Phase 2.5 Report
February 2021

Sibyl Schafer, UCSD (Chair)
John Chodacki, CDL
Kevin Comerford, UCR
Salwa Ismail, UCB
Greg Janée, UCSB
Eric Lopatin, CDL
Charlie Macquarie, UCSF
Kevin Miller, UCD
Shira Peltzman, UCLA
Sue Perry, UCSC
Adrian Petrisor, UCI
Edson Smith (Chair, Phase One), UCLA
Roger Smith, UCSD
Hannah B. Tashjian, UCB
Sarah Troy (DOC Liaison), UCSC
In the Fall of 2018, the Direction and Oversight Committee (DOC) formed the Digital Preservation Strategy (DPS) Working Group with the charge of (1) developing a practical, shared vision of digital preservation for library content, and (2) outlining a roadmap to guide the UC Libraries in advancing that shared vision. Following on that first phase, the DPS WG focused Phase Two activities on identifying the steps needed to build a community of practice around digital preservation with the primary goal of preparing a path for collective action in the stewardship of the content types held across the UC Library system.

After presenting the recommendations from the Phase 2 report, the DPS WG was subsequently charged to quickly address the items listed below as Phase 2.5. The main scope of this effort is to outline specifics regarding the creation of a standing Digital Preservation Leadership group, investigate the implications of UC-wide data security policies (IS-3), and to operationalize the main recommendations of Phase 2.

**Summary of Phase 2.5 Outputs**

The charge for Phase 2.5 was outlined in three parts, each of which is discussed below.

1. **Leadership Group**

   *Lay the groundwork for how the Leadership Group would work including determining membership, timelines, scope of work, and deliverables.*

   The DPS WG has drafted a *Digital Preservation Leadership Group Charge* (Appendix A) and an initial *Work Plan* (Appendix B) outlining the activities the group will undertake in its initial two years. Additionally, a suggested initial membership list, based on the criteria listed in the Charge, has been included (Appendix C).

2. **Investigate IS-3**

   *Investigate how the University of California Information Security policies can be incorporated in the Leadership group’s charge and future work, including initiating discussions with Robert Smith (UCOP Systemwide IT Policy Director) on intersections between security policies and digital preservation practice.*

   The DPS WG was provided with a modified version of the IS-3 presentation that was presented to the Systemwide Library and Scholarly Information Advisory Committee (SLASIAC). IS-3 policies were discussed in terms of their data availability levels, privacy and integrity levels, and various roles for the Units (Library). As the Digital Preservation Leadership Group (DPLG) begins its work, their charge and scope should include:
• Considerations on data, information, and resources being digitally preserved by libraries under the digital preservation umbrella, and how they are protected according to their classifications levels under availability, privacy and integrity.

• Roles as defined by IS-3 should also be defined and mapped into the policies and guidelines the DPLG develops, coordinates, and recommends.

These policies will need to be incorporated in how the resources being digitally preserved are being handled in their entire digital preservation lifecycle - from receipt through ingest and curation/management. Because the IS-3 standard does not apply to *individually-owned data*, which is defined as an individual’s own personal information that is not considered institutional information, these policies should only be incorporated into institutional information that is being digitally preserved.

3. Identify Matrix Components

*Identify necessary components for a matrix or rubric to classify digital information/content held by the UC Libraries, in order to assess how it maps onto UC Information Security requirements. This matrix would ultimately be completed by the future standing UCLAS Digital Preservation group, and may, if appropriate, be approved by campus CISOs or other appropriate campus representatives.*

A subgroup of the DPS WG initiated this work as evidenced by Appendix D *Data Classification Matrix Elements*. The outline for completion of work is detailed in Appendix B *DPLG Work Plan*.
Appendix A

University of California Libraries Advisory Structure

Digital Preservation Leadership Group (DPLG) Charge

February 2021

The UC Libraries Digital Preservation Leadership Group (DPLG) is charged by the Direction and Oversight Committee (DOC) to lead the University of California in the area of UC-wide digital preservation. The DPLG reports to the UC Libraries Direction & Oversight Committee (DOC) and is a component of the University of California Libraries Advisory Structure (UCLAS). As a way to advance the goals articulated in the Annual Plan and Priorities of the UC Libraries, this group will spearhead future collaborative efforts, provide strategy and expertise, and act as the guiding body for information dissemination and sharing across the UC.

Summary & Background:

According to the American Library Association, digital preservation “combines policies, strategies and actions to ensure access to reformatted and born digital content regardless of the challenges of media failure and technological change” with the goal being the “accurate rendering of authenticated content over time.”¹ Digital preservation requires a series of managed activities encompassing multiple areas of skill and expertise including technical, curatorial, administrative, and descriptive.

Developing a systemwide digital preservation strategy across the University of California depends on a robust and well-managed digital preservation program at each individual campus. The DPLG was formed based on the recommendation of the UC Digital Preservation Strategy Working Group, a temporary committee initiated in 2018 and charged with building a community of practice around digital preservation in the UC system with the primary goal of preparing a path for collective action in the stewardship of the content types held in common by the ten campuses and the California Digital Library (CDL).

Responsibilities:

This standing group of preservation practitioners coordinates and helps to drive UC-wide digital preservation policies, strategies and actions. In this capacity, the DPLG:

---

1. Serves as the primary systemwide coordination and communication group for constructing digital preservation strategies, harmonizing policies, sharing collaborative project opportunities, and leading campus activities regarding digital preservation and curation issues.

2. Develops and manages a systemwide digital preservation training program for UC Libraries administrators, librarians and staff.

3. Provides guidance and develops strategy to assist campuses in determining the appropriate level of stewardship for a given set of digital material.

4. Acts as a knowledge center by consulting across the UC system on digital preservation cost models, analysis of current digital preservation policies, assessment frameworks, and gap analysis.

5. Understands the scope of protected data stewarded by the UC libraries and strategizes the best path forward for preserving sensitive digital information, including how to best address campus and systemwide policies that pertain to data integrity and data security (IS-3, data policies, etc.).

6. Liaises with regional, national and international groups, such as the National Digital Stewardship Alliance (NDSA), to strategically explore collaborative project opportunities and advance the profile of the UC Library system as a location for innovative, creative, sustainable, and responsible approaches to digital preservation.

7. Identifies, defines, and proposes future deliverables that would lead to collaborative digital preservation efforts throughout the UC system.

**Deliverables:**

The DPLG and appointed subgroups will take the following actions to accomplish the initiatives described in the responsibilities section of the charge.

1. Develop and maintain a systemwide digital preservation training program for existing preservation staff and administrators, team leads, or unit/department heads with digital preservation either fully or partly within their portfolios.

2. Create an assessment matrix or rubric to assist campuses in determining the appropriate level of stewardship for a given set of reformatted or born digital content. This work should involve representation from across the campuses and respect the individuality of each library’s collecting policies and practices.
3. Analyze available economic models that quantify and assess both costs and benefits, and establish which models can be applied to the UC system.

4. Identify and define specific use cases to inform strategy for the digital preservation of sensitive information to standardize the UC Library community’s compliance with applicable policies, best practices, and laws.

5. Establish a framework for administering and facilitating cross-campus engagement with external collaborators and consortial partnerships, especially with regards to grant opportunities.

Membership Composition:

Members are recommended by DOC with approval by the local University Librarian (or delegate) or the CDL Associate Vice Provost and Executive Director.

Members serve for three year terms, with the possibility of renewal. Representatives will be expected to attend regular group meetings which are expected to occur no more than once biweekly. The estimated weekly time commitment for DPLG members is between 1-2 hours per week on average. Subgroups will be formed for specific deliverables and will require additional time commitment.

1. Each campus appoints one representative, as available. DPLG is designed to include participants from various roles within their respective libraries. Committee members should have the expertise and experience in digital preservation to contribute to the UC-wide perspective. Members should be appointed because they have the delegated authority to work with their library administration to commit resources to digital preservation activities and/or because they primarily participate in day-to-day digital preservation activities.

2. In addition to campus participation, a designated CDL representative(s) whose portfolio includes management and oversight for UC-wide digital preservation and curation services should also be included.

3. The DPLG charges ad hoc subgroups to fulfill the DPLG’s goals and assignments. Subgroup members may be nominated by campus representatives and do not necessarily need to be members of the DPLG. Subgroups follow the DOC project proposal and management template.

4. The Chair and Vice Chair are selected by the membership. The Chair/Vice Chair is a two-year commitment. The person elected Vice Chair serves two consecutive one year terms, first as Vice Chair and then as Chair.
5. The Chair and Vice Chair will appoint a Project Manager from among DPLG membership that assists with logistics and deliverables, delegating as required. This includes scheduling meetings and building agendas; establishing project timelines; assisting with discussion facilitation and decision-making; managing minutes and group documents; and ensuring group information is kept up-to-date. The Project Manager is a one-year commitment.

**Reporting Structure:**

1. Provides regular activity updates to DOC via the DOC liaison, as well as an annual report of activities and accomplishments in June of each year.

2. Reviews periodically its value within the UC Libraries Advisory Structure by using DOC-developed evaluation criteria.

3. Requests financial and resource allocation from DOC as needed.

4. Liaises with other UC Libraries Advisory Structure groups, including CKGs, as appropriate.

5. Communicates major decisions and activities regularly to the UC Libraries communities via the local DPLG representative. Provides appropriate website content open to all UC campus library staff which features DPLG activities.

**Out of Scope:**

1. Any collection development and management activities covered by the Shared Content Leadership Group.

2. Decisions regarding content that affect fewer than four UC campuses.

**Related Documents:**

[DPLG Work Plan](#)
Appendix B

DPLG Work Plan

Below are the main recommendations from the Digital Preservation Phase 2 Report. Each item below includes a reference to the recommendation number that was presented in that report.

Work Plan for Years 1 & 2 (2021-2022)

1. ADMINISTRATIVE.

- **By March 2021** the DPLG membership will select a Chair and Vice Chair; the Chair and Vice Chair will appoint a Project Manager, who will schedule regular recurring bi-weekly meetings and establish a system for communication. DPLG leadership will appoint and charge Training Program, Assessment Matrix, and Collaborations subgroups responsible for leading that work. Details for these projects are below. Additional activities may include:
  - Reviewing the Charge and agree on a shared interpretation of the DPLG’s purpose, goals, and priorities
  - Establishing a community agreement that outlines expectations around group participation and engagement
  - Setting up a listserv and wiki for DPLG communication
  - Determining protocol and expectations for regular website updates
- **By July 2021** the DPLG will submit their first annual report to DOC, CoUL and the UC community about the activities of the DLPG, and publish key information about the DPLG, including membership, charge, and priorities. Additional activities may include:
  - Conducting outreach to publicize key information about the DPLG, including a description of activities currently planned and underway
  - Planning and conducting a webinar communicating the outcomes of Phases 2 and 2.5 to the UC community.
- **By January 2022** the DPLG will request financial and resource allocation from CoUL, if necessary, for Training Program and/or Assessment Matrix deliverables.
- **By July 2022** the DPLG will submit their second annual report to DOC, CoUL and the UC community about the activities of the DPLG, publish key updates on the website, and review its value within the UC Libraries Advisory Structure. Additional activities may include:
  - Reassessing, prioritizing, and outlining work plans for future and ongoing work
2. TRAINING PROGRAM. Develop, enhance, and sustain a systemwide digital preservation training program. The intended audience would be existing preservation staff as well as any administrators, team leads, or unit/department heads with digital preservation either fully or partly within their portfolios. (DP WG Phase 2 Report Recommendation 2A)

- **By July 2021** the Training Program subgroup (5 people maximum) will be charged and will begin to identify and refine the overall training goals and learning outcomes. The subgroup will create and submit a proposal using DOC’s project proposal template. Additional activities may include:
  - Holding a project kick-off meeting and developing a work plan
  - Undertaking a literature review & scan of existing educational modules, resources, and training materials
  - Conducting a UC-wide survey of existing preservation staff but also any administrators, team leads, or unit/department heads with digital preservation either fully or partly within their portfolios to assess their goals and needs for training
  - Preparing a report outlining the project for DOC and contributing to the DPLG’s annual report

- **By January 2022** the Training Program subgroup will identify target dates for training; apply for funding to secure consultants and/or hire a graphic designer; begin to develop training materials. Additional activities may include:
  - Identifying and applying for external grants to develop educational materials
  - Identifying and retaining appropriate consultant and/or graphic designer
  - Sending out Training Program announcements and Save the Dates to attendees
  - Consulting with CKGs and campus staff to determine specific training needs

- **By July 2022** the Training Program subgroup will deliver the initial training module(s) and begin the process of assessment. Additional activities may include:
  - Conducting a follow-up assessment survey
  - Completing the design of subsequent training programs, adjusting form and content as necessary depending on results of the assessment
  - Preparing a report on the project for DOC and contributing to the DPLG’s annual report

- **By January 2023** the Training Program subgroup will complete the training module(s) and submit a wrap-up report that identifies and makes recommendations for future training needs and initiatives. Additional activities may include:
  - Completing outstanding grant deliverables, if applicable
  - Presenting on the training program goals and outcomes
  - Ensuring training materials and associated documentation are publicly accessible

3. ASSESSMENT MATRIX. Draft and refine an assessment matrix or rubric to assist campuses in determining the appropriate level of stewardship for a given set of digital materials. This work should involve representation from across the campuses and respect the individuality of each library’s collecting policies and practices. (DP WG Phase 2 Report Recommendation 2B)
• **By July 2021** the Assessment Matrix subgroup (5 people maximum) will be charged and the subgroup will begin laying the groundwork for a first draft. The subgroup will create and submit a proposal using DOC’s project proposal template. Additional activities may include:
  ○ Holding a project kick-off meeting and developing a work plan
  ○ Reviewing Phase 2 stakeholder interviews to ascertain existing collecting policies and practices and identifying their significant characteristics
  ○ Constructing a list of predefined categories of digital materials currently and potentially collected by UC Libraries
  ○ Conducting a literature review of pertinent assessment tools currently in use to assist with digital preservation decision-making and resource allotment
  ○ Preparing a report outlining the project for DOC and contributing to the DPLG’s annual report

• **By January 2022** the Assessment Matrix subgroup will produce a draft matrix and circulate for review. Additional activities may include:
  ○ Researching levels of stewardship, define a set of preservation activities, and map them into tiers based on the resources required to perform
  ○ Drafting accompanying documentation, in the form of a rubric, to support application of the matrix
  ○ Reviewing matrix (and rubric) iteratively with full DPLG membership.
  ○ Assisting campus staff with testing the effectiveness of the draft matrix on a limited number of collections, and iterating it as needed.

• **By July 2022** the Assessment Matrix subgroup will produce a final draft of the matrix and rubric. After the completion of the final draft, the subgroup may:
  ○ Distribute the matrix and rubric and ensuring that all relevant materials and associated documentation are publicly accessible
  ○ Provide training on matrix/rubric use for all existing digital preservation staff but also any administrators, team leads, or unit/department heads with digital preservation either fully or partly within their portfolios
  ○ Ensure training materials and associated documentation are publicly accessible
  ○ Prepare a report on the project outcomes for DOC and contributing to the DPLG’s annual report

4. **COLLABORATIONS.** Establish a framework for administering and facilitating cross-campus engagement with external collaborators and consortial partnerships, especially with regards to grant opportunities. (DP WG Phase 2 Report Recommendation 2E)

• **By March 2021** the DPLG will establish a small subgroup (3 people maximum) to document existing practices for cross-campus grants and UC-wide partnerships or memberships. The subgroup will create and submit a proposal using DOC’s project management template.

• **By July 2021** the subgroup will put forth recommendations for the DPLG to adopt regarding how to identify grant and partnership opportunities, collaborate across the campuses, determine the appropriate administration of resources, and manage ongoing
reporting requirements. Recommendations should also include mechanisms for reviewing the process at appropriate intervals.

- **By September 2021** the framework for administering and facilitating cross-campus engagement should be approved by the full DPLG and DOC.

## Future and Ongoing Work

In addition to special projects and/or grant opportunities, the following recommended activities will need to be accomplished alongside or after the items above:

- **ECONOMIC MODELS.** Analyze available economic models that quantify and assess both costs and benefits, and establish which models can be applied to the UC system. (DP WG Phase 2 Report Recommendation 2C)

- **CAMPUSS-BASED STRATEGIES.** The DPLG will support and work with designated individuals/groups at each campus to analyze their current policies related to digital preservation, compare them against established frameworks, and determine where gaps exist. (DP WG Phase 2 Report Recommendation 3A&B)

- **PROTECTED DATA.** Investigate the best path forward for addressing HIPAA compliance, as well as the preservation of other kinds of sensitive digital information, including FERPA-protected and other confidential material. (DP WG Phase 2 Report Recommendation 2D)

- **REPORTING.** Report to DOC, CoUL and the UC community annually about the group’s activities. Update website and provide periodic status briefs, as requested.
Appendix C

Suggested Digital Preservation Leadership Group Members

**CDL:** Eric Lopatin (Product Manager, Digital Preservation)

**UC Berkeley:** Hannah Tashjian (Head of Preservation)

**UC Davis:** Eric Nebeker (Digital Assets Specialist)

**UC Irvine:** Elvia Arroyo-Ramirez (Assistant University Archivist)

**UCLA:** TBD

**UC Merced:** TBD

**UC Riverside:** Kevin Comerford (Associate University Librarian for the Digital Library)

**UC San Diego:** Sibyl Schaefer (Chronopolis Program Manager/Digital Preservation Analyst)

**UC San Francisco:** Charlie Macquarie (Digital Archivist)

**UC Santa Barbara:** Greg Janée (Director, Research Data Services)

**UC Santa Cruz:** Susan Chelsey Perry (Head of Digital Initiatives)
Appendix D

Data Classification Matrix elements

Charge sub-bullet:
Identify necessary components for a matrix or rubric to classify digital information/content held by the UC Libraries, in order to assess how it maps onto UC Information Security requirements.

This matrix would ultimately be completed by the future UCLAS Digital Preservation group, and may, if appropriate, be approved by campus CISOs or other appropriate campus representatives.

<table>
<thead>
<tr>
<th>Components for a Matrix to map onto UC IS-3 requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Confidential or Sensitive</strong></td>
</tr>
<tr>
<td>Does the material have any Attorney-Client or other privileged information, donor agreements, academic records with faculty student grading information, FERPA data? Does it contain staff or user information such as phone numbers, citizenship, income tax data, address, performance evals, confidential academic review records?</td>
</tr>
<tr>
<td><strong>Notice-triggering information (HIPAA, GDPR, employee, patron, user data, etc.)</strong></td>
</tr>
<tr>
<td>Do the material have any SSNs, Drivers Licenses, bank info, medical records, health insurance)? Details -- Does the material contain Social security number, Government issued identification numbers (Driver's license number, California identification card number, tax identification number, passport number, military identification number, or other unique identification number issued on a government document commonly used for identity verification). Financial account numbers, credit or debit card numbers, and financial account security codes, access codes, or passwords. Personal medical information, Personal health insurance information, Biometric data used for authentication purposes, including photographs used or stored for facial recognition purposes. A username or email address, in combination with a password or security question and answer that would permit access to an online account. Information or data collected through the use or operation of an automated license plate recognition system. Separate but related is personal information under the General Data Protection Regulation (GDPR)</td>
</tr>
<tr>
<td><strong>Rare/unique</strong></td>
</tr>
<tr>
<td>Is the material rare, unique, difficult to obtain or reproduce?</td>
</tr>
<tr>
<td><strong>Copyrighted</strong></td>
</tr>
<tr>
<td>Is the material protected by copyright?</td>
</tr>
<tr>
<td><strong>Contractual restrictions</strong></td>
</tr>
<tr>
<td>Does the material have any specific contractual obligations around access beyond IP or campus restriction?</td>
</tr>
<tr>
<td><strong>Ethical concerns</strong></td>
</tr>
<tr>
<td>Does the material have any ethical concerns? Around NAGRPA and the CARE principles. Could the information in this material lead to: harm or exploitation of people, resources, or knowledge?</td>
</tr>
<tr>
<td><strong>Privacy concerns</strong></td>
</tr>
<tr>
<td>Does other content fall under one or more of these privacy torts? (e.g. nudity, illegal activity, private personal information -birthdate, death date, marriage date etc.)</td>
</tr>
<tr>
<td><strong>Access restriction (controlled but not confidential/unclassified)</strong></td>
</tr>
<tr>
<td>Does the material need to be accessed through some form of authentication (IP, campus-user access, identify management, or authentication of any kind etc.)?</td>
</tr>
<tr>
<td><strong>PR risk (reputational damage)</strong></td>
</tr>
<tr>
<td>Would the loss or leak of this material or content in this material create a PR debacle for the organization? Will such a loss or leak lower the reputation of the organization?</td>
</tr>
<tr>
<td><strong>Access/Retrieval</strong></td>
</tr>
<tr>
<td>Does this material need to be accessed often by users? Will it need to be retrieved frequently or occasionally?</td>
</tr>
<tr>
<td><strong>Business controlled data (institutional information)</strong></td>
</tr>
<tr>
<td>Does the material contain data and information created, received and/or collected by UC relating to the activities or operations of the university or organization?</td>
</tr>
<tr>
<td><strong>Shared-Fate Information</strong></td>
</tr>
<tr>
<td>Would material/data or system compromise cause further and extensive compromise to multiple (even unrelated) sensitive systems? e.g.: e.g., enterprise credential stores such as the username credential database; Domain Name Service (DNS).</td>
</tr>
</tbody>
</table>