

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

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## 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**

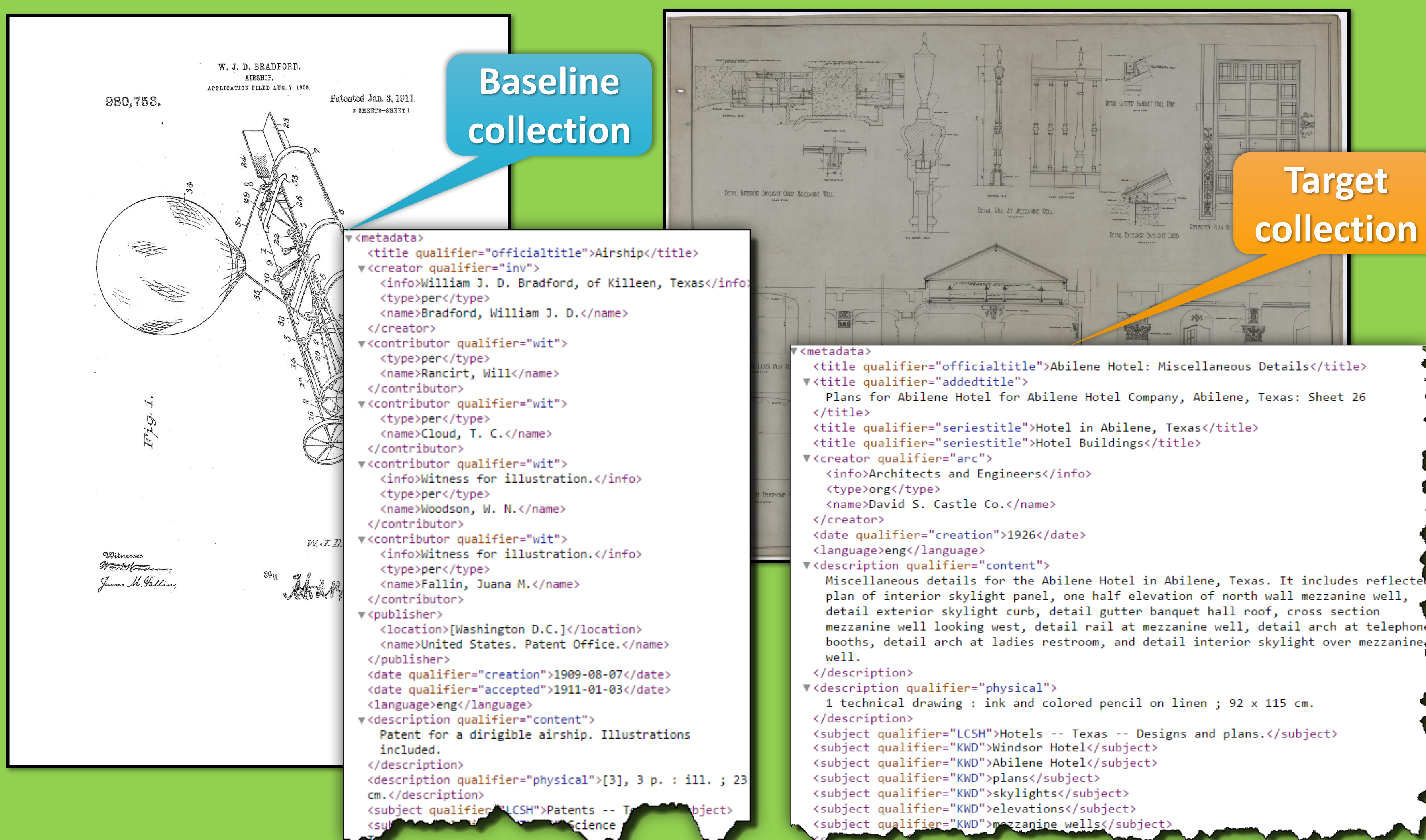
### 3. UNT INFO 5224 course redesign experiment

- **To facilitate skill-building in:**
  - Metadata quality evaluation
  - Metadata application profile development
- **To provide more efficient link between content-based & 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 in records	Coded element 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>	A class of entity for whom the resource is intended or useful	<b>mandatory;</b> repeatable	marc:target	Dublin Core	dcterms:audience
2.Bibliographic Note	<myname:bibliographicNote>	A note about a bibliography, discography, filmography, webliography, and/or other bibliographic references in an item	<b>optional;</b> repeatable	n/a	local	dc:description
3.Creator	<dc:creator.ulan> <dc:creator.lcnaf>	An entity primarily responsible for making the resource	<b>mandatory;</b> repeatable	ULAN LC NAF	Dublin Core	dc:creator
4.Date Issued	<dcterms:issued>	Date of formal issuance (e.g., publication) of the resource	<b>mandatory;</b> repeatable	W3CDTF	Dublin Core	dcterms:issued
5.Edition	<mods:originInfo.edition>	Information identifying the edition or version to which the resource belongs	<b>optional;</b> <b>non-</b> repeatable	n/a	MODS	n/a

### 3b2. Documenting resulting MAP as a data model: based on *DCMI Metadata Terms* (<http://dublincore.org/2012/06/14/dctterms.rdf>)



## 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

## 5. Conclusions

**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

