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This white paper and attached pre-print are part of the three-year interim project report for the IMLS Digital Collections & Content Project, summarizing major findings October 2002 through September 2005. Project is hosted at the University of Illinois at Urbana-Champaign. Project Director is Timothy W. Cole (<u>t-cole@uiuc.edu</u>). Full report is available at <u>http://imlsdcc.grainger.uiuc.edu</u>. The material in this report is based upon work supported by the Institute of Museum and Library Services under IMLS National Leadership Grant Award No. LG-02-0281. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the Institute of Museum and Library Services.

Template for Collection Registry Information White Paper

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Introduction

Through its National Leadership Grant (NLG) program, IMLS is enabling the development of hundreds of significant new digital collections. The visibility, adaptability, and interoperability of these collections and their content have become increasingly important as new paradigms of digital libraries have developed. In September 2002, IMLS awarded the University of Illinois at Urbana Champaign a National Leadership Grant to create a collection registry and item-level metadata repository for digital collections and content created or developed using IMLS NLG program funding. Project has been a collaboration between IMLS and the University of Illinois Library and Graduate School of Library and Information Science.

To create the collection registry for this project we began by reviewing current practice in digital collection description. Not surprisingly given the range of curatorial traditions spanning the library, museum and archival communities, we found a wide diversity of practice. Even the very definition of collection is variable across the community of IMLS NLG grantees. (This led us to begin an investigation of fundamental questions about the role of "the collection" as a defining or organizing unit in the digital environment -- see separate project white paper on "Collection Definition in Digital Resource Development"). While views of collection description are diverse, we found sufficient commonality to allow a working definition of what constitutes a collection (for purposes of this project) and to create a metadata schema to describe digital collections created under the NLG program. This collection-level metadata schema or template draws heavily on work done for the Research Support Library Programme (RSLP) in the UK, augmenting that work with additional elements from other schemas and created new for this project. With template defined, we then designed a registry database architecture, developed internal (for editing) and public interfaces, populated the registry, and began testing its effectiveness and usability. This paper discusses the metadata schema created, gives a description of the database architecture, and shows examples of the internal interfaces of the registry. Results from initial usability testing of collection registry with IMLS staff and UIUC Library staff are discussed in a separate white paper.

Elements in IMLS_DCC project collection-level	Equivalent Element in RSLP CD Schema	Refinement of DC
description schema		
title.collection	dc:title	—
gen:isLocatedAt (the URL of the collection)	cld:hasLocation	Sub-property of relation
identifier.IMLSGrant	—	—
Format	dc:format	—
Language	dc:language	—
Туре	dc:type	—
Audience	—	—
dcterms:accessRights	cld:accessControl	rights
dc:rights	cld:legalStatus	description
dc:publisher (hosting institution)	cld:owner	relation
dc:contributor (contributing institution)	_	relation
dcterms:abstract	dc:description	—
Strength	cld:strength	description
subject.topic	dc:subject	—
subject.objectName	cld:objectName	subject
subject.personName	cld.agentName	subject
dcterms:spatial	dcq:spatial	coverage
dcterms:temporal	dcq:temporal	coverage
dcterms:hasPart	dcq:hasPart	relation
relation.isPartOf	dcq:isPartOf	relation
dc:relation	cld:hasAssociation	relation

Table 1 Conection-level description elements used (as of 9/30/0

Development of the IMLS DCC Collection Description Metadata Schema

To develop a collection-level description metadata schema for this project, we began by surveying prior work on collection-level description (CD) metadata schemas and collection registries. We identified three emerging standard schemas of interest. The RSLP CD Schema [1] contains descriptive attributes about a collection, its location, agents associated with the collection, and relationships with internal or external collections. The RSLP CD schema is well documented[2] and has been implemented by RSLP projects throughout the UK. However, it has not been well tested for use in describing digital collections.

The Dublin Core (DC) CD schema [3], being developed by the Collection Description working group of the DC Metadata Initiative, is based on the RSLP CD schema, but adapted and simplified for digital collections. It does not include the location and agent information. There were no known implementers at the time this project began.

The Encoded Archival Description (EAD) [4] is used primarily to encode archival finding aids, although it has been used to describe museum collections.[5] It can describe both a collection as a whole and the discrete contents of that collection. This schema is used primarily by the archival community.

After the analysis of these schemas and discussions with the authors of the RSLP and DC collection description schemas we recommended an adaptation of the RSLP schema for this project. That recommendation was approved by IMLS on February 2, 2004. As mentioned above the RSLP CD schema describes the collection, its location, and any associated agents (such as owner, collector, or administrator). We examined each of these entities closely and adapted each slightly to fit the needs of our registry. We changed location to institution. We added a project entity element to maintain the link between NLG funded projects and collections. In addition we dropped some attributes which were of use only for physical collections (for example, hours of access). **Table 1** lists collection attributes from our schema as currently implemented and shows correspondence to RSLP elements and DC refinements.

A detailed look at individual elements, their attributes, and guidance on use is available at <u>http://imlsdcc.grainger.uiuc.edu/CDschema_elements.htm</u> and is attached as Appendix A of this white paper. The development process by which we arrived at the schema implemented was further documented in a Poster Session presentation at DC 2003 (Shreeves & Cole, extended abstract attached). The root XML Schema Definition is available at: <u>http://imlsdcc.grainger.uiuc.edu/registry/imlsdccprofile.xsd</u>. Note that multiple XML namespaces are invoked. The largest number of elements used in our collection-description schema are from the DC and DC Terms (Qualified DC) namespaces, but other namespaces (including a project-specific namespace) are also used. Additional details of XML namespaces used and schemas created in support of the collection registry are provided below in discussion of XML export formats.

Controlled Vocabularies

Library of Congress controlled vocabularies are the distinct majority used by projects in our collection registry. Library of Congress Subject Headings for subject, the Thesaurus of Graphic Materials for format, the LC Name Authority File for personal and geographic names are the majority of controlled vocabularies used. Other predominantly used controlled vocabularies include the Art and Architecture Thesaurus (AAT) for subjects and format, MIME types for format, the Anglo-American Cataloging Rules 2 (AACR2) for format and type, DCMI Type for object type, and the Getty Thesaurus for Geographic Names.

Our registry uses the GEM Subject Vocabulary. When editing a registry record, projects can choose which broad or specific GEM subject terms which apply to their collection. Although the projects in the registry may use a variety of subject vocabularies locally, this global usage of GEM headings allows users to browse projects by GEM subject area. Choosing a specific subject heading automatically includes the broader term to facilitate user browsing. Projects can choose as many headings as is appropriate to describe themselves. The majority of our projects self-identify with the broad subject terms of Social Science, the Arts, or Science. Specifically, the large subject headings represented in the Collection Registry are American History, state history, visual arts, photography, World History, and U.S. Government. Full statistical information and analysis on the controlled vocabularies used by projects in the Collection Registry is available in the Summary of IMLS NLG Collections White Paper.

XML Export Formats

Primary access to the collection registry is via a Web-based human-readable search and browse portal (http://imlsdcc.grainger.uiuc.edu/Collections). Browse access to machine-readable XML versions of collection registry records is also available. Because our metadata schema allows a single collection description to include several different types of related entities, <u>METS</u> [6] seemed like a natural choice for binding these entities together and expressing their structural relationships. In addition to the METS bundle, we also expose our custom XML schema. However, we feel METS provides a richer and more interoperable framework for expressing collection description record structure.

Several XML Schemas were developed to support machine-readable export formats. Both the METS and our custom approach utilize these XML Schema. Several of these XML Schema are based on the <u>XML Schemas for Qualified Dublin Core</u> [7]. However, instead of linking to or importing these schema directly, local copies have been created. This is because some of the canonical schema hosted at the Dublin Core site are out-of-date. Additionally, in some cases minor changes were required to support our data. Digital copies are available on our website. Without further ado, here are the XML Schemas which are mounted locally:

Namespace	Schema	Brief Description
http://imlsdcc.grainger.uiuc.edu/profile	# <u>IMLSDCCProfile.xsd</u>	This is the root XML Schema for the main collection description profile. It declares several top-level container elements, plus a few new terms needed specifically for the IMLSDCC Profile. It imports from the following other schema:
http://imlsdcc.grainger.uiuc.edu/types	# IMLSDCCTypes.xsd	This XML Schema declares several custom types (mostly enumerated values) that are used by the IMLSDCC Profile. This schema includes several other schema which are dynamically derived from the controlled vocabulary tables in our database: <u>Temporal Coverage, Spatial</u> <u>Coverage, Collection Type,</u> <u>Metadata Schema,</u> <u>Interactivity, Relation</u> <u>Supplement, and Audience.</u>
http://www.w3.org/2001/vcard- rdf/3.0#	<u>vCard.xsd</u>	This XML Schema declares terms from the vCard standard, based on the <u>vCard RDF Schema</u> hosted by the W3C . vCard terms are used for describing people and insitutions.
http://purl.org/dc/elements/1.1/	<u>DC.xsd</u>	This XML Schema declares the basic 15 terms of Dublin Core. It is based on the canonical <u>XML Schemas</u> for Qualified Dublin Core.
http://purl.org/dc/terms/	DCTerms.xsd	This XML Schema declares the qualified Dublin Core terms and types. It is also based on the canonical XML Schemas for

http://purl.org/dc/dcmitype/	<u>DCMIType.xsd</u>	This XML Schema declares values used to describe the type of a resource. It is also based on the canonical <u>XML Schemas for</u> <u>Qualified Dublin Core</u> .
http://www.loc.gov/marc.relators/	<u>MARCRel.xsd</u>	This XML Schema declares MARC Relator Terms. It is based on the <u>MARC Relator</u> <u>Terms RDF Schema</u> maintained by the Library of Congress. Even though the XML Schema contains all terms, only the 'own' term is used by the <u>Dublin</u> <u>Core Collection Description</u> <u>Application Profile</u> to identify the owner of a collection.
http://example.org/gen/terms#	<u>Gen.xsd</u>	This XML Schema declares several general purpose terms and types which are used by the <u>Dublin Core</u> <u>Collection Description</u> <u>Application Profile</u> , but are not found in any other "official" namespace. This namespace is provisional, and will be changed once a more suitable value is agreed upon.
http://example.org/cld/terms#	<u>CLD.xsd</u>	This XML Schema declares several terms and types needed specifically for collection description which are used by the <u>Dublin Core</u> <u>Collection Description</u> <u>Application Profile</u> , but are not found in any other "official" namespace. This namespace is provisional, and will be changed once a more suitable value is agreed upon.

http://example.org/cld/type#

CLDType.xsd

This XML Schema declares values used to describe the type of a collection. These values are defined in the <u>Dublin Core Collection</u> <u>Description Application</u> <u>Profile</u>, but are not found in any other "official" namespace. This namespace is provisional, and will be changed once a more suitable value is agreed upon.

Table 2 – XML schema mounted locally

There are also several external XML Schemas which are used or imported by the other schema listed above:

Namespace	Schema	Brief Description
http://www.loc.gov/METS/	METS.xsd	This is version 1.4 of the METS XML Schema.
http://www.w3.org/1999/xlink	<u>XLink.xsd</u>	This schema declares the various attributes used by the <u>XLink standard</u> . These attributes are used by the METS and vCard XML Schema.
http://www.w3.org/XML/1998/namespace	XML.xsd	This schema declares the various special attributes used by XML, such as xml:lang, xml:space,and xml:base.

Table 3 – Imported XML schemas

A METS Application Profile for exporting collection records from the collection registry is also available at http://imlsdcc.grainger.uiuc.edu/registry/imlsdccprofile.xsd.

The Database and Information

The information used to create collection records and populate our Registry initially comes from administrators of individual projects filling out surveys about their collections. Additionally information is also generated by a manual review (by Project Coordinator) of collection Website or portal. Once initial record has been created, and before it is made viewable through the public interface, collection administrators can update, change, or add information or links to related collections through our internal collection registry record edit interface. Recently, an internal interface has been added to allow new projects to directly create initial collection records. Before newly added or edited records are uploaded to the publicly accessible copy of the collection registry, records are individually vetted by the project coordinator. Copies of the entry/edit forms are included in Appendix B.

Collection registry records are maintained in two Microsoft SQL databases. One database contains all records publicly accessible. The other database also includes records being edited or newly created. An additional copy of the collection registry database is maintained (with only a few representative records) to provide a test region for interface design and development. The collection registry database design is highly relational, consisting of 39 tables. Table and column names and the primary key-foreign key relationships between the tables are shown in Appendix D.

Collection registry information is searchable and browsable in a public search interface for IMLS staff, librarians, and other end-users. More information about public interface design issues is available in another project white paper, *Results from Initial Usability Testing of Collection Registry with IMLS Staff and UIUC Library Staff*, but you can compare screen shots of our public interface with the restricted entry form in the Appendix C.

Future Plans

We continue surveying new NLG grant recipients and adding them to our Registry. We have gotten online publicity for the registry from a number of blogs. Publicity like this secures a larger audience for individual projects showcased in our Collection Registry. For this reason, we have encouraged participants to keep their entries up to date. We will further research how collections are defined and revised through these updates.

As mentioned we include GEM subject headings for collections. This facilitates browseability and accessibility across the varied collections by those interesting in considering collections as learning resources. We will study how people use this access point through search log analysis and interface testing with teachers. We will also be linking Collection Registry records to our item-level metadata repository, which recently became public. This will allows users to learn about a collection in its entirety but also to drill down to individual records and vice versa. Future research white papers will be posted on our website.

References

[1] RSLP Collection Description Schema. Retrieved Jan. 28 2003. http://www.ukoln.ac.uk/metadata/rslp/schema/

[2] Heaney, Michael. *An Analytical Model of Collections and their Catalogues* Retrieved October 10, 2005. http://www.ukoln.ac.uk/metadata/rslp/model/amcc-v31.pdf

[3] Dublin Core Collection Description. Retrieved May 12 2003. http://homes.ukoln.ac.uk/~lispj/dc-cd/rslpcd.html

[4] Encoded Archival Description. Retrieved May 14, 2003. http://www.loc.gov/ead/ead.html.

[5] Rinehart, R. (2003). MOAC: A report on integrating museum and archive access in the Online Archive of California. *D-Lib Magazine*. 9(1). Retrieved Jan 17 2003. http://www.dlib.org/dlib/january03/rinehart/01rinehart.html

[6] Metadata Encoding and Transmission Standard, Retrieved September 17, 2005. http://www.loc.gov/standards/mets/

[7] W3C XML Schemas for Qualified Dublin Core http://www.dublincore.org/schemas/xmls/qdc/2003/04/02/notes/

Appendix A

_IMLS DCC Collection Description Metadata Schema

Each metadata element is described by the following attributes:

Name	The unique token assigned to the term.
Label	The human-readable label assigned to the term.
Definition	A statement that represents the concept and essential nature of the term.
*Uses Encoding Scheme	Name of the classification scheme for use, if required.
Obligation	Indication of whether element is required or optional.
Occurrence	The number of times a data element may appear.
*Refines	A second element which is the super-property of the current element.
Comment	Additional information about the term or its application, including examples.
*optional attributes	

Elements:

Collection Entity

General attributes

- <u>dc:title</u>
- <u>dc:identifier</u>
- gen:isLocatedAt
- imls:interactivity
- <u>dc:type</u>
- <u>dc:format</u>
- <u>dc:language</u>
- <u>dc:extent</u>

- <u>dcterms:accrualPeriodicity</u>
- <u>imls:supplement</u>
- dcterms:audience
- <u>dcterms:accessRights</u>
- <u>dc:rights</u>
- dcterms:accrualPolicy
- gen:isAccessedVia
- <u>imls:metadataSchema</u>
- <u>imls:notes</u>

Topical attributes

- <u>dc:subject</u>
- <u>dcterms:abstract</u>
- <u>dcterms:spatial</u>
- <u>dcterms:temporal</u>

Attributes describing relationships with other collections:

- <u>dcterms:isPartOf</u>
- dcterms:hasPart
- <u>dc:source</u>
- <u>dc:relation</u>

<u>Attributes describing relationships with NLG projects, institutions, and</u> <u>administrators:</u>

- <u>dc:creator</u>
- <u>dc:publisher</u>
- <u>dc:contributor</u>
- <u>imls:managedBy</u>

Project Entity

- <u>dc:title</u>
- <u>dc:identifier</u>
- gen:isLocatedAt
- <u>imls:administeredBy</u>
- <u>imls:participatedBy</u>

Institution Entity

- <u>vCard:FN</u>
- <u>vCard:UID</u>
- <u>vCard:Role</u>
- vCard:Region

- vCard:Pcode •
- Vcard:Country •

Administrator Entity

- <u>vCard:N</u>
 - <u>vCard:Family</u> <u>vCard:Given</u>
- <u>vCard:UID</u>
- vCard:email
- <u>vCard:Org</u>
 - <u>vCard:orgname</u>

Collection Entity (back to top)

General attributes:

Name	dc:title
Label	Name of digital collection
Definition	The name of the digital collection created by the National Leadership Grant project.
Uses Encoding Scheme	n/a
Obligation	Mandatory
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	Examples:
	The Hoagy Carmichael Collection
	The Louisiana Purchase: A Heritage Explored

Name	dc:identifier
Label	Identifier (not displayed)
Definition	The unique key for the digital collection.
Uses	n/a

Encoding Scheme	
Obligation	Mandatory
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	This element is used internally only.

Name	gen:isLocatedAt
Label	Digital Collection URL
Definition	The URL where an end user can access the digital collection / primary entry point for the digital collection.
Uses Encoding Scheme	Uniform Resource Identifier (URI)
Obligation	Mandatory
Occurrence	Minimum: 1, Maximum: unbounded
Refines	cld_gen:isAvailableAt
Comments	Example:
	http://www.rochester.lib.ny.us/rochimag/

Name	imls:interactivity
Label	Interaction with Digital Collection
Definition	An indication of how a user can interact with the digital collection, such as searching, browsing, etc.
Uses Encoding Scheme	n/a, though the IMLS DCC project has developed a list of often used terms for use on the collection registry form.
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded

Refines	n/a
Comments	Examples:
	Search
	Exhibit

Name	dc:type
Label	Objects Represented
Definition	The name of the object(s) or resource(s) represented by the digital item(s) in the collection.
Uses Encoding Scheme	n/a, but use of the LC TGM II (<u>LC Thesaurus for Graphic</u> <u>Materials II: Genre and Physical Characteristics Terms</u>) is recommended where possible.
Obligation	Mandatory
Occurrence	Minimum: 1, Maximum: unbounded
Refines	n/a
Comments	Use more specific terms than the DCMI Type list (image, text, etc.). Do not use this element for the digital format of the item (such as .jpg) Examples: Periodical illustrations
	Photographic prints

Name	dc:format
Label	Format of Digital Items
Definition	The format(s) of the digital items within the collection.
Uses Encoding	IMT (Internet Media Type)

Scheme	
Obligation	Mandatory
Occurrence	Minimum: 1, Maximum: unbounded
Refines	n/a
Comments	Use the first level of the Media Type (i.e. image, text, audio, video, application) if you cannot find the specific media type for your digital items.
	Examples:
	image/jpg
	audio
	application/pdf

Name	dc:language
Label	Language
Definition	If textual, the language(s) of the items in the digital collection.
Uses Encoding Scheme	ISO 639-2: See <u>http://www.loc.gov/standards/iso639-</u> 2/englangn.html.
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	The element is used to describe primarily collections containing textual items.
	Examples:
	eng
	Fre

Name	dcterms:extent
Label	Size of collection
Definition	The number of digital items within the collection
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:format
Comments	When possible use separate counts for different types of items.
	Examples:
	150 photographs; 300 books
	25,000 images

Name	dcterms:accrualPeriodicity
Label	Frequency of additions
Definition	A statement of how often the digital collection is updated.
Uses Encoding Scheme	 IMLS DCC project terms: Daily Weekly Monthly Yearly Irregularly No longer adding
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	This element is meant to indicate whether the items are

actively added to the collection.
Examples:
Irregularly
No longer adding

Name	imls:supplement
Label	Supplementary Materials
Definition	Additional materials included alongside the digital collection which explain, incorporate, or otherwise make use of the collection.
Uses Encoding Scheme	n/a, though the IMLS DCC project has developed a list of often used terms for use on the collection registry form.
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:relation
Comments	Examples:
	Atlas
	Teacher and student resources
	Bibliography

Name	dcterms:audience
Label	Audience
Definition	The primary audience(s) of the items in the collection.
Uses Encoding Scheme	n/a, though the IMLS DCC project has developed a list of often used terms for use on the collection registry form.

Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	Use to indicate target audiences, if any, of the collection.
	Examples:
	Undergraduate Students
	K-12 Teachers and Administrators

Name	dcterms:accessRights
Label	Access Restrictions
Definition	A statement of any access restrictions placed on the digital collection.
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:rights
Comments	If there are access restrictions on your digital collection, please indicate them here. Examples:
	Portions of the digital collection are limited to the University's faculty, staff, and students.

Name	dc:rights
Label	Rights
Definition	Information about rights (copyrights, etc.) held in and over the digital collection.

Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	Can include a URL linking to a rights page.
	Examples:
	for educational use. Commercial use is strictly prohibited without permission.
	See http://palmm.fcla.edu/lfnh/copyright.html for copyright and conditions of use information.

Name	dcterms:accrualPolicy
Label	Collection Development Policy
Definition	A statement of the collection development policy for the digital collection.
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	Can include a URL linking to a collection development policy page.
	Examples:
	http://www.cdpheritage.org/about/policy_collection.html

Name	gen:isAccessedVia
Label	Alternative Access
Definition	Services beyond the URL that provides access to the digital collection, such as an OAI data provider or Z39.50 target.
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:relation
Comments	Examples:
	OAI Data Provider: http://www.lib.unc.edu/cgi- bin/oai/das/das/oai.pl; set=6

Name	imls:metadataSchema
Label	Metadata schema used
Definition	The name of the metadata standard(s) used, if any, to describe the items in the digital collection.
Uses Encoding Scheme	n/a, though the IMLS DCC project has developed a list of often used terms for use on the collection registry form.
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	Examples:
	Dublin Core
	MARC

imls:notes
Notes
A statement of any additional information about the digital collection.
n/a
Optional
Minimum: 0, Maximum: unbounded
n/a
 This element is to be used to put information that does not fit well in other elements. Example: This digital collection and web site will be completed in Sentember 2004

Topical attributes:

Name	dc:subject
Label	Торіс
Definition	Terms that describe the overall topical content of the items in the digital collection.
Uses Encoding Scheme	Requires at least one heading from <u>GEM</u> (Gateway to Educational Materials). May use other terms as desired.
Obligation	Required
Occurrence	Minimum: 1, Maximum: unbounded
Refines	n/a

Comments	The IMLS DCC project chose GEM subject headings because they are very broad and not overly complicated. We also felt that the GEM subject headings could be used by a wide variety of communities. NLG projects are encouraged to use additional terms from controlled vocabularies and keywords.
	Examples:
	Social Studies (GEM)
	Current events/issues (GEM)
	Work Projects Administration. Museum Extension Project

Name	dcterms:abstract
Label	Description
Definition	A summary of the content and topics of the digital collection.
Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: unbounded
Refines	dc:description
Comments	The IMLS NLG Digital Collection Registry will display the first few lines of each description in the brief display of collections. Free text searching will also be available. Examples:
	Museums and the Online Archive of California (MOAC) provides access to cultural collections held by museums, archives, and libraries throughout the state of California.
	The Linking Florida's Natural Heritage (LFNH) web site allows students, researchers, and the public to query museum specimen databases, library catalogs, and other citation databases for taxonomic and topical information.

In addition, scientific experts selected 200 texts for digitization. This core collection on Florida species and ecosystems is available through the LFNH site.

Name	dcterms:spatial
Label	Geographic Coverage
Definition	A place(s) or area(s) associated with most or all of the items in the digital collection.
Uses Encoding Scheme	The use of the <u>Getty Thesaurus of Geographic Terms</u> is strongly recommended.
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:coverage
Comments	The IMLS DCC project has provided a list from the top hierarchy of the Getty TGN. Projects are encouraged to add refinements to this from the Getty Thesaurus.
	Examples:
	United States.
	Mountain States.
	Colorado (state)

Name	dcterms:temporal
Label	Temporal Coverage
Definition	A time period(s) associated with most or all of the items in the digital collection.
Uses Encoding Scheme	n/a, though the IMLS DCC project has developed a list of often used terms for use on the collection registry form.
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:coverage
Comments	Projects should use spans of years rather than names of periods. (i.e. 1861-1865 instead of <i>Civil War</i>).
	Examples:
	1900-1924
	1939-1945

Attributes describing relationships with other collections:

Name	dcterms:isPartOf
Label	Parent Collection
Definition	Another NLG digital collection that contains the current digital collection.
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:relation

Comments	The parent collection will be automatically generated through the creation of sub-collections.
	Examples:
	Springfield College YMCA Historical Image Collection

Name	dcterms:hasPart
Label	Sub-Collection
Definition	Any other collection(s) contained within the current collection.
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:relation
Comments	The IMLS DCC project recommends that sub-collections use a URL that is distinct from that of the parent collection. This will help users distinguish between various digital collections (and avoid confusion when they are directed to the same URL multiple times).
	Examples:
	YMCA Training School Image Collection
	YMCA Portrait Collection
	YMCA World War I Image Collection

Name	dc:source
Label	Physical Collection

Definition	The physical collection(s) from which the current digital collection is derived.
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	A place to indicate, if desired, the source collection(s) of the digital collection.
	Examples:
	Detroit News Photo Archive

Name	dc:relation
Label	Other Associated Collections
Definition	Any other collection(s) - NLG or not - that is associated with or complements the current collection.
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	A place to indicate digital collections that may be useful in conjunction with the current collection. A list of these digital collections - generated from the NLG collections as well as other digital collections they have named - will be created for projects to choose from on the collection registry. Examples: <i>American Memory Project (Library of Congress)</i>

Attributes describing relationships with NLG projects, institutions, and administrators:

Name	dc:creator
Label	National Leadership Grant Project
Definition	The NLG project(s) which created the digital collection. [Links to the Project Entity]
Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: unbounded
Refines	n/a
Comments	This element is expressed through a relationship between the collection and the project in the database. Projects may choose to associate multiple projects with a collection.

Name	dc:publisher
Label	Hosting Institution
Definition	The institution which hosts (makes available) the digital collections. [Links to the Institution Entity]
Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	This element is expressed through a relationship between the collection and the institution in the database.

Name	dc:contributor
Label	Contributing Institution
Definition	The institution(s) which has contributed content to the digital collection. [Links to the Institution Entity]
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	n/a
Comments	This element is expressed through a relationship between the collection and the institution in the database.

Name	imls:managedBy
Label	Administrator
Definition	The person who has primary responsibility for the digital collection. [Link to the Adminsitrator Entity]
Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	dc:relation
Comments	This element is expressed through a relationship between the collection and the administrator in the database.

Project Entity

	Name	dc:title
--	------	----------

Label	Project Name
Definition	The title of the IMLS National Leadership Grant project associated with the digital collection.
Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1 (see comment below)
Refines	n/a
Comments	A digital collection may have multiple NLG projects associated with it; however, each project may only have one title. Example:
	The Urban Beat: The Detroit News Collection 1900-1980

Name	dc:identifier
Label	IMLS Grant Number
Definition	The IMLS Grant Number assigned to the NLG project.
Uses Encoding Scheme	IMLS supplied
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1 (see comment below)
Refines	n/a

Comments	A digital collection may have multiple NLG projects associated with it; however, each project may only have one identifier.
	Examples:
	LG-03-02-0068
	ND-10004

Name	gen:isLocatedAt
Label	Project URL
Definition	The URL where an end user can access the NLG project web site.
Uses Encoding Scheme	URI
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Occurrence Refines	Minimum: 0, Maximum: unbounded dc:relation
Occurrence Refines Comments	Minimum: 0, Maximum: unbounded dc:relation The NLG project web site is in most cases distinct from the collection web site. Often it is an "About this Collection" or "About the Project" page. Inclusion of this URL allows users to learn about the 'behind the scenes' work. Examples:

Name	imls:administeredBy
Label	Administering Institution
Definition	The institution which has administrative responsibility for the NLG project. [Links to the Institution Entity]

Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	dc:relation
Comments	This element is expressed through a relationship between the project and the institution in the database.

Name	imls:participatedBy
Label	Participating Institution
Definition	The institution(s) participating in the NLG project either formally (through a cooperative agreement) or informally. [Links to the Institution Entity]
Uses Encoding Scheme	n/a
Obligation	Optional
Occurrence	Minimum: 0, Maximum: unbounded
Refines	dc:relation
Comments	This element is expressed through a relationship between the project and the institution in the database.

Institution Entity

Name	vCard:FN
Label	Institution Name
Definition	The name of the institution(s) associated with the digital collection and NLG project.

Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: unbounded
Refines	n/a
Comments	The institution names should be constructed with the parent institution first and then the smaller sub-set of that institution second (following AACR2 guidelines).
	Examples:
	University of Wisconsin-Madison. Library.
	Lower East Side Tenement Museum
	University of Illinois at Urbana-Champaign. Digital Imaging and Media Technology Initiative.

Name	vCard:UID
Label	Identifier (not displayed)
Definition	The unique identifier for the institution
Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	Created and maintained by the IMLS DCC project.

Name	vCard:Role
Label	Institution Type
Definition	The category of institution, such as academic library, museum, etc.
Uses Encoding Scheme	IMLS defined types + a number of IMLS DCC refinements.
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	This categorization is based on the institution types in the grant proposal guidelines issued by IMLS.

Name	vCard:Region
Label	State
Definition	The state where the institution is located.
Uses Encoding Scheme	Defined list of states and territories.
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	Requiring the state allows users to organize collections and projects based on the location of the institution.

Name	vCard:Pcode
Label	Zip Code

Definition	The zip code for the institution.
Uses Encoding Scheme	United States Postal Codes.
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	Requiring the zip code allows users to organize collections and projects based on the location of the institution.

Name	vCard:Country
Label	Country
Definition	The country where the institution is located.
Uses Encoding Scheme	Getty Thesaurus of Geographic Names
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	The country is automatically generated for institutions in the United States.

Administrator Entity

Name	vcard:n
Label	Administrator Name
Definition	The name of the administrator responsible for the digital collection.

Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum:1
Refines	n/a
Comments	The administrator information will not be publicly available through the collection registry. This information is collected for the benefit of IMLS.

(back to <u>top</u>)

Name	vcard:family
Label	Administrator Name
Definition	The family name of the administrator responsible for the digital collection.
Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum:1
Refines	vCard:n
Comments	The administrator information will not be publicly available through the collection registry. This information is collected for the benefit of IMLS.

Name	vcard:given
Label	Administrator Name
Definition	The given name of the administrator responsible for the digital collection.

Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum:1
Refines	vCard:n
Comments	The administrator information will not be publicly available through the collection registry. This information is collected for the benefit of IMLS.

Name	vCard:UID
Label	Identifier (not displayed)
Definition	The unique identifier for the administrator.
Uses Encoding Scheme	Created and maintained by the IMLS DCC project
Obligation	Required
Occurrence	Minimum: 1, Maximum: unbounded
Refines	n/a
Comments	The administrator information will not be publicly available through the collection registry. This information is collected for the benefit of IMLS.

Name	vcard:email
Label	Email address
Definition	The electronic mail address for the administrator
Uses	name@domain.org

Encoding Scheme	
Obligation	Required
Occurrence	Minimum: 1, Maximum: unbounded
Refines	n/a
Comments	The administrator information will not be publicly available through the collection registry. This information is collected for the benefit of IMLS.

Name	vcard:org
Label	Affiliation
Definition	The institution the administrator is associated with.
Uses Encoding Scheme	n/a
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	n/a
Comments	The administrator information will not be publicly available through the collection registry. This information is collected for the benefit of IMLS.

Name	vcard:orgName
Label	Affiliation
Definition	The name of the institution the administrator is associated with.
Uses Encoding	n/a

Scheme	
Obligation	Required
Occurrence	Minimum: 1, Maximum: 1
Refines	vCard:org
Comments	The administrator information will not be publicly available through the collection registry. This information is collected for the benefit of IMLS.

Schemas and Vocabularies (and Namespaces where available) used

gen:	General Description Terms identified in DC Collection Description App Profile; URIs to be confirmed; Temporary Namespace Name	reference: http://www.ukoln.ac.uk/metadata/dcmi/collection-application- profile/
cld:	Collection Description Terms identified in DC Collection Description App Profile; URIs to be confirmed, Temporary Namespace Name	reference: http://www.ukoln.ac.uk/metadata/dcmi/collection-application- profile/
dc:	The Dublin Core Metadata Element Set v. 1.1	namespace: http://purl.org/dc/elements/1.1/ dc_

dcterms	Dublin Core	namespace:			
•	Terms	http://purl.org/dc/terms/dcterms			
imls:	IMLS DCC Collection Description Metadata Schema	reference: http://imlsdcc.grainger.uiuc.edu/registry/imlsdccprofile.xsd http://imlsdcc.grainger.uiuc.edu/CDschema_elements.htm			
vcard:	RFC 2426 - vCard MIME Directory Profile	reference: http://www.ietf.org/rfc/rfc2426.txt			
URI	Uniform Resource Identifier	reference: http://www.ietf.org/rfc/rfc2396.txt			
LC TGM II	Library of Congress Theasurus of Graphic Materials - Genre and Physical Materials Terms	reference: http://www.loc.gov/rr/print/tgm2/			
IMT	Internet Media Types	reference: http://www.isi.edu/in-notes/iana/assignments/media- types/media-types			
ISO 639-2	Codes for the Representatio n of Names of Languages Part 2: Alpha-3 Code	reference: http://lcweb.loc.gov/standards/iso639-2/langhome.html			
GEM	Gateway to Educational Materials Topic Terms	reference: http://search.thegateway.org/			
Getty TGN	Getty Thesaurus of Geographic	reference: http://www.getty.edu/research/conducting_research/vocabularies			

Terms	<u>/tgn/</u>			
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Appendix B Collection Registry Entry/Edit Forms (Password protected forms)

Digital Coll	Digital Collections and Content Working toward interoperable digital content.								
	IMLS	NLG Collection	Registry Entry	Form					
STEP 1: Edit General Collecti Information	ion <u>STEP 2: Assign</u> <u>GEM Subject</u> <u>Headings>></u>	<u>STEP 3:</u> Describe Topical <u>Content>></u>	STEP 4: Add Contributing Institutions>>	STEP 5: Add Associated Collections>>	STEP 6: Review Completed Registry Entry>>				
General Collection Information You may add, edit, or delete any of the information on this page. Clicking or mousing over the field name will present you with an information pop-up about the element.									
Fields that required are marked with an *. You may also view <u>other collection registry records</u> . If you need to end the session before finishing your work, click the "Save File and Come Back Later" button at the <u>bottom</u> of the screen. All information you have entered or edited will be saved. If all information below is correct, you can go to the next screen by clicking the "Save File and Go to Next Screen" button at the <u>bottom</u> of the screen.									
* <u>Name of</u> <u>digital</u> <u>collection</u> : * <u>Digital</u> <u>collection URL</u> :	* Name of digital collection: * Digital collection URL: (If web site is not yet available, please enter Not yet available in field.)								
<u>Type(s) of</u> interaction with digital collection:	Search Exhibit Site map Type(s) of interaction with digital collection: Browse Interactive learning objects Other types of interaction with collection: Other types of interaction separated by semi-colons.)								
*Name of personal names and email addresses collected through this instrument will be used only internally by UIUC project staff or the IMLS as contact information for the upkeep and maintenance of the collection registry. This information will not be made public in any way, and will not be shared with any third party See the <u>University of Illinois privacy policy</u> for more information.									
*Email address:									
* <u>Institutional</u> affiliation:									
* <u>Object(s)</u>	* <u>Object(s)</u> = Books and namphlate = Photographs / slides / = Music (audio files)								

Page One

Digital Colle	toward interopera	able digital content.						
IMLS NLG Collection Registry Entry Form								
STEP 1: Edit General Collection Information<<	STEP 2: Assign GEM Subject Headings	<u>STEP 3:</u> Describe <u>Topical</u> <u>Content>></u>	STEP 4: Add Contributing Institutions>>	<u>STEP 5: Add</u> <u>Associated</u> <u>Collections>></u>	<u>STEP 6: Review</u> <u>Completed</u> Registry Entry>>			

GEM Subject Headings

Please assign at least one Gateway to Educational Material (GEM) subject heading to your digital collection. On the next page you will be able to add keywords or additional subject headings from any controlled vocabulary to describe your digital collection.

The top level GEM subject headings are listed here. Each of these has several sub-headings. You can add as many GEM subject headings as you like.

Arts Educational Technology Foreign Languages Health Language Arts Mathematics Philosophy Physical Education Religion Science Social Studies Vocational Education

The browse functions of the IMLS NLG Collection Registry will be based on the GEM subject headings. The IMLS DCC project chose GEM subject headings because they are very broad and not overly complicated. We also felt that the GEM subject headings could be used by a wide variety of communities. To find out more information about GEM, see <u>http://www.thegateway.org/</u>.

If you need to end the session before finishing your work, click the "Save File and Come Back Later" button at the <u>bottom</u> of the screen.

If all information below is correct, you can go to the next screen by clicking the "Describe Topical Content of Digital Collections" button at the <u>bottom</u> or top of the screen.

🗹 Arts (Main Subject Heading)	📃 Philosophy (Main Subject Heading)
Architecture	Aesthetics
Art therapy	Careers in philosophy
Careers in art	Educational Philosophy
Computers in art	Epistemology
Dance	Ethics

Page Two

Institute of Maximum and Labracy Services Digital Collections and Content Working toward interoperable digital content.								
		IMLS NI	G Collection	n Registry Entry	/ Form			
<u>STEP 1: Edit (</u> <u>Collectio</u> Informatio	<u>General</u> on on<<	STEP 2: Assign GEM Subject Headings<<	STEP 3: Describe Topical Content	<u>STEP 4: Add</u> Contributing Institutions>>	STEP 5: A Associat Collection	<u>idd</u> <u>s</u> ed Coi s>>	TEP 6: Review npleted Registry Entry>>	
Description of Topical Content of Collection								
Please edit or	add info	ormation about the t	opical content of	f the collection.				
Fields that re	quired ar	e marked with an *.						
If you need to	o end the	e session before finis	shing your work,	click the "Save File	and Come B	ack Later	button at the	
If all informat	ion belov	w is correct, you can	o to the next	screen by clicking th	e "Save and	Go To Ne	vt Screen"	
button at the	bottom (of the screen.	r go to the next	screen by checking a		00 10 14	Screen	
	Tapical					antrollad .		
<u>Topic of</u> <u>digital</u>	lopical phrase						ocabulary	
collection: (Please							÷	
indicate						None	\$	
vocabulary, if any)					Save Fi	le and Add	nother Topic Line	
<u>Geographic</u> <u>coverage</u> of digital	⊟ Af	rica (continent)	🦲 Pacifi region)	c Islands (general	E Mi	dwest U.S	5. (general region)	
collection: (Please check all	L Ar	ntarctica (continent)	South	n America (continent) 🧮 Mountain F region)		ountain R 1)	egion U.S. (genera	
that apply)	🔄 Asia (continent)		Uest 📃	t Indies (archipelago) re		l Northeastern U.S. (general region)		
	L Ce region	entral America (gene n)	eral 📃 Cana	da (nation)	📃 Pa regior	cific Coas 1)	t U.S. (general	
	Eu	rope (continent)	Mexic	o (nation)	So	uthern U	S. (general region)	
	📜 Mi regior	iddle East (general n)	📒 Unite	d States (nation)	📃 So region	uthwest (1)	J.S. (general	

Page Three

Institute of Muscum and Library Services Digital Collections and Conter Working toward interoperable digital content.								
IMLS NLG Collection Registry Entry Form								
STEP 1: Edit General Collection Information<<	<u>STEP 2: Assign</u> <u>GEM Subject</u> <u>Headings<<</u>	<u>STEP 3:</u> Describe <u>Topical</u> <u>Content<<</u>	STEP 4: Add Contributing Institutions	<u>STEP 5: Add</u> <u>Associated</u> <u>Collections>></u>	<u>STEP 6: Review</u> <u>Completed</u> Registry Entry>>			

Associate Contributing Institutions with Digital Collection

Institutions can have one of two relationships with a collection.

- 1. A hosting institution is the institution who is holding or hosting the digital collection. A collection can have only one hosting institution.
- A contributing institution is one which has contributed content to the digital collection. A collection can have multiple contributing institutions.

Please **add** institutions which are *contributors* to the digital collection. In some cases, there will be no contributing institutions.

If you need to **edit** the information or **delete** a contributing (or hosting) institution from your collection registry record, please contact Sarah Shreeves (<u>sshreeve@uiuc.edu</u>).

If you need to end the session before finishing your work, click the "Save File and Come Back Later" button at the <u>bottom</u> of the screen.

If this information is complete and correct, you can go to the next screen by clicking the "Save File and Go to Next Screen" button at the <u>bottom</u> of the screen.

Select Contributing Institutions from List or Create New Contributing Institutions:

[Outside USA] - Chinese Opera Society (Singapore)	'n
[Outside USA] - International Foundation for Arts and Culture (Japan)	Μ
[Outside USA] - St. Petersburg State Museum of Theatre and Music (Russia)	L
[Outside USA] - Thang Long Water Puppet Theatre of Hanoi (Vietnam)	L
[Outside USA] - The Necessary Stage (Singapore)	L
[Outside USA] - World Trade Organization	L
Alabama - Air University. Office of History.	L
Alabama - Alabama Department of Archives & History	L
Alabama - Alabama State Council on the Arts	ų
Alabama - Auburn University Digital Library	4
Alabama - Birmingham Public Library	٧

Create New Contributing Institutions for this Collection

Page Four

nation of Maxim and Library Service Digital Collections and Content									
Digital Collecti	ons and cont	em		Wo	orking toward interc	perable digital content.			
	IMLS NLG Collection Registry Entry Form								
		_							
STEP 1: Edit General Collection STEP 2: Assign GEM Subject STEP 3: Describe Topical Contributing STEP 4: Add Contributing STEP 5: Add Associated Collections STEP 6: Review Completed Registry Entry>>									
Add associated co	ollections								
Please edit or add infor	mation about other	collections associa	ted v	with your IMLS fu	inded digital collec	tion such as:			
 the physical collection from which the digital collection is derived; other digital collections which may be useful in conjunction with your collection; and sub-collections within your collection that you wish to highlight. Please note that you may describe your sub-collections in more detail by completing an additional collection registry form for each sub-collection. 									
If you do not have any Completed Registry Ent	associated collection ry" button at the <u>bo</u>	ns, you may contin ttom of the screen	iue ii	mmediately to th	e next form by cli	cking on the "Review			

If you need to end the session before finishing your work, click the "Save File and Come Back Later" button at the bottom of the screen.

If all information below is correct, you can go to the next (and last!) screen by clicking the "Review Completed Registry Entry" button at the bottom of the screen.



<u>Complementary Digital Collections (Current number: 0.)</u> (i.e. other collection(s) that may be useful in conjunction with your digital collection) Choose complementary digital collections from the list below

Page Five

matients of Marsum and Library Services Digital Collections and Content				Wa	rking toward interc	operable digital content.		
IMLS NLG Collection Registry Entry Form								
			-					
STEP 1: Edit General Collection Information<<	STEP 2: Assign GEM Subject Headings<<	<u>STEP 3:</u> Describe Topical <u>Content<<</u>	S C In	TEP 4: Add ontributing stitutions<<	STEP 5: Add Associated Collections	STEP 6: Review Completed Registry Entry>>		
Add associated co	ollections							
Please edit or add infor	mation about other	collections associat	ted w	ith your IMLS fu	nded digital collec	tion such as:		
 the physical collection from which the digital collection is derived; other digital collections which may be useful in conjunction with your collection; and sub-collections within your collection that you wish to highlight. Please note that you may describe your sub-collections in more detail by completing an additional collection registry form for each sub-collection. 								
If you do not have any associated collections, you may continue immediately to the next form by clicking on the "Review Completed Registry Entry" button at the <u>bottom</u> of the screen.								
If you need to end the	session before finish	iing your work, clia	ck the	e "Save File and	Come Back Later	" button at the		

If all information below is correct, you can go to the next (and last!) screen by clicking the "Review Completed Registry Entry" button at the bottom of the screen.



<u>Complementary Digital Collections (Current number: 1</u>) (i.e. other collection(s) that may be useful in conjunction with your digital collection)

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Institute of Museum and L Digital Colle	ibrary Services ections and (Conter	Working t	oward interoperal	ile digital content.			
IMLS NLG Collection Registry Entry Form								
<u>STEP 1: Edit</u> <u>General</u> <u>Collection</u> <u>Information<<</u>	<u>STEP 2: Assign</u> <u>GEM Subject</u> <u>Headings<<</u>	<u>STEP 3:</u> Describe <u>Topical</u> <u>Content<<</u>	<u>STEP 4: Add</u> <u>Contributing</u> <u>Institutions<<</u>	<u>STEP 5: Add</u> <u>Associated</u> <u>Collections<<</u>	STEP 6: Review Completed Registry Entry			
Collection Sun	nmary							
You have reached t below. These chang	the end of this edi ges have not been	it session. Char made permane	iges you have ma ent yet.	de are reflected	the display			
Click on the "Finali:	ze Entry" at the b	ottom of the sc	reen in order to s	ubmit your recor	d.			
If you need to mak	e changes to you	r entry, you car	n do this in one of	two ways:				
1. Use the navig 2. Use the "Sav	 Use the navigation bar at the top of this page to navigate to the area you need to edit. Use the "Save File and Come Back Later" function at the bottom of the screen. 							
In either case, changes will not become permanent until you click on the "Finalize Entry" button at the bottom of this screen.								
If you have questions, please contact the project coordinator, Sarah Shreeves, at 217.244.7809 or <u>sshreeve@uiuc.edu</u> .								

test

Find out more about the: Collection Description Collections Associated with this Collection National Leadership Grant Project(s) Responsible for this Collection

Collection Information

Title: test

URL: http://imlsdcc.grainger.uiuc.edu

Description: testtesttesttesttest

CEM Culting Arts

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Appendix C Public Collection Registry Interface



IMLS Digital Collections Registry

Home About Contact

A gateway to digital collections funded through the IMLS National Leadership Grant Program

Welcome to the Institute of Museum and Library Services (IMLS) Digital Collections Registry, a gateway to the digital collections funded through the IMLS National Leadership Grant Program (learn more) and a resource for educators and cultural heritage professionals.

You will find here a fascinating array of digital collections from all subject areas - art to science, literature to home economics - and from all types of institutions such as museums, libraries, and historical societies.

Take some time to browse through the collections or search for a topic that interests you.

Browse Collections by:



Search Collections:

Search

Other Browse Options:



The IMLS Collection Registry is a product of IMLS Digital Collections and Content, a National Leadership Grant funded collaboration among the University of Illinois Library, the <u>Graduate School of Library and Information Science</u>, and the <u>Institute of Museum and Library Services</u>, a Federal agency that fosters innovation, leadership, and a lifetime of learning.

© 2003, 2004 IMLS DCC. Last updated on February 12, 2005. Hosted by Grainger Engineering Library, University of Illinois at Urbana-Champaign.

Page One



by:

IMLS Digital Collections Registry

A gateway to digital collections funded through the IMLS National Leadership Grant Program About Contact

Home

Browse Collections Search Results

moac

You may edit your search in the box below.

<u>Subject</u>

.

<u>Object</u> Place

Title

1 Collections were found:

MOAC: California museums working with libraries and archives to increase and enhance access to cultural collections

Full Description

Search Collections



Advanced Search

Other Browse Options:

<u>By</u> <u>National</u> <u>Leadership</u> <u>Grant</u> <u>Project</u>

By Hosting Institution **Description:** MOAC is a group of California museums working with libraries and archives to increase and enhance access to cultural collections. MOAC includes a broad range of museum and library

collections. **Alternative Access:** OAI Data Provider: http://oai.cdlib.org/? verb=Identify ; set=images (MOAC is a subset of the larger Open Archives of California finding aids)

Title: MOAC: California museums working with libraries and archives to increase and enhance access to cultural collections URL: http://www.bampfa.berkeley.edu/moac

The following institutions were found:

MOAC

Title: MOAC

Collection Home

The following projects were found:

MOAC

Title: MOAC URL: http://www.bampfa.berkeley.edu/moac/

The P symbol indicates that the hyperlink is to a web site external to the IMLS Digital Collections Registry.

The IMLS Digital Collections Registry is a product of <u>IMLS Digital Collections and Content</u>, a National Leadership Grant funded collaboration among the <u>University of Illinois Library</u>, the <u>Graduate School of Library and Information Science</u>, and the <u>Institute of Museum and Library Services</u>, a Federal agency that fosters innovation, leadership, and a lifetime





IMLS Digital Collections Registry

A gateway to digital collections funded through the IMLS National Leadership Grant Program

Home About Contact

Browse Collections	Full Description MOAC: California museums working with libraries and archives to increase and enhance access to cultural collections		
Subject			
<u>Object</u> <u>Place</u> <u>Title</u>	Find Out More About:	<u>Collection Description</u> <u>Collections Associated With This Collection</u> <u>National Leadership Grant Projects Responsible For This</u> <u>Collection</u>	
	Collection Inf	formation	
Search Collections	Title:	MOAC: California museums working with libraries and archives to increase and enhance access to cultural collections	
(co)	URL:	http://www.bampfa.berkeley.edu/moac	
Advanced Search	Description:	MOAC is a group of California museums working with libraries and archives to increase and enhance access to cultural collections. MOAC includes a broad range of museum and library collections.	
Other Browse Options:	GEM Subjects:	<u>Arts</u> <u>Photography</u> <u>Visual arts</u>	
<u>By</u> <u>National</u> <u>Leadership</u> <u>Grant</u> <u>Project</u>		Social Studies Anthropology United States history World history	
<u>By Hosting</u> Institution	Geographic Coverage:	<u>United States (nation)</u> <u>Pacific Coast U.S. (general region)</u> <u>Africa (continent)</u> <u>Asia (continent)</u> <u>Europe (continent)</u> <u>Southwest U.S. (general region)</u> <u>Mexico (nation)</u>	
	Objects Represented:	Photographs / slides / negatives Prints and drawings Physical artifacts Paintings Archival finding aids	
	Format:	image/jpeg text/html	
	Language:	eng	

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Appendix D Database Structure Diagram