Digital Project Planning & Management Basics

Section 1
Introduction:
Background, Goals, and Course Outline

Course design: Mary S. Woodley
CSU Northridge
Cat21 Series Objectives

- To equip catalogers to deal with new types of resources and to recognize their unique characteristics
- To equip catalogers to evaluate competing approaches to and standards for providing access to resources
- To equip catalogers to think creatively and work collaboratively with others inside and outside their home institutions
- To ensure that catalogers have a broad enough understanding of the current environment to be able to make their local efforts compatible and interoperable with other efforts
- To prepare catalogers to be comfortable with ambiguity and being less than perfect
- To enable practicing catalogers to put themselves into the emerging digital information environment and to continue to play a significant role in shaping library services
Workshop Goals

- Learn basic steps in planning a digital project
- Review grant writing for digital projects
- Understand basic management issues
- Explore assessment goals and tools for measuring success
Workshop Objectives

- Create a project management roadmap
- Understand needed for collaboration and team building (for both intra- and inter-agency collaboration)
- Learn the skills need to develop a work plan and grant writing
- Develop criteria for assessment and selection of tools to measure success of a digital project
Outline for this Workshop

Section 1: Introduction
Section 2: Team Building and Planning
Section 3: Development of a Business Plan or Making your Case
Section 4: Planning and Grant Writing
Section 5: Project Management Issues
Section 6: Evaluation & Assessment or How to Measure Success
Why Digitize?

- Provide better access
- Added value to resources
- Preserve fragile materials
- Support educational and research activities
- Fulfill strategic mission and goals of institution
Types of Digital Projects

- Special and Archival collections
- Reformatting content from other non-print resources
- Born digital projects
- Digitization projects in a consortium
Define the Project: 
Who, What, When

- Who is the audience?
  - Primary audience?
  - Secondary audience?

- What is digitized?
  - What should/could be digitized?
  - Priorities?
  - Who decides the priorities?
Define the Project: How and How Much

- How much do you digitize?
  - All or representative samples?
- When will the project start?
- What is the timeline?
- How will the project workload be supported?
- Long-term plans (sustainability)
Steps in the Process

- Identify the key players
- Conduct an “information audit”
- Have a clear idea of management’s vision
- Create a planning team who will be responsible for research, planning and writing the grant
Collaboration and Team Building

- Negotiation skills
- Listening and coaching
- Influencing and persuasion skills
- Group decision-making
- Appropriate technology tools
Grant Writing and Work Plan Development

Grant writing and development of a feasible work plan includes:

- Realistic expectations
- Identification of grants and agencies
- Writing a successful grant proposal
Plans for Assessing the Success of the Digital Project

1. Steps to follow
2. Requirements / criteria for measuring success
3. Evaluation tools and techniques
   - Choosing the right tool
   - Knowing how and when to design a local tool
Digital Project Planning & Management Basics

Section 2:
Team Building and Planning
Goals of the Teambuilding Section

- Understand the process for team building
- Learn how to effectively plan and develop ideas through the team
- Learn how to effectively negotiate when parties disagree
- Understand the importance of building consensus -- working together towards the same goals
Cooperation, Collaboration & Partnerships

Success of projects depends on developing a core team of stakeholders

Stakeholders may be part of the institution, parent institution, or partners in the project
Potential Stakeholders / Team Members

- Digital project director
- Grant writer(s)
- Curators
- Project manager
- Specialist in metadata creation
- Specialist in scanning standards
- Conversion specialist

- Hardware / software developer or procurer
- Web page / interface developer
- Marketing and promoter of project
- Staff responsible for the tasks of implementation
- Assessment specialist
Staffing

Every project will vary

Not shown on this page:
Heritage Network members of partnership
Digital Gutenberg Project: team of 9

In June 2002, the Ransom Center and Ilmage Retrieval Inc. of Carrollton, Texas collaborated on the digitization of the Center's Gutenberg Bible using the i2s Digibook 6000 overhead scanner. The project took less than a week to complete and resulted in nearly 1,300 digital images. For the first time, it is possible for the general public to view all of the pages from the University of Texas copy, including all of the large illuminated letters in volume I and the copious handwritten annotations, as well as other indications of the book's use in religious services. The release of the web images coincides with the installation of the Gutenberg Bible in a new exhibition case, part of the recently remodeled main lobby of the Ransom Center.

Further reproduction of any of the Gutenberg Bible images without the written consent of the Ransom Center is prohibited. Inquiries regarding the availability of higher-resolution digital images for research or publication should be directed to the Center's staff.

Digital Gutenberg Project Team

Phillippe Bayle (I2s), Eric Beggs (HRC), Derek Jenkins (IIRI), Rich Oram (HRC), Olivia Primani (HRC), Pete Smith (HRC), David Sturgeon (IIRI), Steve Wilson (HRC), Daniel Zmud (HRC)
Plan Meetings to Discuss Impacts on Organization

- Impact on institution
  - Impact on staffing
  - Impact on space, equipment, software
  - Impact on workflow / routines
- Impact on relations with other institutions, organizations
- Selection process
Brainstorming

- Effective tool for hearing multiple viewpoints, issues, and general ideas
- Leads to the development of more specific ideas and solutions to issues
Brainstorming Techniques
Useful for:

- Supporting institutional SWOT analysis
  - Strengths
  - Weaknesses
  - Opportunities
  - Threats
- Scope and nature of projects
- Selection
Environment for Brainstorming

- Create a relaxed and non-threatening atmosphere
- Decide if all staff involved or representatives from various departments
- Suggest that if representatives are only participants, that the representative meets with constituents to collect ideas, issues, viewpoints
Brainstorming Rules

- Select a facilitator (sometimes using an outsider has an advantage – facilitator does not have a vested interest in the results, or influences or directs the discussion)

- Write down all comments
  - No evaluation of ideas
  - Everyone has an opportunity to speak
  - Use flip chart, white board or software to record comments
Brainstorming Process

1. Define ideas or problems
   - Rephrase idea to make sure that everyone understands the point; write it down concisely

2. Break down broad issues into smaller issues to be “brainstormed” separately

3. Time limit for each section

4. Select the most important issues
Building a Consensus

Review all ideas presented then refine by:

• Look for items that duplicate each other
• Combine related concepts
• Narrow list down
• Work towards a consensus: find common ground
“Getting to Yes”*

- Decide issues based on their merit
- Look for options that will lead to mutual gains (win-win)
- Avoid arguing from positions
- Focus on the issues/interests, not the people
- Use objective criteria

*By Roger Fisher, William Fry, Bruce Patton. Harvard Negotiation Project
Stages Getting to Agreement

1. Analysis stage
   Gather, organize, consider information from all sides

2. Planning stage
   Evaluate the information, think of options

3. Discussion stage
   Communicate interests & options
Active Listening Skills

1. Hear the message
2. Interpret the message
3. Evaluate the message
4. Respond to the message
Tips for Effective Listening

- Take notes (locate key points)
- Reflective listening
- Focus on listening
- Build rapport with speaker
- Show respect
What Blocks Effective Communication?

- Evaluating
- Advise-giving
- One-up-manship
- Diagnosing, prescribing
- Prying
- Warning
- Lecturing
- Shaming
- Withdrawing
- Lack of trust
Communication Break Down

Causes

- Competing agendas
- Concern about long-term support
- Partners lack of skill sets to equally share responsibilities
- Partners fear cultural material will be damaged or lost if “loaned” to lead institution
Revisit Decision process

- Start over
- Change management add Sue Curzon’s diagram
Exercise 1:
Learning Objectives

1. Practice brainstorming techniques and negotiation skills
2. Experience working in a team
Digital Project Planning & Management Basics

Section 3:
Developing the Business Plan or
Making Your Case
Goals of Section

- Understand the process of developing a business plan and the role of the business plan in the overall planning process
- Learn the components of a business plan
## Planning Process*

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Constraints</td>
<td>Organizational mandates</td>
</tr>
<tr>
<td>SWOT analysis</td>
<td>Strengths, Weaknesses, Opportunities and threats</td>
</tr>
<tr>
<td>Mission</td>
<td>Institutional purpose &amp; values</td>
</tr>
<tr>
<td>Strategic Plan</td>
<td>Within mission, set realistic goals and objectives / activities</td>
</tr>
<tr>
<td>Stakeholder analysis</td>
<td>“Entities” who have a stake in the results</td>
</tr>
<tr>
<td>Business Plan</td>
<td>General description of implementation</td>
</tr>
<tr>
<td>Operating Plan</td>
<td>Specifics of business plan for given period</td>
</tr>
<tr>
<td>Vision for success</td>
<td>How the organization will look when plan is implemented</td>
</tr>
</tbody>
</table>

*Based on Bishoff and Allen (2004)
Components of a Business Plan

The business plan needs to address the following issues:

- What is the need?
- Who is the target audience?
- How is the digital project the best solution?
- What will be the impact on the institution?
Components of a Needs Analysis

- Determine types of data needed
- Collect and analyze data
- Describe how the digital project is a solution
Types of Data Needed

- Who is your target audience?
- How are their needs being met, or not?
- Where are the gaps in service, in content?
- What audience skill, knowledge, or behavior can be improved?
- Environmental scan of what other projects
How to Find or Discover Data

- Use US Census statistics
- Use Library statistics
  - Size and scope
  - Use statistics
  - Reference desk statistics
  - Published studies
- Surveys
- Focus groups
Audience & Needs Gap

The San Fernando Valley, which makes up fully 80 percent of CSUN's service community, is quite diverse ethnically, linguistically, and socio-economically. On the weekends, about 50% of the Library's service requests are by persons who are not affiliated with CSUN such as high school and elementary school students, local historical groups, and individual members of the local business community. [CSUN’s] Special Collections and Archives …contain extensive collections that document the history of the San Fernando Valley through a mixed media of rare illustrated items, drawings, photographs, brochures, pamphlets, maps, official and unofficial reports and studies, personal letters, oral remembrances and related records.

Both the CSUN undergraduate students and the K-12 students seek primary source material about their neighborhood, history of the valley, and history of California missions. It is difficult for them to find reliable information.
Benefits of Solution

- Describe the solution
- Detail the benefits
- Describe how the solution will close the gap
- Calculate the cost of the solution
Benefits of Project

The San Fernando ... Digital Library opens accessibility to an unlimited number of client and user groups ... including scholars, teachers, students, local historical societies, and members of the community, material otherwise accessible only by on-site visits. The project will:

- Open holdings to a wider audience
- Heighten interest in the historic development of the Valley
- Provide primary source materials for K-14 classroom use
- Link historical collections throughout the Valley
Why Digitize?

✓ to support collection management and preservation

✓ to make information and assets more readily available

✓ to provide material for educational programs and address curriculum needs

✓ to provide material for curators and researchers (internal and external)

✓ to eliminate redundant work, and creation of redundant assets (photographs, slides, digital images, etc.)
Presenting your Case

“Selling” the project to internal staff, library administrators, campus administrator or governing boards, all may need to hear different content

Explaining the uneasy part without putting people off:
  Labor
  Time
  System support

Explaining what the project is using the right amount of information:
products developed

Managing expectations
Selling your Project

How does the project help fulfill institutional mission & goals

- Supports community outreach & public relations
- Increases user base
- Increases revenue (through commercial profit but also through donations)
- Creates more efficient workflow
- Helps preserve original materials (less wear & tear)
- Supports educational function of institution
Presenting the Costs to Your Administration

- Include a succinct statement of project goals
- Clearly state which (original) collections will be included
- What equipment is needed
- Staffing—how many, and what skill sets?
- Hidden costs: “marketing,” benefits for new staff members, grant management costs
- In-kind costs (e.g. staff release time)—effect on other projects
- Maintenance—“care and feeding”
Cost benefits

“There are no short-term cost savings to be realized by digitizing collections”

Factors to Consider

Every project is unique, costs will vary depending on:

• scope and material of the project
• staff and equipment costs
• database development

Data migration is not a “once-in-a-lifetime” thing, but rather its ongoing
Criteria for Evaluation

- Feasibility
- Legal issues
- Costs / Benefits
- Scope / nature of material
Categories of Cost

- Operational
  - Hardware/Software
  - Training
- Organizational
  - Release time
  - Space
- Staffing
Relative Costs

Table 6: Comparative Cost Ratings Based on Overall Average Projections

<table>
<thead>
<tr>
<th>Digitization Category</th>
<th>Digitizing</th>
<th>Metadata Creation</th>
<th>Other</th>
<th>Overall Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Collections</td>
<td>Higher</td>
<td>Slightly Higher</td>
<td>Lower</td>
<td>Slightly Higher</td>
</tr>
<tr>
<td>Single Items</td>
<td>Lower</td>
<td>Slightly Higher</td>
<td>Higher</td>
<td>Higher</td>
</tr>
<tr>
<td>Photographs</td>
<td>Slightly Higher</td>
<td>Lower</td>
<td>Average</td>
<td>Lower</td>
</tr>
<tr>
<td>Books/Pamphlets</td>
<td>Lower</td>
<td>Lower</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>Re-keyed Text</td>
<td>Lower</td>
<td>Lower</td>
<td>Lower</td>
<td>Lower</td>
</tr>
<tr>
<td>OCR</td>
<td>Very Low</td>
<td>Very Low</td>
<td>Very Low</td>
<td>Very Low</td>
</tr>
</tbody>
</table>

OCR to meet ADA standards in more labor intensive than this represents
# Reported Cost Ranges

## Table 5: Reported Cost Ranges for Various Digitization Processes

<table>
<thead>
<tr>
<th>Digitization Category</th>
<th>Digitizing</th>
<th>Metadata Creation</th>
<th>Other</th>
<th>Overall Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Projections</td>
<td>$0.25-$19.80</td>
<td>$0.75-$34.65</td>
<td>$0.45-$50.20</td>
<td>$1.85-$96.45</td>
</tr>
<tr>
<td>Adjusted Projections</td>
<td>$0.25-$16.65</td>
<td>$0.75-$17.25</td>
<td>$0.45-$28.15</td>
<td>$1.85-$42.45</td>
</tr>
<tr>
<td>Mixed Collections</td>
<td>$3.45-$16.50</td>
<td>$2.85-$17.25</td>
<td>$4.50-$21.55</td>
<td>$3.25-$40.50</td>
</tr>
<tr>
<td>Single Items</td>
<td>$1.90-$8.00</td>
<td>$5.75-$12.85</td>
<td>$7.60-$28.15</td>
<td>$23.10-$35.80</td>
</tr>
<tr>
<td>Photographs</td>
<td>$2.30-$16.65</td>
<td>$4.85-$6.45</td>
<td>$3.35-$24.65</td>
<td>$5.20-$42.45</td>
</tr>
<tr>
<td>Books/Pamphlets</td>
<td>$2.10-$6.10</td>
<td>$1.50-$11.10</td>
<td>$1.35-$6.90</td>
<td>$4.60-$14.40</td>
</tr>
<tr>
<td>Re-keyed Text</td>
<td>$2.55-$5.00</td>
<td>$2.35-$5.70</td>
<td>Limited Data</td>
<td>Limited Data</td>
</tr>
<tr>
<td>OCR</td>
<td>$0.25-$3.60</td>
<td>$0.75-$2.40</td>
<td>$0.40-$2.10</td>
<td>$1.85-$7.65</td>
</tr>
</tbody>
</table>

*Puglia 1998*
In-House and Outsourcing: Various Combinations

- Permanent staff assigned, equipment purchased, software developed locally
- Temporary staff hired, equipment purchased, software developed locally
- Permanent and temporary staff employed, hardware purchased, software “subscription”
- Scanning and metadata creation performed by vendor
Staffing

- **Work that can be outsourced:**
  - database development
  - Scanning
  - Transcription of audio (e.g., oral histories)
  - Basic tagging (markup) for TEI, or EAD in XML

- **In-house labor issues:**
  - Release time (“in kind”), duties performed by temporary help?
  - Time supported by grant, duties performed by temporary help?
  - New staff hired for project

Labor costs represent the largest percentage of costs in a digital project
Staffing Costs

- Salaries
- Benefits
  - Health
  - Sick Leave
  - Vacation
  - Holidays
- Training
- Attendance at conferences and meetings
Hardware

• Scanners
  • Slide scanners
  • Flatbed scanners
  • Microfilm/Microfiche scanners

• Digital cameras

• Audio/video conversion

• Server for storage/delivery

• Server for streaming audio/video

• Long-term maintenance/replacement
Software

• In-house database development:
  • Requires skilled programmers
  • How and by whom will the system be updated, enhanced, and maintained?

• Purchase of an off-the-shelf product:
  • Is the vendor reliable, responsive, and likely to stay in business?
  • Are funds (and staff liaisons) available for system enhancements, updates, and ongoing technical support?

• Documentation of decisions made, code written
Vendor Selection

- Visit website whose “product” you would want to emulate
- Take note of the solutions the project used to create the digital product
- Make a list of desired features & prioritize them
- Decide what features are necessary and what you may not be able to afford
Timeline

- Environmental scan of IT solutions
- Issue RFP
  - Deadline when due
  - Follow up questions
  - Evaluation of responses
- Short-list vendors
  - Site visits
  - Interview current (and past) customers
  - Vendor presentations
- Identify preferred vendor
- Award contract
Request For Proposal (RFP)

- User requirements
- System or technical requirements
- Functional requirements
- Interoperability with other OS / platforms
RFP Assessment

- Does the proposed solution meet all the stated requirements?
- To what degree do they meet your ideal solution?
- Contacts and business history
- What support do they provide (e.g., in-house training)?
- Costs/prices clearly delineated
- How well do they communicate with their customer base
Points to Remember

• Keep the IT solution in sync with the stated goal of business deliverable
• Link the “business case” to the goal
• Keep the stakeholders informed of the process
• Remain flexible -- it’s a dynamic environment
Collaborative Digitization Project
http://www.cdpheritage.org/digital/index.cfm

Website provides information about:

- Digital imaging vendors
- Preservation resources
- Software resources
- Technical resources
- Strategic planning documents
- Project manuals and presentations and more
Other Useful Web Sites

TechSoup.org
Technology resources for nonprofits
http://www.techsoup.org/

Technical Review (MIT)
Articles on technology, broader than digital libraries
http://www.technologyreview.com/
Exercise 2

- Attendees work in teams
- For each team scenario, think about the issues involved
- Goals of exercise:
  - Practice brainstorming techniques
  - Discuss the staffing considerations for each scenario
  - Discuss hardware and software options for metadata creation and presentation
  - Appoint a spokesperson to report back to the group
Digital Project Planning & Management Basics

Section 4:
Planning and Grant Writing
Goals of this Section

- Learn the basics of grant writing
- Understand the connection between planning and grant writing
- Learn how to write an operational or implementation plan
Parallels between Planning and Grant Writing

- Clearly articulated goals and objectives
- Succinct description of the content to be digitized and its relevancy to achieving the goals
- Realistic estimates concerning time, costs, staffing and IT
- Knowledge of the appropriate metadata and scanning standards
- Plan for implementation: workflows
- Defined criteria to measure success
Grant Writing Team

- Who are the key players for writing the grant and their responsibilities?

- What is the role of the Development Officer and a University “Corporation”?

- What is the role of the Library Director/Dean in the process? Technical Services & Cataloging staff?

- Whom can you consult with for feedback about the process?
Remember! When Applying for a Grant …

READ THE DIRECTIONS!

MAKE SURE THEY FUND THE TYPE OF PROJECT YOU ARE PROPOSING!
Proposal Components

Components of a Grant Proposal

- Letter of transmittal
- Title page
- Table of Contents
- Summary/Abstract
- Introduction
- Statement of need
- Goals / outcomes
- Work plan
- Evaluation / Assessment plans
- Budget
- Sustainability
- Marketing
Proposal Summary

Concise statement includes:

- Who you are
- What project you are requesting funds for
- How the project relates to the mission of the organization
- How much funding is required
Introduction to Proposal

- Describe the institution and its community
- What is the significance of the content you plan to digitize
- Does your institution have a track record with grants? With digital projects?
Example of Library Description
(abbreviated)

The University Library is at the heart of the CSU Northridge (CSUN) campus. The building is 235,000 square feet ... The Library is staffed by 23 full and part-time librarians, 51 technical and research specialists, and 250 student assistants. With over 1.2 million volumes, 3 million microforms ... and an extensive historical of collection of mixed media, rare books and archives ...
Example of Description of the Wider Community (abbreviated)

CSU Northridge (CSUN) is a public University, located in the San Fernando Valley, in the north west section of Los Angeles. As the only major university in this area, CSUN also serves the adjacent incorporated and unincorporated urban and rural areas ... The San Fernando Valley is quite ethnically, linguistically, and socio-economically.
Statement of Need

- What need will be addressed?
- What is the significance of the project?
- Why the need matches funding institution’s mission
Audience & Needs Gap

The San Fernando Valley, which makes up fully 80 percent of CSUN's service community, is quite diverse ethnically, linguistically, and socio-economically. On the weekends, about 50% of the Library's service requests are by persons who are not affiliated with CSUN such as high school and elementary school students, local historical groups, and individual members of the local business community. [CSUN’s] Special Collections and Archives …contain extensive collections that document the history of the San Fernando Valley through a mixed media of rare illustrated items, drawings, photographs, brochures, pamphlets, maps, official and unofficial reports and studies, personal letters, oral remembrances and related records.

*Both the CSUN undergraduate students and the K-12 students seek primary source material about their neighborhood, history of the valley, and history of California missions. It is difficult for them to find reliable information.*
Example of Solution to Need

“The goal of the Digital Library is to provide full, open, and equal access to a wide variety of primary research materials about the socio-economic growth and cultural evolution of the Valley, from its earliest foundation, to its explosive growth post World War 2.”
Goals / Objectives of Project

- How does project meet the mission of the institution?
- How does the project provide a solution to the need stated earlier?
- Who is involved?
- Who is being served?
- Is it realistic or overly ambitious?
Example of Goal or Objective Statement

“When completed at the end of the first year, the project will have digitized a minimum of 2,400 images and related historical records and textual documentation into the San Fernando Valley History Digital Library.”
Project Work Plan

- What is the quantifiable goal?
- What is the work plan to accomplish project?
  - Timeframe
  - Space
  - Equipment
  - Staffing
  - Software
  - Metadata
- How do the methods compare to other similar projects?
Digital Life Cycle

- Activities surrounding the creation and maintenance of digital objects
  - Sequential
  - Parallel
  - Iterative
Digital Life Cycle

Ongoing Activities:
Quality control
File Maintenance
Digitization Issues

- Metadata standards
- Digital standards: imaging and file formats
- Delivery of digitized content
- Rights management
- Preservation
Example of Standards Statement

Standards

MODS

Cataloguing Cultural Objects
A Guide to Describing Cultural Works and Their Images

ead
Encoded Archival Description

ALCTS
Why go to the trouble to follow standards?

Interoperability

Sustainability

With Permission, Murtha Baca
The Use of Metadata Standards Facilitates...

- Data mapping
- Data migration and preservation
- End-user access
- Interoperability
  - participation in union resources
  - OAI harvesting
  - cross-repository searching
Documentation

To ensure consistency in the current project and in the future, the project team must develop a suite of documents:

- for workflow
- for cataloguing policies and procedures, data standards, etc.
- for system (e.g. CMS, DAM) usage, data integrity, reports, etc.
Measurable Objectives & Project Actions Timeline

1. Review {number} of historical documents for possible inclusion

2. {number} of documents will be digitized and incorporated into a searchable database that is Internet accessible
Example of a Goal Statement

In the first year, the project will make freely available to the academic community as well as the community at large, 1400 digital objects accompanied by full descriptions. These digital objects will directly support general interest in the fauna of the valley as well as K-12 biology courses. The school district will create 6 curriculum packages based on the digital objects and state curriculum standards.
## Project Actions Timeline

<table>
<thead>
<tr>
<th>Project Month</th>
<th>Action</th>
<th>Steps Taken</th>
<th>Who is responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-03</td>
<td>Hire Project staff; buy equipment</td>
<td>Interview candidates; training</td>
<td>Project director, manager, catalogers</td>
</tr>
<tr>
<td>02-11</td>
<td>Scanning and metadata creation</td>
<td>Project Technicians will scan items and add data</td>
<td>Project technicians</td>
</tr>
<tr>
<td>12-13</td>
<td>Publicity, Presentations, Post-Grant activities</td>
<td>News Media &amp; Listservs contacted; Official opening; Presentations organized</td>
<td>Development Librarian, Outreach Librarian, Library Director, project staff</td>
</tr>
</tbody>
</table>
Proposed Project Budget

a. Salaries & Benefits
b. Library materials
c. Operation
d. Equipment (5k+)
e. Indirect Costs
## Example of Budget Summary

<table>
<thead>
<tr>
<th>10. Budget Summary</th>
<th>LSTA (1)</th>
<th>Other funds (2)</th>
<th>In-kind (3)</th>
<th>Total (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Salaries &amp; Benefits</td>
<td>$120,945</td>
<td>$52,275</td>
<td>$173,220</td>
<td></td>
</tr>
<tr>
<td>b. Library Materials</td>
<td>0</td>
<td>0</td>
<td>$5,000</td>
<td></td>
</tr>
<tr>
<td>c. Operation</td>
<td>$3,760</td>
<td>0</td>
<td>$6,760</td>
<td></td>
</tr>
<tr>
<td>d. Equipment ($5K+)</td>
<td>0</td>
<td>0</td>
<td>$7,000</td>
<td></td>
</tr>
<tr>
<td>e. Total for Objectives</td>
<td>$124,705</td>
<td>$15,000</td>
<td>$52,275</td>
<td>$191,980</td>
</tr>
<tr>
<td>f. Indirect Cost</td>
<td>$12,471</td>
<td>0</td>
<td>$12,471</td>
<td></td>
</tr>
<tr>
<td>g. TOTAL</td>
<td>$137,176</td>
<td>0</td>
<td>$204,451</td>
<td></td>
</tr>
</tbody>
</table>
Detailed Information Requests

- Contact info
- Budget details with narrative support for budget
- Client needs and project goals
  - Collection
  - Partners
  - Benefits
  - Relationship between Library Service and client group
- Measurable objectives and actions
- Timeline
- Reporting of results
- Marketing and publicity
- Sustainability
Marketing & Publicity for Completed Project

NORTHRIIDGE

A New Era

Taking a Campus Tour

Mission City Church

MISSION CITY CHURCH

ALCTS
Grant Resources

- Government
  - Federal
  - State
  - Local

- Corporate and private foundations

- Subject related grants

- General

- Corporate

- Family
Government Agencies: Examples

- IMLS (Institute of Museum and Library Services)
  http://www.imls.gov
- LSTA (Library Services and Technology Act)
- NEA (National Endowment for the Arts)
  http://www.nea.gov
- NEH (National Endowment for the Humanities)
  http://www.neh.gov
- NSF (National Science Foundation)
  http://www.nsf.gov
Why Some Proposals are not Funded

1. Type of project not funded by the awarding agency
2. Application must be in the geographic area
3. Grant proposal poorly written and does not follow the format required by granting agency
4. Proposed budget and timeline are unrealistic
5. Sustainability not addressed
6. No assessment plan articulated
7. Lack of credibility
8. Lack of funds
Exercise 3

For your scenario, fill out the abbreviated grant application form found in your notebook.

Work in groups to wordsmith the document.

OUTCOMES? Understand the importance of following directions and the complexity of answering grant questions.
Digital Project Planning & Management Basics

Section 5:  
Project Management or Doing the Project
Goals of this Section

Understand the issues in managing a digital project:

- Organization of project team and tasks
- Handling the original material
- Increase knowledge about the issues of standards
- Quality control
- Reasons some projects do not achieve their goals
Process and Workflow

- All projects are different and workflows will vary by project
- Project Manager will need to address and document:
  - Staff and Space
  - Workflow
  - Conversion of resources
  - Storage and display of digital collection
  - Budget and timeline constraints
  - Quality control
Aspects of a Digital Project

Management Wheel: The figure demonstrates the organic nature of digital imaging, with interdependencies connecting goals, resources, and processes.

What is the Project Manager Managing?

- People
- Workflow
- Collection
- Assets (DAM)
- Rights
- Metadata production
- Presentation software
Ideally, Project Managers Are Not Alone

Teamwork with subject expertise is necessary

• Curatorial expert
• Scanning expert
• Database expert
• Copyright expert
• Web design expert
• Metadata expert
Selection: Setting Priorities

- What is the value of the item in terms of the goals of the project?
- What is the physical nature and condition of the original?
- Is the material out of copyright? Does the institution have a deed of gift that allows dissemination?
Selection Process:

- Survey collections
- What resources match goals
- Evaluate collections:
  - Cultural or educational value
  - Appropriate for scanning
  - Preservation issues
Value?

- May be defined by the mission or goals of the institution
- Rarity or intrinsic artistic value
- Provides insight or illustrates a subject matter
- Provides content to areas poorly documented
- Added value

Display images enhanced
Links to related resources
Common Standards

- **Dublin Core:**
  - metadata for document and image collections; often combined with LC name and subject authorities

- **MODS (Metadata Object Description Standard)**
  - simpler MARC that can be expressed in XML with language (not number) tags

- **EAD (Encoded Archival Description)**
  - standard for structuring find aids for the Web; often combined with DACs and LC name and subject authorities
# Standards Typology

<table>
<thead>
<tr>
<th>Content Standards</th>
<th>Data Structures</th>
<th>Data Values</th>
<th>Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>• AACR2</td>
<td>• MARC</td>
<td>• LCAF</td>
<td>• MARC</td>
</tr>
<tr>
<td>• RDA</td>
<td>• Dublin Core</td>
<td>• LCSH</td>
<td>• MARCXML</td>
</tr>
<tr>
<td>• CCO</td>
<td>• MODS</td>
<td>• MeSH</td>
<td>• RDF</td>
</tr>
<tr>
<td>• DACS</td>
<td>• VRA Core</td>
<td>• TGM</td>
<td>• METS</td>
</tr>
<tr>
<td></td>
<td>• CDWA</td>
<td>• AAT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• EAD</td>
<td>• TGN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• ONIX</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on slide courtesy of Luiz Mendes
Why go to the trouble to follow standards?

Interoperability

Sustainability

With Permission, Murtha Baca
Interoperability

The ability of different types of computers, networks, operating systems, and applications to work together effectively, without prior communication, in order to exchange information in a useful and meaningful manner.
Metadata Standards: Issues

- Purpose
- Audience
- Best Practices
- Interoperability
Metadata Definitions

- Data about data
- “Metadata are structured, encoded data that describe characteristics of information-bearing entities to aid in the identification, discovery, assessment, and management of the described entities.”
- “Data that characteristics source data, describes their relationships, and supports the discovery and effective use of source data.”
- “Another name for cataloging”
Functions of Metadata

Metadata can be used for any one or all of the following purposes:

- Resource discovery
  - Potentially can enhance discovery of resource by web crawlers
- Manage a digital resource
- Ownership and authenticity
- Describe the nature of the resource
Mechanisms for Accessing Metadata

- Embedded HTML
- Embedded XML/RDF
- Repositories
- Record Management Systems
- Analog files (paper or card files)
Metadata Selection Principles

1. Appropriate to the materials, users and intended and future use of digital objects
2. Supports interoperability
3. Allows use of controlled vocabularies
4. Clear statement on terms of use (rights)
5. Supports long-term management
6. Metadata standard itself should have: authority, authenticity, archivability, persistence, & unique identification
Types of Metadata

- Descriptive
- Administrative
  - Preservation
  - Technical
  - Rights
  - Use
- Structural
Descriptive Metadata

Metadata that supports the discovery of a digital object

Contains:

- Access points
- Provides links to other digital objects
- Information about the digital object (electronic resource)
Administrative Metadata

- Metadata used in managing and administering information resources, e.g., location or donor information.
- Includes rights and terms & conditions to access information.
- Data on the creation and preservation of the digital object.
Administrative Metadata

Includes

- Preservation
  - Records information about formats

- Technical
  - Records information about processes, logs

- Rights
  - Records information about access rights, copyright, use
Structural Metadata

Defines the digital object’s internal organization and is needed for display and navigation of that object.
Semantic Interoperability

“The ability to seamlessly search for digital information across heterogeneous distributed databases through a federated search.”

The definitions of the fields * have a standard meaning across multiple implementations and across different metadata schema. The effectiveness of mapping from one database to another, or create crosswalks, is weakened when the interpretation/use of the fields varies.

* aka elements, categories of information
Structural Interoperability

Achieved through agreements about content description standards. For example,

- Controlled vocabularies
  - LCSH
  - AAT
  - NAFL
- Description standards
  - AACR2
  - Best Practices
Scanning: Formats

1. Finding Aids
2. Photographs and documents
3. Oral history audio-recordings
4. Transcripts
5. Books

1. EAD
2. TIFFs (masters) JPGs (web)
3. .wav files or mp3 files
4. PDFs
5. TEI
Image Standards

CDL Guidelines for Digital Images
http://www.cdlib.org/inside/diglib/guidelines/bpgimages/

- TIFFS
  Used for archival masters
  Too large for Web delivery

- JPGs
  Standard for Web delivery
  All browsers support
  Compresses (lossy) = loss of information
  Not suitable for archival purposes

JPG2000□
Digital Collections Scanning Standards

VIEW STANDARDS SUMMARY (PDF)

GOALS:

- Objects will be scanned and archival images will be preserved in TIFF format at the same resolution.
- The presentation images used in the Oviatt Library Digital Collections databases will be created by compressing copies of the archival TIFFs, and saving in JPEG format. The JPEG standard has been chosen for its portability and because it can easily be resized as a “thumbnail” image without significant loss of quality.
- The presentation JPEG images should retain enough detail to support significant research. Image quality is, however, somewhat reduced by compression and limited by the resolution capabilities of a user’s monitor, so standards have been created to accommodate the following considerations:
  - Resolution of presentation images should allow relevant text to be legible.
  - If size or complexity requires that an object be scanned in several parts, the separate images should retain a logical coherence.
  - The file size of the JPEGs and supplementary images should be small enough so that users with telephonic modem connections can access them.

Archived TIFF images scanned between January 2001 and June 19, 2001 were scanned according to the standards of the California Digital Library (CDL): photographs and graphic images at 300 dpi and text at 600 dpi without corrections. However, as new items were included in the project, the scanning guidelines were modified to compensate for the size of the original image, to ensure that detail of smaller images would be viewable in the online JPEG versions. Those specifications marked *CDL indicate derivation from the CDL Guidelines for Digital Images.

TIFF IMAGES (archived)

TIFF images are to be created as follows:

- Original photographs and graphic images larger than 5 x 7 in. will be scanned at 300 dpi and saved as TIFF files with no corrections (*CDL).
- Original photographs and graphic images 5 x 7 in. or smaller will be scanned at 600 dpi and saved as TIFF files with no corrections (*CDL)
- Original text-items will be scanned at 600 dpi and saved as TIFF files, with no corrections. (*CDL) (EXCEPTION: If the smallest type on the page is 24 points high or larger (for example, posters with large type), scan at 300 dpi.
- 35mm slides and negatives will be scanned at 2400 dpi, and saved as TIFF files with no corrections. (See Creating TIFFs and JPEGs from slides and negatives).
- Digital photographs (created using a digital camera) will be saved at their original dpi and saved as TIFF files with no corrections.
- Color: Black and white photographs and text (black text on white background, not including discoloration due to aging) are scanned in grayscale. Photographs that are monochromatic but are not black and white (i.e., sepia) are scanned in color. Text items with colored lettering and/or colored background are scanned in color.
- What if the originals are too big for the scanner? If the dimensions of the original item prevent it from being scanned all at once, it will be scanned in two parts, then integrated into one archival TIFF file.

JPEG IMAGES (used in online database)

JPEG images are to be created as follows:
System Requirements

- Is your system able to support mounting multiple formats: images, streaming audio and video, PDFs?
- Are you developing a platform which you will require support or will use off the shelf software which will require annual fees?
- Hardware: scanners, computers
- Software: imaging and metadata creation
PREMIS: Fields Pertaining to Objects

- objectIdentifier
- preservationLevel
- objectCategory
- objectCharacteristics
- creatingApplication
- originalName
- Storage
- Environment

- signatureInformation
- relationship
- linkingEventIdentifier
- linkingIntellectual Entity Identifier
- linkingPermission StatementIdentifier

http://www.oclc.org/research/projects/pmwg/
PREMIS Fields for ...

**Events**
- eventIdentifier
- eventType
- eventDateTime
- eventDetail
- eventOutcome
- eventOutcomeDetail
- linkingAgentIdentifier
- linkingObjectIdentifier

**Agents**
- agentIdentifier
- agentName
- agentType

**Characteristics**
- compositionlevel
- fixity
- size
- format
- significantProperties
- inhibitors
Controlled Vocabulary for San Fernando Valley History Digital Library and Latino Cultural Heritage Digital Archives

SEE ALSO: METADATA ELEMENTS SUMMARY | CONTENT GUIDELINES

In order to support efficient retrieval of material, certain indexed fields in the metadata records are under authority control, that is, there is standard way to express a subject or topic, personal or corporate name, or location. Use the left button of your mouse to highlight the term you wish to search and copy it into the appropriate box on the search screen.

Below is a summary of which fields are under vocabulary control followed by a copy of the headings from CONTENTdm. Although the lists linked to this page in the right-hand column are updated at regular intervals, they will not necessarily contain all the terms that have been included in the database.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Controlled Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>No</td>
</tr>
<tr>
<td>Description</td>
<td>No</td>
</tr>
<tr>
<td>Subject</td>
<td>Yes, Library of Congress Subject Headings</td>
</tr>
<tr>
<td>Topic</td>
<td>Yes</td>
</tr>
<tr>
<td>Keywords</td>
<td>No</td>
</tr>
<tr>
<td>Neighborhood</td>
<td>Yes, Library of Congress Subject Headings or Thesaurus of Geographic Names</td>
</tr>
<tr>
<td>Date</td>
<td>No, ISO standard</td>
</tr>
<tr>
<td>Alternative Dates</td>
<td>Yes, Library of Congress Subject Headings</td>
</tr>
<tr>
<td>Photographer/Author/Interviewee</td>
<td>Yes, Name Authority File</td>
</tr>
<tr>
<td>Donor &amp; Others</td>
<td>Yes, Name Authority File</td>
</tr>
<tr>
<td>Media</td>
<td>Yes, AAT</td>
</tr>
<tr>
<td>Media Measurement</td>
<td>No</td>
</tr>
<tr>
<td>Type</td>
<td>Yes, Dublin Core Types</td>
</tr>
<tr>
<td>Format</td>
<td>Yes, Internet Media Types</td>
</tr>
<tr>
<td>Identifier</td>
<td>No</td>
</tr>
</tbody>
</table>
Content Guidelines

SEE ALSO: METADATA ELEMENTS SUMMARY | CONTROLLED VOCABULARY

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Guidelines</th>
</tr>
</thead>
</table>
| **Title**         | **Source of Information**
Label or accompanying material with piece. May be devised by Metadata Catalogers

**Data Entry Responsibility**
Metadata Catalogers

**Content Management**
Use the title "as is" from label, with the exception of spelling or grammatical errors. When devising a title be succinct, keep it under 10 words when possible. Avoid initial articles. Do not start the title with page enumerations.

| **Description**   | **Source of Information**
Supplied by Archivists based on information available, research; Metadata Catalogers

**Data Entry Responsibility**
Archivists, Metadata Catalogers

**Content Management**
Use Description with piece if available (correct spelling, grammar). Otherwise, Curator writes description. Record information that is available in the following order:
Photographer: Natural Word Order. Numbers assigned by Photographer. Donor: Natural Word Order. [If the same, Photographer, Donor: Name]. Format of object, measurement [e.g., Black and white photograph, 7 x 5 in.] Measurements are given height x width (AACR rules), height and width are determined by the view (portrait or landscape)

| **Subject**       | **Source of Information**
Image as a whole

**Data Entry Responsibility**
Metadata Catalogers

**Content Management**
Use LCSH terms which are strings that are constructed in a specific order. LCSH strings will be added to the controlled vocabulary. If an appropriate string is not present in the controlled vocabulary, contact subject cataloger. Use spaces and dashes between the main heading and its subdivisions. A semi-colon will automatically be added when using the controlled vocabulary. Use the semi-colon
Why Some Projects Do not Reach Expected Goals

- Poor selection policy
- Unrealistic expectations
- Unclear or fuzzy measures of success
- Poor selection of presentation software
- Poor communication within team
- Poor documentation of process and procedures
- Poor quality control
Exercise 3

Teams reconvene

Goals of Exercise 3:

- Demonstrate an understanding of implementation issues
- Practice consensus building
- Summarize how the team would answer grant questions
Digital Project Planning & Management Basics

Section 6
How to Measure Success:
Outcome Evaluation & Assessment
Goals of this Section

- Learn what is an “outcome-based” evaluation
- Learn why is assessment important
- Understand how to conduct an “outcome-based” evaluation
- Know how to decide
  - who will conduct the evaluation of the project
  - when will it take place
  - what will be the criteria for judging success
Outcome-based Evaluation

- Encouraged by IMLS & LSTA grants
- Demonstrates that the goals of the digital project were met
- Includes assessment of operations or management (staffing, workflow efficient)
- Includes quantitative and qualitative measures
- Are user-centric
Outcome-based Evaluations

Look at:

- Impact and benefits that are the result of the project
- Short-term changes
- Long-term changes
Components of Outcome-Based Evaluations

- Inputs
- Activities
- Outputs
- Outcome indicators (quantifiable outcomes)
- Outcome targets
- Outcome measures
Typical Inputs

- Staff
- Money
- Equipment
Typical Activities

- Assessment of collection
- Processing of archival and special collections
- Preservation activities
- Digitization and metadata creation
Typical Outputs

- Number of images / objects scanned or digitized
- Number of metadata records created
- Number of supporting web pages created
  - Project documentation
  - Curriculum packages created
  - Survey or summary of collection
Typical Outcome Targets

- Size of collection estimated in grant proposal
- Impact on target audience
- Creation of new audience
- Protection of fragile resources (less handling)
- 24/7 access
- Need gap closed
Typical Outcome Measures

- Indicators of change
- Connected to the stated goals of project
- Measured against a benchmark through data collection
  - Quantitative
  - Qualitative
Benchmark

- Represents the starting point
- Determine what you plan to measure at the onset of the project
- Examples:
  - How many students and faculty use the archives and special collections for research?
  - How many assignments on local history are answered by library resources, and which resources are use?
Examples of Quantitative Measures

- Size of the digital collection
- Number of inquires
- Transaction logs
  - Number of visits to the sites
  - Referring urls
  - IP address of user
  - Date and time of searches
  - Number of searches
  - Types of searches
Qualitative Outcomes

Qualitative in terms of accessibility, usability, functionality, user satisfaction and expectations

- Focus groups
- Surveys
- Interviews

Check with institution concerning guidelines for using human subjects
Usability

- Assesses the structure of the digital site
- Assess how the user interacts with site
- Measured by:
  - Ease of navigation
  - Features clearly labelled
  - Logic of presentation
Functionality

- Does the software and web site perform as intended?
- Can it deliver the results expected?
- Measured by:
  - Precision and recall of search engine
  - Search options allow:
    - Limits
    - Group
    - Basic and advanced
Accessibility

Can the site be used by anyone regardless of disability or impairment?

- Hearing access
- Vision access
- Mobility access
- Cognitive access
Legislation

- Americans with Disabilities Act (ADA) (1990)
  http://janweb.icdi.wvu.edu/kinder/pages/ada_statute.htm
- Telecommunications Act of 1996
- Assistive Technology Act of 1998
Accessibility Problems

- Images without alt tags
- Some tables for layout
- Content presented as graphics without text version
- Video and audio clips without text versions
- Older versions of Adobe
- Links that are not text readable
Web Standards & Testing

- Web Accessibility Initiative (WAI)
  [http://www.w3.org/WAI/](http://www.w3.org/WAI/)
- Electronic and Information Technology Accessibility Standards
  [http://www.access-board.gov/sec508/508standards.htm](http://www.access-board.gov/sec508/508standards.htm)
Exercise 4

Teams reconvene for 30 minutes

Consider what criteria will be used to measure success and how to build in the quality necessary to reach success.