INTEGRATED LEARNING OF METADATA QUALITY EVALUATION AND METADATA APPLICATION PROFILE DEVELOPMENT IN A GRADUATE METADATA COURSE

Oksana L. Zavalina (Oksana.Zavalina@unt.edu), University of North Texas (UNT)

1. Background

- Sequence of UNT graduate metadata courses: INFO 5223 & 5224
 - Course development harmonized
- Collaboration with UNT Digital Libraries and developers of Portal to Texas History (PTX)
- Real-world practical assignments, including:
 - INFO 5223: metadata creation for Texas Patents Collection based on collection-specific metadata quality guidelines
 - INFO 5224: Metadata Quality Evaluation and Documentation Assignment; Metadata Application Profile Assignment

2. Problem statement

- Emphasis on skill-building in the knowledge economy
- Metadata quality evaluation and metadata application profiles development among key skills in information community
- Need for developing and sharing effective ways of teaching and learning these skills

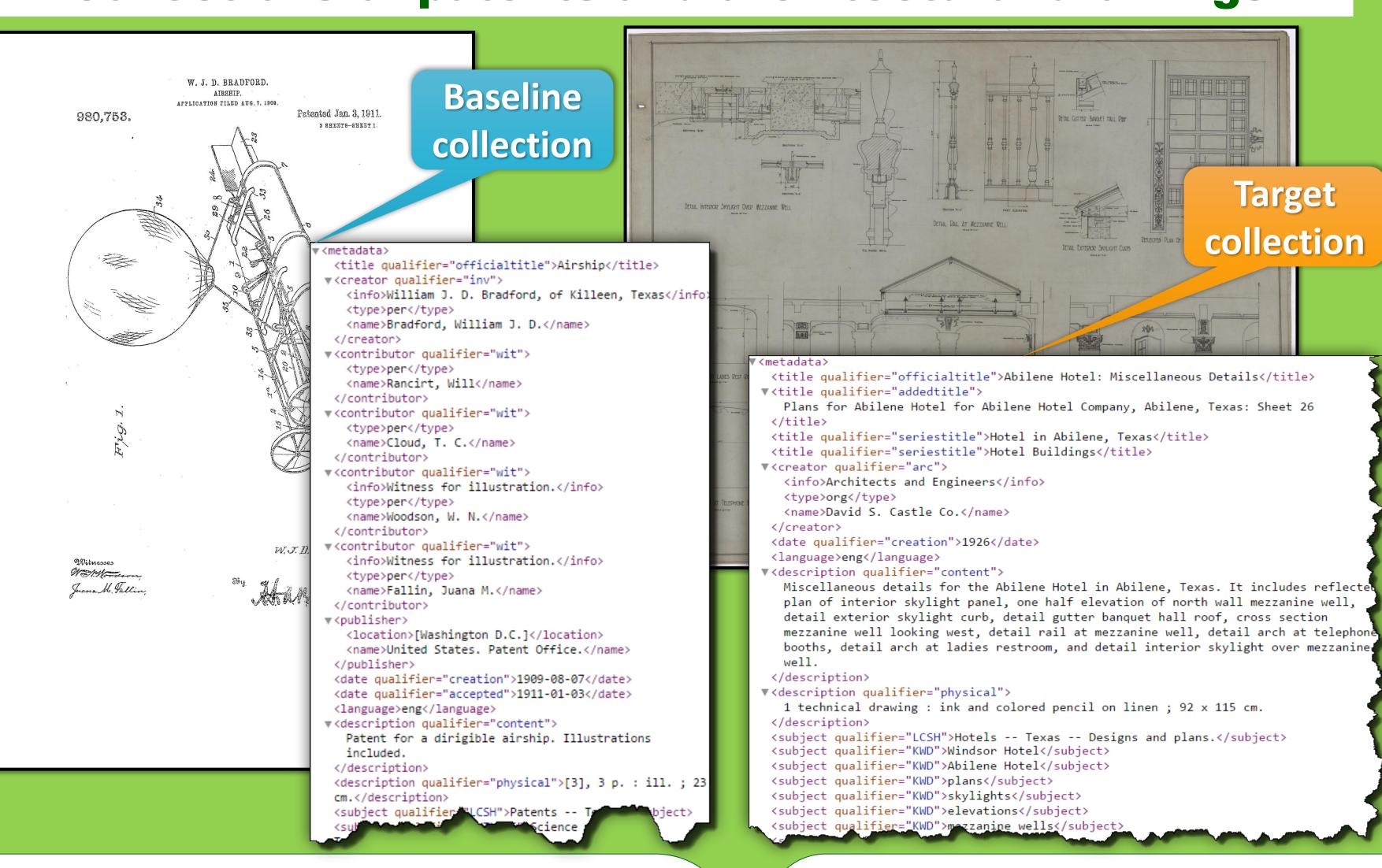
3. UNT INFO 5224 course redesign experiment

- To facilitate skill-building in:
 - Metadata quality evaluation
 - Metadata application profile development
- To provide more efficient link between contentbased & skill-based learning
- Close integration of course topics through the sequence of assignments
- work students complete as part of one assignment informs the work completed in the next assignment.

3a. Redesigned Metadata Quality and Documentation Assignment

- Comparative analysis of metadata records from 2 homogenous collections of similar types of information objects:
 - Baseline collection: familiar to students (from INFO 5223) Texas Patents
 - Target collection: David S.
 Castle Architectural
 Drawings
- Drafting collection-specific metadata quality guidelines for target collection

Metadata in Portal to Texas History: collections of patents and architectural drawings:



3b. Redesigned Metadata Application Profile (MAP) Assignment

Became the final assignment in the course, in which students apply knowledge & skills gained in 4 learning modules:

- Metadata in Semantic Web
- Metadata Interoperability
- Metadata Quality and Change
- Metadata in Digital Content
 Management

Informed by findings of quality analysis and recommendations made by students in Metadata Quality Evaluation and Documentation Assignment

Target: David S. Castle Architectural Drawings collection from PTH

3b1. Documenting metadata application profile for architectural drawings as a table

Element label & element position records	name with namespace (in DSpace)	Definition	Cardinality: repeatability and optionality	Controlled vocabulary (-ies)	Element source (existing standard metadata scheme or local)	DC equivalence
1.Audience	<dcterms: audience></dcterms: 	A class of entity for whom the resource is intended or useful	mandatory; repeatable	marctarget	Dublin Core	dcterms:audience
2.Bibliogra hic Note	<myname:bibliogr aphicNote></myname:bibliogr 	A note about a bibliography, discography, filmography, webliography, and/or other bibliographic references in an item	optional; repeatable	n/a	local	dc:description
3.Creator	<dc:creator.ulan> <dc:creator.lcnaf></dc:creator.lcnaf></dc:creator.ulan>	An entity primarily responsible for making the resource	mandatory; repeatable	ULAN LC NAF	Dublin Core	dc:creator
4.Date Issued	<dcterms:issued></dcterms:issued>	Date of formal issuance (e.g., publication) of the resource	mandatory; repeatable	W3CDTF	Dublin Core	dcterms:issued
5.Edition	<mods:origininfo .edition></mods:origininfo 	Information identifying the edition or version to which the resource belongs	optional; non- repeatable	n/a	MODS	n/a

4. Some results

Course offering	Average student grade in Metadata Evaluation and Documentation Assignment (out of 100)	Average student grade in Metadata Application Profile Assignment (out of 100)	Average semester grade (out of 100)	Average student course satisfaction: usefulness of written assignments in understanding of course content (out of 5)	Average student course satisfaction: overall index of the class's quality (out of 5)			
Earlier offering	89.60	94.40	92.15	4.2	4.2			
Latest offering (with assignment sequencing experiment in course design)	94.88	96.13	93.3	4.6	4.6			

3b2. Documenting resulting MAP as a data model: based on *DCMI Metadata Terms*

(http://dublincore.org/2012/06/14/dcterms.rdf)

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5. Conclusions

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- Integration correlated with observed improvement of skill building for both topics Need for a database of metadata course design case studies
- to help support the changing metadata education:
- focus on how the specific metadata skills are developed through assignments and other activities

