Lesson Plan: PBCore and XML

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# About

This lesson is designed as a 3-hour session in semester-long course on metadata, although it could be used as a standalone lesson. Through hands-on experience with PBCore, the lesson aims to introduce key concepts and structures of XML while simultaneously introducing PBCore by providing an opportunity to practice creating PBCore records and use the PBCore documentation.

# Learning Objectives

* Use a metadata standard’s documentation
* Explain XML components (elements, attributes, types of content models) using appropriate terminology
* Connect concept of key-value pairs with XML structure
* Understand nesting in XML
* Make informed modeling decisions related to structure of records and level of description
* Explain the difference between structure and schema validation

# Readings

Chapter 6: XML-Encoded Metadata in Miller, S. J. (2011). *Metadata for digital collections.* New York; London: Neal-Schuman.

Chapter 2: A Quick Review of XML Basics in Cole, T. W., Han, M.-J. K., & Schwartz, C. (2018). *Coding with XML for efficiencies in cataloging and metadata: practical applications of XSD, XSLT, and XQuery*.

PBCore videos (available at: <http://pbcore.org/tutorials>)

* PBCore Structure
* Making an Asset Record
* Using Instantiations and Essence Tracks
* Using PBCore Extensions
* Using PBCore Collections
* Simple Spreadsheet Templates
* Building a PBCore-Compliant Database

# Instructor Resources

Slide deck [attached]

Internet Archive video collections:

XFR Collective collection: <https://archive.org/details/xfrcollective&tab=collection>

Prelinger Archives collection: <https://archive.org/details/prelinger>

Sample APB record:

Presentation view: <https://americanarchive.org/catalog/cpb-aacip_16-n872v2cv1s>

PBCore XML view: <https://americanarchive.org/catalog/cpb-aacip_16-n872v2cv1s.pbcore>

PBCore documentation: <http://pbcore.org/>

PBCore validator: <http://pbcore-validator.herokuapp.com/>

# Lecture/Demo Outline

1. XML overview
2. PBCore history and structure
3. Group activity: Comparison to Dublin Core and VRA Core
   1. List comparison points between PBCore, Dublin Core, and VRA Core either by editing the slide live or by writing on a whiteboard
   2. Key points
      1. flat vs. nested structure
      2. levels of nesting
      3. one-to-one principle
      4. element applicability to different record types
      5. restrictions
4. Demo: Create Asset and Instantiation records for a sample audio resource from APB
   1. Download PBCore Cataloging Tool
   2. Go over settings/presets
   3. Demo entering metadata and saving a record
      1. Warnings
      2. Element repeatability
      3. Controlled vocabularies
   4. Compare entered data with sample PBCore record from APB
5. In-class assignment: catalog videos
6. Demo: use online PBCore validation tool
   1. Overview of difference between valid structure vs. valid schema
   2. Paste PBCore record created during the activity into the validator (<http://pbcore-validator.herokuapp.com/>)
7. Role of XML
   1. Storage vs. Exchange
   2. Discussion: PBCore in other formats
      1. Key points
         1. root elements
         2. repetition of elements

# In-class assignment

## Resources

Internet Archive video collections:

XFR Collective collection: <https://archive.org/details/xfrcollective&tab=collection>

Prelinger Archives collection: <https://archive.org/details/prelinger>

PBCore documentation: <http://pbcore.org/>

PBCore Cataloging Tool tutorials: <http://pbcore.org/tutorials>

PBCore validator: <http://pbcore-validator.herokuapp.com/>

## Steps

In class, with a partner select one video from either the XFR Collective collection or Prelinger Archives collection. Catalog the video using the PBCore Cataloging Tool on your own computer. At minimum, capture descriptive metadata such as title, creator, and description and administrative/technical metadata related to format and rights. Refer to the PBCore Cataloging Tool tutorial videos if needed. You may choose to discuss your choices with your partner as you go, or after you have both completed your own records.

At home, finish creating your own record if you did not complete it in class. Answer the reflection questions below and post to the LMS, attaching your PBCore XML document.

## Reflection questions for LMS post

1. What was it like entering data into the Cataloging Tool? Reflect on your experience.
2. How did you choose which fields to use?
3. What fields were you unable to fill in because you didn’t have access to the information? What kind(s) of metadata were you unable to capture?