



PRESERVATION EDUCATION CURRICULUM



NORTHEAST
DOCUMENT
CONSERVATION
CENTER

CLASS 9 LESSON PLAN

Preservation Reformatting

The Lesson

Part I: Introduction to Reformatting (1 hour)

This section of the lesson introduces types of reformatting, the history of reformatting for preservation purposes, principles of reformatting, and the organization and function of reformatting in libraries and archives. Part I relies heavily on instructors creating, for example, a PowerPoint to guide their presentation of this material.

A. Where reformatting “fits” in the range of preservation options; when do we use it?

B. History of reformatting for preservation purposes

If time permits, it is interesting to begin with the invention of microphotography by J. B. Dancer and to discuss the various purposes for which microfilm has been used. For a brief history of microphotography, see <http://www.srlf.ucla.edu/exhibit/text/BriefHistory.htm>.

Students should be aware that reformatting also includes photographic duplication of deteriorating nitrate and acetate film negatives, as well as glass plate negatives, onto modern polyester safety film. Increasingly, duplication is achieved digitally, but it has been performed historically using the interpositive process. In this process, the original negative is contact-printed onto film to produce an interpositive (a positive image on film). The interpositive is then contact-printed onto film to produce the duplicate negative.

C. Reformatting of paper-based collections; comparative reformatting needs of audiovisual collection materials

The instructor should discuss the relative preservation urgency that many modern audiovisual carriers present. Though in the past the profession has emphasized reformatting paper-based collections, attention is now fairly intensely tuned to the issues of the fragile audiovisual record.

D. Reformatting principles (refer to Harvard’s document, *Principles for Reformatting Collections*, <http://preserve.harvard.edu/guidelines/reformattingprinciples.html>)

E. Organization and function of reformatting in libraries and archives

Point to organizational charts and other documents on the Internet. Here are some suggested sources:

<http://www.library.cornell.edu/about/digital.html>

<http://www.lib.berkeley.edu/preservation/digital.html>

<http://library.osu.edu/sites/dlib/>

<http://preserve.harvard.edu/digital/>

http://lib.virginia.edu/digital/collections/finding_digital.html

<http://www.lib.utexas.edu/dls/>

F. Outsourcing

In-Class Activity

- Begin class by asking students to brainstorm about their understanding of the role of reformatting in preservation.

Part II: Preservation Microfilming (1 hour)

Part II again requires the instructor to combine presentation of information and class discussion. Based on the class readings, students should be engaged to discuss their opinions about selection methodology. Selection is at the heart of what is preserved for the future; this may be a prime moment in this introductory course to think broadly and philosophically. If the instructor has a good understanding of the history of selection for preservation, noting the “holes” and ambiguities in thought and institutional policy will spark discussion and debate.

A. Standards and guidelines (Gwinn book, RLG guides, US Newspaper guidelines, Fox book, ANSI/AIIM standards)

1. Brief history, why needed and goals

B. Selecting collection materials for microfilming

1. “Great collections”
2. Use-based

C. Advantages/disadvantages of microformats

1. Appropriateness of collection materials for microformats
2. User perceptions
3. Long-lived format
4. Stable technology in the marketplace?

D. Functional components and workflow (in brief)

1. Preparation and targeting
2. Capture
3. Bibliographic control
4. Quality control
5. Disposition of originals

E. Technical considerations (in brief)

1. Reduction ratio
2. Density
3. Resolution
4. Quality index
5. Splicing, image position, targeting

The instructor should cover “D” and “E” briefly, explaining that preservation microfilming is one aspect of preservation that is standardized and that institutional work flow will differ (especially in how bibliographic control is addressed—as a Preservation Department function or as a function within the institution’s Cataloging Department), though the work-flow components are all essential to the production of preservation-quality microfilm. Outsourcing of a range of work-flow components is available. If the instructor is comfortable with the topic, the pros and cons of outsourcing can be discussed.

In-Class Activities

- Pass around examples of different microfilm, i.e., Diazo, vesicular, silver-halide. Discuss the differences.
- Demonstrate the use of a densitometer and/or microscope for quality assurance.

Part III: Digitization (25 minutes)

This section of the class requires presentation and discussion of the questions that surround the use of digitization as a preservation tool. The instructor can use *Why Digitize?* as a point of departure, then move on to a discussion of ARL's "Recognizing Digitization" and the differences of opinion on the topic.

- A. When is digitization used for preservation purposes?
- B. Association of Research Libraries "Recognizing Digitization as a Preservation Reformatting Method," 2004
 1. Differences of opinion on the topic
- C. Introduce concept of "sustainable" digital collections

Part IV: Standards, Guidelines, and Best Practices for Digitization (10 minutes)

Describe standards, guidelines, and best practices for capture of photographic, manuscript, text, moving image (film and video), and audio source materials. These subjects are addressed in more detail in Classes 10 and 11, so this introduction should be brief. The issues are complex and standards are few and far between.

- A. Functional components and workflow (in brief)
 1. Capture
 2. Metadata
 3. Quality control
 4. Search engine and interface design
 5. Digital archiving
 6. Disposition of originals

Part V: Hybrid Options (10 minutes)

- A. Why?
- B. Pros and cons
- C. Examples of
 1. Text
 2. Photographs
 3. Audiovisual (audio, video, film)

This section provides an opportunity to show examples of digitization products on the Web.

Suggested Graded Assignments

- Prepare general guidelines for preservation microfilming projects at the student's workplace or a local institution of interest. These should specify standards to be followed, as well as procedures for preparing materials, filming materials, and ensuring quality control.
- Evaluate two or more collections at the student's workplace or a local institution of interest to determine whether and how they should be reformatted for preservation. Students should provide specific reasons for their decisions.

Suggested Term Projects

- Identify a collection in need of preservation microfilming at the student's workplace or a local institution of interest. Contact several preservation filming vendors, get cost estimates for filming the collection, and write a grant proposal for filming the collection.