testing are planned, continuing the process of folding assessment and re-design into the site.

From Assessment to Design

The solution – designed in response to an understanding of teacher practice and based on the analysis of teacher interviews – was a cluster of 15-25 carefully chosen, presented, and annotated primary digital resources from UC's collections; each cluster illustrates a topic or theme in the content standards adopted by the California State Board of Education. Six themed collections were built around broad topics, e.g., Gold Rush Era, Closing the Frontier, World War II; within these broad areas smaller collections were created for selected topics in social studies, art, and science and technology.

Themed collections created in this project respond to an understanding of teacher practice, grounded in data compiled from teacher interviews and a teacher advisory board. In particular, the following teacher practices and preferences were considered:

- ***Informed curation aids teacher resource selection:*** Teachers feel overwhelmed by the abundance of material found on the Internet. Reliable and trusted sources of organized and well-curated materials are highly valued.
- ***Teachers begin with a question:*** A question or focused set of questions narrows the scope when a teacher begins to search for supplementary materials. The questions reveal, and may help to align materials with, the lesson content and learning objectives.
- ***Digital resource collections need contextual introduction:*** Some amount of text and context is necessary to quickly determine the appropriateness of a resource collection. Information is needed to address such things as: the origin of the materials, information about the material's creator, the historical moment or social situation from which the material has been taken, the intent of the curator in creating the collection, and the standards to which a resource or collection is aligned.
- ***Experienced teachers use supplementary materials:*** Adaptation and

supplementation of textbook and other materials to a specific classroom context or learning objective are the norm. Teachers improvise around familiar core curriculum standards, and they search ahead of time for the materials to enable the improvisation.

- ***Modular collections are valued above comprehensive curriculum packages:*** Adapting or re-working supplementary curriculum packages to meet specific classroom situations is too time consuming. Teachers prefer modular, malleable resource collections from authoritative sources that are easy to use, well designed, and contextualized in a clear, precise style.
- ***Elegant design and presentation enhance usefulness:*** Users should be able to quickly grasp the scope and details of a collection. This doesn't mean a shallow presentation, nor does it mean a flashy appearance. It does mean design appropriate to the material that quickly orients users and guides them to what is central and important in a collection.

Teachers' reported needs and practices were broadly translated into design goals and organizing concepts that shaped and guided the creation of web-based themed collections. The parameters for building a themed collection included the following:

- ***Teaching is a social endeavor:*** Teaching is centered on time in class; teachers build lessons and materials around curriculum requirements and standards, as well as the needs of a particular group of students and classroom dynamics. The selection and addition of supplementary materials tailored to a particular group of students can add value to teaching time in class.
- ***Offer supplementary materials:*** Most teachers consider supplementary materials essential to good teaching. Themed collection sites are designed to serve as a source for high quality primary digital resources. In this context, teachers overwhelmingly mentioned the importance of being able to easily print images and documents found on the Internet. As a result, themed collection sites are designed with "print friendly" options.
- ***Design for maximum adaptability:*** Each teacher is likely to have a unique need for a specific situation. Themed collections are designed to be modular and easily broken into smaller parts or units. This is true both for the technical capability to grab, cut or paste specific sections of a page and for how the contextual information is presented in discrete, self-contained units.
- ***Standards are a guide, not a script:*** Teachers are aware of and refer to standards in their preparation and teaching. Objects within themed collections were chosen with the California Content Standards in mind. Alignment with standards is noted in the text. Standards have been used as a guiding light, but no attempt has been made to systematically cover all standards.

A Team to Implement Design

Calisphere Themed Collection Project Team

Once the idea of a themed collection was envisioned, and the components and

procedures necessary to create one mapped out, it was clear a multidisciplinary project team would be needed. The partner institutions assembled this team, comprised of user assessment specialists, technologists, curatorial professionals, a museum educator, writers and a marketing specialist. In some cases, individuals filled more than one role. Members were drawn from CDL and IU staff, as well as outside contractors and members of a constituted teacher advisory board. The themed collection project team benefited from the assistance of several additional CDL staff who worked on navigation and user interface issues outside the CTC team. The Themed Collection Project Team included the following specific roles and skills:

- Project management – This role was assumed by the CDL's Manager of Public Content, who, before this project began, was responsible for content at the K-12 domain within the larger Calisphere web site. The project manager coordinated the work of all team members and set the schedules and agenda for development. In addition, the project manager assumed responsibility for coordinating work with other CDL staff not immediately associated with the Themed Collection Project, seeking their assistance and guidance on technical web site development, design and implementation issues. Finally, the project manager was also a key member of and a liaison to the Calisphere Advisory Board.
- Assessment – CDL's Assessment Coordinator served in a close advisory capacity to the themed collections project team, coordinating user testing and assessment with outside advisory groups and reporting to the team on the findings and outcomes. The IU Associate Program Manager, who served as co-chair of the Themed Collections Project, was also valuable in conveying and confirming findings from an earlier IU teacher assessment study.
- Curatorial expertise – An independent contractor with extensive experience as an image specialist and museum educator was hired to do most of the searching of CDL managed collections and to cull out images and other materials for themes and topics.
- Curriculum development – The themed collection project team relied on input from the teacher advisory board, as well as on knowledge and experience from team members around the table. In fact, there was no single, specifically designated and qualified team member who was a curriculum development expert – this turned out to be an area where the team would have benefited from more expertise around the table at the weekly development sessions.
- Writing and editing – An outside contractor was hired as the primary writer. At its weekly meetings, the team put together a final cluster of themed images that had been initially selected, organized and presented by the museum curator. The writer then wrote a first draft of text describing the context of the images. This practice enabled the writer to be present during a selection and discussion process that established initial guidelines for the "context threshold" deemed necessary for any individual themed collection. After the project writer produced an initial draft, the rest of the team edited the copy.
- Research – There was no one person designated as the researcher. Throughout the process of gathering material and choosing selections for themed collections,

all team members who were around the table or editing copy acted as researchers or fact checkers – at times ad hoc, at other times as part of an assignment between meetings.

- Design – From time to time, the themed collection project team met and worked with CDL design and programming staff, who supported the development team, to discuss options and feasibility for features the project team wanted to have built into the themed collection sites.
- Publicity and Dissemination – A CDL Senior Communications Analyst on the Project Team was kept informed about progress and process to better design and implement a successful publicity campaign. Marketing concerns did not drive development and creation of themed collections.

Implementation Strategy and Process

Development work began by exploring the strengths of the contents and understanding the structure of the collections. The team reviewed a number of other sites identified through users' research as noteworthy for teaching history or social studies. In addition, the team discussed new ways of organizing materials to better expose them and make them more usable for K-12 teachers.

Initial Developments

Four potentially useful types of collections were identified. These included an "image-heavy" collection with up to 50 images related to a specific theme, such as the Great Depression; a collection of images that highlights an often overlooked aspect of a well-studied theme, such as the diversity of migrants to California during the gold-rush era; a collection with greater focus on "text" and "facts" that might serve as a review for novice or new teachers about a specific theme; and a collection that combined a handful of images with in-depth information about them. Discussions lasted over two or three meetings, until the team decided to take a more empirical approach to define a themed collection.

At the same time, the team began generating ideas for possible themes around which collections could be built. This exercise involved reviewing the California History-Social Studies Content Standards (<http://www.cde.ca.gov/be/st/ss>) and brainstorming historical events, prominent figures, and developments centered on California history. Later, team members reviewed two recently published U.S. History textbooks adopted by districts in the San Francisco Bay Area and southern California. Once a preliminary list of possible themes was generated, the team's efforts shifted to aligning standards and possible themes to contents in the collection.

At times, this proved more difficult than expected given the scarcity or absence of materials, or the poorly rendered digitization of some selected images. For example, initially, the team was only able to uncover 6 images about the *Bracero* program, an important guest worker initiative from the 1940s with wide-ranging implications for California (and U.S.) agriculture and organized labor. Several additional images are part

of the collection, but the poor quality of their scan precluded their inclusion. Nor could images of suitable quality be found to create a collection around the rise of Hollywood or the impact of the Cold War and McCarthyism on Hollywood, which team members considered appropriate and important to include as a themed collection focused on California topics. As a final example, the team could not find suitable images or documents to create a themed collection around aspects of Chinese American immigration to California, a particularly desirable topic because of the role that Angel Island played for Asian immigrants as the "Ellis Island of the West."

The First Collections

The team's museum educator had primary responsibility for gathering the initial group of images based on the group's priorities. She searched through the collection to gather possible images; collected URLs and excerpts from finding aids in a text document; and emailed it to team members for review between meetings. The text document, with URLs and excerpts from the finding aids describing the images and providing information such as provenance, biographical data, date, and locale, was the first attempt at creating the themed collections.

Team members reviewed text and images by clicking on listed links and reading pertinent information. One immediate challenge posed by this method was that only a handful of images were viewable on a computer screen at the same time. While efficient for disseminating materials quickly, this approach proved frustrating to team members who wanted to view the constellation of images to best assess whether it met the threshold of a "themed collection."

In response, the team decided to print out images in full color and in 8.5 x 11 inches when possible in order to better evaluate whether they were of sufficiently high quality and whether the specific grouping met the criteria for a themed collection. Immediately after laying out the first group of images on the table, advantages of this approach became clear. First, it was relatively easy to tell when images were missing from a group, e.g., depictions of (male) supervisors in the Richmond shipyards during wartime ship production. Second, the team was able to quickly assess the "balance" in the collection among several dimensions, e.g., Caucasian women were mostly engaged in design, engineering, and inspection work, while women of color appeared more often in dangerous metalworking activities. Third, group discussion about viewing the images together often provided the basis for a narrative of the theme we sought to represent, and questions raised about the emerging narrative often suggested missing or underrepresented aspects or images in the collection. This questioning became a powerful "test" to assess whether a grouping of images might be considered a themed collection – "Can you tell the story about X through these images?" Similarly, images were often sub-divided into smaller groups, illustrating different aspects of the theme itself and providing "sub-heads" of sorts to the collection.

Once the image components of a themed collection were settled upon, the writer began crafting notes to accompany the collection. These notes sought to broadly establish the

context for the images and to briefly explain the contents of the collection. The team's working definition of a themed collection included *some* number of images and *some* text to provide "appropriate" context. The goal was to provide teachers, our primary audience, with enough preliminary and tentative context to assess the usefulness of the materials for teaching.

Initial drafts were quickly completed and circulated electronically to team members for review and editing. This proved a useful approach. The group's discussion, often captured in these drafts, was complemented by individuals' knowledge of the theme, her/his sense of important aspects, or corrections or amplifications based on research. These notes, suggestions, questions, and comments were included in the text document and sent back to the project manager to bring together in a single document, which was then returned to the writer for editing. A second draft of the document was produced and distributed to team members for review.

Bringing it together

Approximately two weeks after the initial grouping of images was presented, the written component was completed and both pieces were brought before the team. The image specialist laid out the revised set of images on the conference table, and the writer read the text of the notes, with team members pointing to various images and following the narrative. This process uncovered a handful of errors – for example, an image that better depicted the subject replaced an earlier one described in the narrative. Viewing images in this manner closely resembled the way in which potential users might encounter the materials and assess their usefulness for teaching.

The first two or three collections were developed using the following process: initial image selection, review and collation of images, draft and edit of contextual notes, and a "live" viewing and reading of images and notes during a team meeting. Additional themed collections were produced more quickly, with a handful of collections sometimes being developed in parallel. The team continued to focus on identifying themes teachers would use and exploring the possibility of developing them into themed collections. At times – prompted by a discussion with a teacher, inspired by developments in current events, or by uncovering a rich sub-collection within CDL – the team returned to the standards, or even to textbooks, to better assess the appropriateness of an evolving set of images as a themed collection. For example, it was difficult to find advertising images that might clearly reflect changes in cultural, aesthetic, and design values and artistic expression. And, though California is often considered to be at the forefront of civil rights movements – gay and lesbian, women, African-American – suitable images and documents were simply not represented in the existing digitized collections.

Web Presentation of a Themed Collection

Part of the challenge of the themed collection project team was to determine how best to organize and present a themed collection in a website. In addition to conceptual

questions about the optimum number of images or components to include in each themed collection, or the "context threshold" that provides sufficient information to adequately tie together objects without over-structuring them and limiting alternative interpretations and reusability, there were design questions about the method and manner of presenting information once conceptual questions were settled. Usability testing was conducted at Chico (California) High School with teachers recruited by one of the Advisory Board members. Teachers' input informed interface improvements. Below is an image of a mocked-up beta site, designed to make a single themed collection intuitively navigable and its information easily accessible.

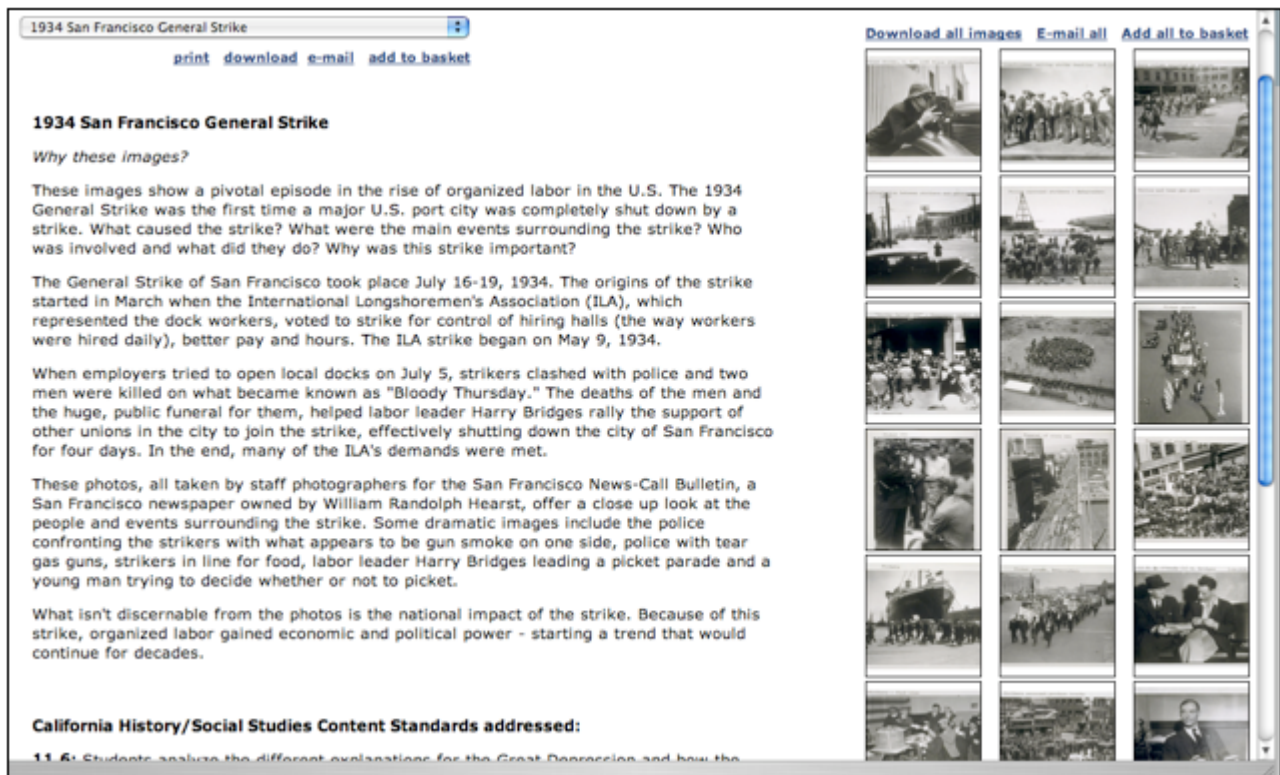


Figure 2: Themed Collection Prototype

Lessons Learned and Remaining Questions

The themed collections project team identified several lessons learned and questions that require further research and/or development. Key aspects identified here address these questions.

1. Themed collections drawn exclusively from an existing digital library collection will necessarily be constrained by the nature, contents, and scope of the originating collection.
2. Using educational content standards as the basis of themes can lead to identifying topics

that are not well represented in a collection. Identifying weaknesses provides an opportunity to seek out additional content to strengthen collections.

3. Calisphere's themed collections are not a destination for teachers' so called "one-stop shopping," but rather a compendium of high quality, well organized, and often hard-to-find resources that complement textbooks.
4. Long-term sustainability requires, in part, that technologies evolve to facilitate the creation of themed collections – either by specialists within libraries and museums or by members of the public such as K-12 teachers or others. How can a themed collection be created in a scalable, cost-effective model?
5. The themed collection project team did not include a content specialist, i.e., a historian or a K-12 curriculum specialist. How would results differ with the addition of these kinds of expertise to the team? What kinds of expertise are needed to create themed collections designed for reuse by multiple user communities? Usability testing and user surveys will begin to answer these questions.
6. The themed collection project team worked on the premise that contextual information linking together images in themed collections consists of a brief historical background and a summary describing unifying themes behind chosen images. Does this model meet the "context threshold" for a themed collection and provide sufficient information to loosely tie objects in the collection together without over-structuring it and limiting alternative interpretations and reusability?³ This question will be explored in future assessment.
7. How many images or digital documents might form a sufficiently useful themed collection to adequately illustrate a specific theme? Is there an optimal number of themes, sub-themes, and images for effective use by teachers?
8. How do teachers use Calisphere's themed collections? Does the site do what it was designed and intended to do for teachers? How well do themed collections work to better expose public content through Calisphere? Discussion with teachers and other forms of assessment will be necessary to answer these questions.

Next Steps

Work on the Calisphere project is progressing; refinement of search and display by the CDL technology and user interface teams continues. Work in these areas will benefit other CDL projects and may also set best practices for use in a larger arena. The site is projected to be launched in June 2006.

Two more rounds of usability testing are planned with K-12 teachers and librarians, aided by the Advisory Board. The aim of further testing is to ensure the following:

- The interface is easy to use.
- Users can easily navigate the site.
- Users can successfully complete desired tasks.
- Users have a clear understanding of available materials.
- The site effectively sets the context needed by teachers.

Further work has been undertaken at the CDL to explore tying the vast amount of Calisphere

content not already contained in the themed collections to the California Content Standards via a hand-selected subject browse. More experimentation will need to be completed in this area.

The launch of the redesigned site will consist of a comprehensive marketing and dissemination plan including press releases, announcements to relevant listservs, displays and presentations at teacher conferences, and the creation and distribution of promotional materials.

With the knowledge gained from working on this site, an important next step is to continue working with archival collections to fill identified gaps to enrich existing Calisphere collections. For example, an exciting upcoming addition to Calisphere is the "California Cultures" collection. These materials document ethnic groups in California and the West, with the specific aim of building an online research collection of primary resources comprised of digital images and electronic texts to serve as the basis for historical studies, analysis, interpretation, and application to current events. The focus of these collections will be California's Native-, Hispanic-, Asian-, and African-Americans, and they may help address gaps uncovered in building the first round of themed collections. Additional collections will be built as conversations with teachers continue.

The work of this project suggests that university-level digital collections can be structured for multiple audiences. Partnerships with user communities ought to inform restructuring decisions to enhance the usefulness of unique digital primary source collections in support of the educational experience.

Acknowledgments

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Notes

1. While the California Standards, in their entirety, are comprehensive, this project attempted to identify only a few areas to focus on – e.g., topics that had seemed neglected, or those where the archive was rich enough in digitized material to support a themed collection.
2. Library holdings include both licensed and public resources. Agreements governing licensed holdings, such as journals or periodicals, often restrict use only to those directly associated with the University, such as faculty, students and staff.
3. See South and Monson, 2000, in *The Instructional Use of Learning Objects*, Wiley, David, editor. Accessed on 7/26/2005 at <<http://reusability.org/read/>>).

References

- [1] Wright, Alex. Documenting the American West: Findings from user interviews. July 2004. <http://www.cdlib.org/inside/assess/evaluation_activities/docs/2004/amWest_awFindings.pdf>

[2] Ashley, Chris, Isaac Mankita and James Harris. "High School Social Studies Teachers: The Use of Digital Objects in Teaching Practices." January 2005.

<http://www.cdlib.org/inside/assess/evaluation_activities/docs/2005/iuAssessment_2005_0202.pdf>.

[3] Lee, Jane and Felicia Poe. "Calisphere UI Testing: Findings and Recommendations": Chico High School. September 2005. <http://www.cdlib.org/inside/assess/evaluation_activities/docs/2005/calisphereChicoReport_sept2005.pdf>.

Appendix 1: Calisphere Themed Collection Project Team

Rosalie Lack, CDL, Calisphere Project Manager; CDL Public Content Manager; Co-Chair, Themed Collection Project Team

Julia Brashares, Museum Educator

Jennifer Colvin, CDL, Manager of Strategic Communications

James Harris, Publications Specialist and Principal Consultant, Interactive University, UC Berkeley

Jane Lee, CDL, Assessment Analyst (Advisor to the Team)

Isaac Mankita, Associate Program Manager, Interactive University, UC Berkeley; Co-Chair, Themed Collection Project Team

Ellen Meltzer, CDL, Information Services Manager

Robin Meyerowitz, Writer

Felicia Poe, CDL, Assessment Coordinator (Advisor to the Team)

Appendix 2: Calisphere Themed Collections (as of Feb 10, 2006)

CLOSING OF THE FRONTIER (1870-1900)

1. Facing Prejudice: The Chinese Exclusion Act of 1882
2. The Transcontinental Railroad
3. The Removal and Assimilation of Native Americans
4. Preservation of the West

THE CHANGING STATE IN THE GOLD RUSH ERA (1848-1865)

1. Murder and Mayhem
2. Disasters
3. Everyday Life and People

4. Gold Mining and Its Environmental Impact
5. Growth of Cities
6. Diversity in the Changing State

THE GREAT DEPRESSION AND THE 1930s

1. Hard Times
2. Dust Bowl Migration
3. Help and a New Deal
4. Organized Labor: The 1934 San Francisco General Strike
5. Regional Development: Bridges, Dams, Power Plants

WORLD WAR II (1939-1945)

1. Women Enter the Wartime Workforce
2. Life on the Home Front
3. Mexican Immigration: The Bracero Program
4. Richmond Shipyards
5. Japanese American Internment
6. The 442nd Combat Team

EMERGING INDUSTRIAL ORDER (1900- early 1940s)

1. The Changing Workplace
2. The Rise of Technology
3. California's Growing Ethnic Diversity
4. Early Advertising
5. Popular Culture

SOCIAL REFORM (1950s -1970s)

1. African-Americans and the Civil Rights Movement
2. The Free Speech Movement
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