OER Discovery

Ensuring that OER Rise to the Top

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Abstract

This paper discusses the challenges of ensuring discoverability of Open Educational Resources (OER) in the absence of clear standards for sharing them. Despite the efforts of librarians and instructors to create a wealth of OER, discoverability remains limited and often relegated to a list of links on a LibGuide. The authors address this challenge by highlighting technical and descriptive barriers to OER discoverability, then they describe the development of a hybrid metadata standard for OER and its deployment through the institutional repository. Although provisional, this approach ensures that OER records can be adapted to future metadata standards and exported to third-party indexes. This paper underscores the importance of developing an effective metadata standard for OER to ensure discoverability for learners and educators.

Introduction

Open Educational Resources (OER) have the potential to transform education by making learning resources freely available to all. To this end, librarians and instructors are collaborating to create a wealth of OER. However, the absence of clear standards and practices for sharing OER makes it difficult for librarians to invest time and effort in making OER discoverable, both locally and globally. Moreover, in many instances, librarians tasked with OER work serve in reference or instructional roles, while technical services librarians are not always considered or invited to participate in institutional OER initiatives. Without active collaboration among public and technical services librarians to develop standards-based metadata to make these resources discoverable through institutional repositories,

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doi:10.13001/joerhe.v2i1.7879   222   Journal of Open Educational Resources in Higher Education

catalogs, discovery layers, and other third-party indexes, OER is often limited to a siloed list of links on a LibGuide.

In this paper, the authors address the challenge of OER discoverability in the context of recent institutional and statewide OER initiatives. Specifically, we highlight current technical and descriptive barriers to OER discoverability, then we describe the Georgia Southern University Libraries' current approach to these challenges. We discuss the Libraries' decision to develop a hybrid metadata standard for OER, loosely based on the Institute of Electrical and Electronics Engineers' Learning Object Metadata (IEEE-LOM) standard for describing learning objects and their attributes, and how we deployed it through the institutional repository. Published in 2002, IEEE-LOM provides "a conceptual data schema that defines the structure of a metadata instance for a learning object." For this standard, a learning object is defined as "any entity—digital or non-digital—that may be used for learning, education or training," and a metadata instance for a learning object "describes relevant characteristics of the learning object to which it applies."

Although provisional, our approach ensures that Georgia Southern's growing collection of OER records can be adapted to any number of emerging metadata standards and exported to whichever third-party indexes gain popularity over time. Ultimately, this paper demonstrates that developing an effective metadata standard for OER is crucial for ensuring the discoverability and accessibility of these resources for learners and educators alike.

Literature Review

While the recent literature on OER cataloging and description indicates general consensus that standards-based record metadata is central to OER discovery, currently no shared standard exists. The attributes that make OER desirable for enriching learners' experiences also make defining a set of standards challenging, and established standards like MARC 21 and Dublin Core are limited in their ability to describe specific attributes of many OER. Butcher (2015), Nahhas et al. (2018), and Herrera-Cubides et al. (2021) concur that, despite increasing interest, OER metadata consistently suffers from openness, availability, reuse, and enrichment problems. According to Sobotka, Wheeler, and White (2019), the lack of standards raises the risk that unique OER will have multiple and inconsistent bibliographic records, further exacerbating discovery.

Recently, SPARC tackled this issue with the formation of the OER Discovery Working Group. The purpose of this group was to "catalyze a conversation among leaders and practitioners concerned with how to make OER more discoverable, to support the community in developing best practices, and outline potential next steps for how metadata standards could contribute to sustainable discovery infrastructure" (2020). The primary output of this group was the *OER Metadata Rosetta Stone* (2021), which "uses core terms from multiple metadata vocabularies to meet the specific context and requirements for application to OER." Still, many questions remain about how to develop and implement the *Rosetta Stone's* recommendations (Adams, 2022; Ruen et al., 2022; Boland, 2022).

To address these challenges, librarians at Georgia Southern have adopted a provisional approach based on an unpublished 2020 paper by Bobby Bothmann. Following an extensive meta-analysis of available metadata schemes for OER, Bothmann advises institutions not to wait for a perfect scheme but instead adopt the most complete and patron-friendly scheme they can find with the best chance of crosswalking records later on—if and when the OER community coalesces around a third-party repository or a scheme. Based on his meta-analysis, Bothmann recommends "only the OER Commons scheme, which is closely based on the IEEE-LOM, ticks off most of the boxes for desired metadata elements that would meet most user needs." Bothmann further recommends that "the IEEE-LOM should be promoted as the scheme of choice for all future OER metadata endeavors, not only because of the richness of the details it allows for in the description of OER, but also because it is built upon existing standards that are currently in use for material discovery."

Based on current trends and Bothmann's advice, the authors developed the following hybrid standard, loosely based on the IEEE-LOM standard, and deployed the standard within Georgia Southern's institutional repository.

Methods

Georgia Southern subscribes to bepress Digital Commons for its institutional repository, Digital Commons@Georgia Southern (https://digitalcommons.georgiasouthern.edu). Digital Commons is where the Libraries collect, archive, and disseminate the intellectual and creative output of the University's faculty, staff, students, and community partners. In addition to a small number of OER, some of the materials collected in the repository include campus publications, faculty and student research, theses and dissertations, datasets, and special collections. The repository also hosts 20 journals as well as materials from over 30 conferences and events.

Based on current trends and Bothmann's advice, the authors decided that Digital Commons was preferable to the catalog for making locally-generated OER discoverable, at least initially. Since Digital Commons is based on Dublin Core and the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), the platform offers greater flexibility compared to the catalog for customizing records, crosswalking those records from one standard to another, and externalizing them. The authors decided that, if a MARC 21 standard for OER were eventually to emerge, we would rather deploy our preferred standard through the repository, then crosswalk these records to the catalog rather than from the catalog to the repository. Also, because Digital Commons content is crawled and indexed by major search engines, using our preferred standard would make our OER quickly discoverable by a wider audience.

To create our hybrid metadata standard, the Digital Scholarship Librarian (DSL) familiarized themselves with the relevant metadata standards at the statewide, national, and international levels, including the most common elements required or recommended for describing digital content in general as well as those specific to OER. For statewide standards, the DSL first analyzed metadata records appearing in Affordable Learning Georgia's (ALG) Digital Commons repository (https://oer.galileo.usg.edu). This was to ensure that we included the same or similar elements used by

ALG in our records. The DSL then analyzed metadata guidelines for the Digital Library of Georgia (DLG) as well as the Georgia Knowledge Repository (GKR) to develop an awareness of recommended metadata for digital artifacts in Georgia's other statewide repositories.

For OER-specific national and international guidelines, the DSL leaned heavily on Bothmann's recommendations and studied both the OER Commons scheme and the IEEE-LOM to compile a list of metadata elements. After starting this analysis, the DSL learned about the *OER Metadata Rosetta Stone*, which further informed their understanding of elements to consider for crosswalking OER metadata to MARC 21. Also, the DSL reviewed MARC 21 and RDA formats for industry-wide cataloging standards. Taking these guidelines into account, the DSL was prepared to develop a hybrid standard and OER collection prototype in Digital Commons.

For this prototype, the DSL created a parent collection on a Digital Commons demo site for all OER, then a child collection for each subject area. The DSL organized the OER collection this way on the basis that a subject hierarchy provides a familiar browsing experience and aligns well with other library classification systems that group related items together. Georgia Southern supports numerous locally-generated chemistry OER, so the DSL developed this collection first. To do so, the DSL set up a "book gallery" series which generates a landing page of book cover images adjacent to title, author, and abstract information for each resource. The book gallery format provides a user experience similar to scrolling down a page of search results in the library catalog (See Figure 1).

Figure 1

Chemistry OER Collection Homepage

With the series prepared, the DSL finalized the metadata structure for our Chemistry OER records (see Table 1). The following metadata map provides a simple crosswalk between our Digital Commons elements and MARC, including the definition of each element and MARC fields for consideration when creating catalog records. Several of these elements are self-explanatory, including Title, Authors, Subjects, and Keywords. These are basic elements that we use as searchable access points in Digital Commons and they fit neatly with the MARC 245, 1XX, 7XX, and 6XX fields.

Table 1

Crosswalk of Digital Commons Elements and MARC

Digital Commons Elements	Definition	MARC Options
Title, Authors, Subjects, Keywords	Searchable access points describing the resource	245, 1XX, 7XX, 6XX
Course Title & Number	Course information as varying forms of the title	787, 580, 246
Description	Abstract or summary	520
Creative Commons License	Restrictions on access & use	506 & 540
Publication Date & Publisher	Publication & distribution information	264
Source	Related resource from which the OER is derived	500
Comments	Information about the grant/funding source	536
Material Type	Physical & digital file description	300, 347, 516
Format	File format (text, video, image)	Leader/06, 336, 337, 338
Upload File	URL where the resource is located	856

In addition, we included several OER-specific elements with recommended mapping to relevant MARC fields. The Course Title and Course Number element in Digital Commons may either be crosswalked to any number of 246 fields as varying forms of the title, or to the 787 field for Other Relationship Entry with a corresponding 580 field with a justifying note. This allows flexibility to include the *OER Metadata Rosetta Stone's* optional Alternate Title element depending on the specific metadata available on any given OER. This is an important consideration for OER that are created for use locally for a specific course versus those intended for wider use that may not include a course title on the resource itself. The Description element, or abstract, can be crosswalked to a MARC 520 summary field.

For the Creative Commons License element, we split this into two MARC fields: the 506 and the 540 fields. The 506 field notes restrictions on access. In this case, the materials are open access, which is useful to note. Also, the 540 field indicated in the *OER Metadata Rosetta Stone* includes terms governing the use of materials after access is provided. The Publication Date and Publisher elements describe publication and distribution information, which are separate fields in the Digital Commons record; however, we combined these into the 264 field in MARC. For the Source element, which is either a related resource or a resource from which the OER is derived, we used a 500 general note. We placed names and links to any associated grants in the Comments element in Digital Commons and into one or more 536 fields in MARC.

For Material Type, we adopted the OER Commons (2019) list and descriptions and mapped this information to the 300 field for the physical description and extent of the material, the 347 field for digital file characteristics, and the 516 field for a note about the computer file type. Format is defined in the OER Commons metadata template as the media type of the item, which we configured in the Digital Commons record template as either text, video, or image. This corresponds to the Leader/06 and the 366 fields, which describe the type of content. Regarding the 337 and 338 fields for RDA cataloging: although we do not require similar elements in Digital Commons, our metadata map includes a reminder to include the media type or device required to use the OER as well as the carrier type or format of storage. Finally, the URL to the record in Digital Commons maps easily to the 856 field. We recommend that the URL to the institutional repository record be used in the catalog record so that the repository can gather usage data for the resource regardless of where or how the copy of record is hosted.

To help with creating records, the Digital Commons platform supports adding customized instructions to the metadata forms used to create records on the back end. To facilitate creating quality records that we can crosswalk to other standards in the future, the DSL adopted this feature to include definitions and recommendations from the metadata map in Table 1. These instructions help guide repository staff when gathering and recording metadata, and they can be shared with the cataloging staff to help transpose collection elements into the appropriate MARC fields. Appendix A provides a table with the Digital Commons metadata field, input type, and instructional text included in Digital Commons. Currently, not all elements have instructional text, and some elements may be re-titled in future versions of the standard.

In addition to developing the prototype collection and provisional metadata standard, the authors also developed the necessary tools and workflows to implement the collection. Working together, the DSL and OER Librarian (OERL) developed eligibility criteria for OER to be included in the collection as well as an online form for the OERL to submit resources for inclusion. Currently, the scope of the collection is limited to resources created or adapted by faculty at Georgia Southern. Eligibility is based on the recommendation of the OERL who works directly with faculty and is therefore best able to select resources for inclusion.

Responses to the online form become tickets and are automatically forwarded to a LibAnswers ticketing queue to be retrieved by the repository staff. After the resource is added to the repository collection, the ticket is transferred to the cataloging staff to create a bibliographic record for the resource

in MARC format and added to the catalog. As part of this process, the cataloging staff add the record to a bibliographic collection for OER that is searchable in the catalog. An electronic "portfolio" is added to the record, then the bibliographic collection is added to the portfolio. This ties the MARC and holdings records to the bibliographic collection. The final step is adding the catalog permalink to the repository record. This last step ties the catalog and repository records to each other, making the OER fully discoverable through Digital Commons and the library catalog.

Results

With the provisional metadata standard and workflows completed, the authors published the prototype OER collection during summer 2023 (https://digitalcommons.georgiasouthern.edu/oer). At the time of this writing, the collection includes four records in three subject areas: chemistry, education, and history. Currently, the OERL is identifying OER developed or adapted by Georgia Southern faculty that are good candidates for the collection and will submit these suggestions via the online form to the institutional repository staff for addition to the repository.

The online form provides a reliable method for notifying technical services personnel of the existence of new OER. Required information on the form ensures that minimum metadata about the OER is available to create institutional repository and MARC records, and additional information needed for creating descriptive metadata is pulled from sources outside of the form. For OER published by the University System of Georgia, we found that the best resource for copyright and publisher information is located on OpenALG's website, not always on the OER itself.

These early submissions have resulted in several revisions to the OER submission form. For example, the initial form allowed for the selection of only one option for fields like "intended audience" and "type of material." However, some OER are appropriate for multiple audiences, and some include multiple formats like worksheets, problem sets, videos, and images. The initial form did not allow for all features or potential audiences for these OER to be described. As a result, the OERL requested changes to the form to allow more than one option to be chosen for several fields.

Our experience with using the form indicates a need for ongoing revisions, including adding options for the OERL to include comments; removing questions that are available on the OER itself or involve "cataloger's judgment" (e.g. subjects and additional notes); and re-sequencing the form so that the order of questions aligns with the order of metadata fields in the institutional repository and catalog. These changes support the creation of more complete records. Figure 2 presents an example record in Digital Commons, and Appendix C presents the corresponding bibliographic record in MARC.

Figure 2

Example OER Record in Digital Commons

The Enola Gay Controversy, 1994-1995

Allison Belzer, *Georgia Southern University*
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PLUMX METRICS

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Description
This role-playing game for the classroom focuses on the turmoil surrounding the planned exhibit of the Enola Gay aircraft in 1995 at the National Air and Space Museum. The materials help students engage in debates over who controls history, and the role museums and/or the government should play in shaping culture and identity. Materials include a game book for students, character roles from the period, an Instructor's Manual, and sources to encourage research on World War II and the 1990s culture wars. The LibGuide includes primary and secondary resources for reference.

Course Title
World History 2, US: A Comprehensive Survey, Ethics & Values in History, Readings in American History

Course Number
HIST 1112, HIST 2110, HIST 3050, HIST 7631

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Publication Date
6-5-2023

Language
English

Format
Text

Educational Use
Curriculum/Instruction

Audience
Student

Publisher
University System of Georgia

City
Athens, Georgia

Keywords
Enola Gay (Bomber), World War II

Disciplines
History | Political Science | United States History

Comments
Supported by an Affordable Learning Georgia grant from the University System of Georgia: https://alg.manifoldapp.org/projects/enola-gay-controversy-game

Currently, all record creation in the repository is handled by the DSL, and all cataloging is handled by the Collection Management Librarian (CML). This is to ensure that records are created consistently early in the development of the collection, that the DSL and CML are able to consult with each other about any issues that arise with the provisional metadata standard or workflows, and the DSL and CML are able to develop and test written workflows for their staff in preparation for the transfer of responsibilities. During testing for this project, the DSL developed a workflow to create LibAnswers tickets to transfer to the CML after each OER record is added to the repository. These tickets provide an easy way to track progress on the record as well as a space to ask clarifying questions and provide information about the OER that is not recorded on the institutional repository or MARC record, such as OER submission form responses.

In addition, the CML developed MARC record templates for use during cataloging. Developing a record template for standard metadata quickens the cataloging process by allowing the CML to consistently select the necessary information from the Digital Commons record or the resource itself. Also, as of this writing, the DSL and CML are working together to determine what standardized language, if any, is needed for certain fields like the 506, 536 and 540 for licensing information. Different licenses require different languages, so the CML will create workflows as needed for the different licenses, ensuring consistency.

Next steps for this project are to continue testing and refining this provisional standard and workflows. Then we will begin developing crosswalking tools necessary to externalize records to third-party indexes. The authors will seek feedback from colleagues and faculty on the usability of the records in the repository and the catalog and investigate ways to increase discoverability in those contexts. While this standard remains untested for crosswalking our records to other third-party standards, the authors believe that it is sufficiently flexible and robust such that any resultant records will be amenable to adaptation as standards develop over time. The scope of this project began with analyzing metadata schemes within the OER literature, but as the project evolves, the authors intend to draw upon metadata work in the wider digital collection community and look for methods to scale up the workflow. As the collection grows, the OERL will integrate discovery training into their reference and consultation work with faculty.

Discussion

Recently, the Institute for the Study of Knowledge Management in Education (ISKME) (2023) proposed five personas required to fully support OER discoverability. These personas include specialists in OER reference, course design, and collections maintenance. In some instances, these personas may reside outside the library; for example in a faculty center for teaching and learning. In other instances, a single librarian may be responsible for supporting multiple or all of these personas. Regardless, fully supporting OER discoverability requires expertise in several domains of professional practice. As mentioned in the introduction, many librarians tasked with OER work serve in public service roles, including reference and instruction. While this is beneficial to local promotion of OER services and

OER development, collaboration with technical services colleagues is imperative for expanding OER discoverability.

Throughout this project, public and technical services librarians collaborated to solve shared challenges of OER discoverability. As of this writing, the authors have increased the discoverability of OER developed at the institution by integrating these resources into the institutional repository and the catalog. By extension, these records have or will become discoverable through OCLC, Google, and other third-party indexes that harvest Digital Commons content, including the Georgia Knowledge Repository (https://gaknowledge.org). In the long term, the authors have established a provisional framework for externalizing these records as third-party standards develop and as interest coalesces around third-party OER indexes.

By following Bothmann's advice not to wait for consensus to emerge around a single standard for OER description and cataloging, Georgia Southern has sought to cherry-pick elements from multiple nascent but promising standards, develop explicit rules for crosswalking these elements to MARC, and make progress where we can toward exporting our growing collection of institutionally-developed OER to other third-party indexes. This standard includes elements encompassing what our public and technical services librarians believe is the information patrons need to find relevant OER, both now and in the future. This metadata provides patrons with detailed information about the resource they are viewing. Patrons understand the resource through the provided descriptions and resource contents notes. This information is particularly useful to students and faculty using the material for course work.

Moreover, accurate metadata ensures not only that OER is findable and usable by students and faculty, but also by the five professional personas identified by ISKME as supporting discoverability. Some metadata is particularly useful to OER creators. For example, the 536 and 540 MARC fields provide licensing information that explains how these works can be reused. As such, accurate metadata goes beyond discoverability and use, but it is important for re-use and contributes to the long-term value of these works.

Lastly, for the OERL and other public services librarians at Georgia Southern, making our faculty's OER searchable and discoverable through the institutional repository and the catalog has several advantages. Promoting these works internally to other faculty and externally to other colleagues and institutions is easier, and faculty awareness of OER is increased overall. Also, the University System of Georgia recently mandated that faculty explicitly document activities that support student success, so including these works in the repository and the catalog increases the visibility and caché of their works and makes documenting these activities in annual performance evaluations and promotion and tenure reviews easier. This makes evaluating local and regional OER initiatives easier as well.

Conclusion

Despite growing interest in OER, discoverability by learners and educators remains an obstacle to access. Improving discoverability begins with confronting technical and descriptive barriers in

metadata. Our process of building on existing OER metadata standards to create record templates, producing a metadata crosswalk between Digital Commons and MARC, and developing an OER ingestion form provides a path forward. Public services librarians already working with OER may benefit from inviting technical services colleagues to adopt similar practices at their own institutions.

OER's potential to transform education indicates a need to invest library expertise across the specialized realms of public and technical services. Ensuring that OER is searchable and discoverable requires that OER be added to digital repositories and library catalogs. By capitalizing on public and technical services expertise through ongoing collaboration, Georgia Southern University has successfully launched an institutional OER collection employing a provisional metadata standard to support discovery in the near-term until the OER community coalesces around a shared standard.

Acknowledgements

Conflict of Interest Statement

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendixes

Appendix A. Digital Commons Submission Form

Customized submission form for creating OER metadata in Digital Commons.

Metadata Field	Input Type	Field Instructions
Title	Single-line text box.	Use for the 245 field on a MARC record.
Authors	Text box.	Include creators and contributors responsible for making the OER. Use for the 1XX, 7XX fields on a MARC record.
Description	A large text box with HTML formatting tools.	The abstract or summary of the resource. Use for the 520 field on a MARC record.
Course Title	Single-line text box.	Use for the 246 field or the 787/580 fields on a MARC record.
Course Number	Single-line text box.	Use for the 246 field or the 787/580 fields on a MARC record.
Creative Commons License	Drop-down to select from a list of options.	Use for both the 506 and 540 fields on a MARC record. This is an open access resource with no restrictions on access (506 field). Restrictions on the right to reproduce are determined by the Creative Commons License (540 field): https://creativecommons.org/about/cclicenses/
ISBN	Single-line text box.	When applicable. Use for the 022 field on a MARC record.
Publication Date	Text box.	Use for the 264 field on a MARC record.

Metadata Field	Input Type	Field Instructions
Source	A large text box with HTML formatting tools.	A related resource from which the described resource (OER) is derived. Include a link to the related resource. Use for the 500 field on a MARC record.
Language	Single-line text box.	Enter the language(s) in which the OER is written.
Material Type	Drop-down to select from a list of options. The list includes all material types defined by OER Commons.	Select the type that best fits the definition by OER Commons: https://help.oercommons.org/support/solutions/articles/42000046908-material-types-. Use for the 300, 347, and 516 fields on a MARC record.
Format	Drop-down to select from a list of options. The list includes Text, Video, or Image.	Use for the Leader/06 and 336 fields on a MARC record to describe the form of communication (text, audio, video, image, etc.). Include fields 337 (device required to view the content) and 338.
Educational Use	Drop-down to select from a list of options. The list includes Curriculum/Instruction, Assessment, Professional Development, and Other.	Defined by OER Commons as the purpose of the material for education.
Audience	Drop-down to select from a list of options. The list includes Student, Faculty, Administrator, Parent, Teacher, and Other.	Use for the 521 field on a MARC record.
Publisher	Single-line text box.	Use for the 264 field on a MARC record.
City	Single-line text box.	Use for the 264 field on a MARC record.
Keywords	Single-line text box.	When cataloging, adapt to Library of

Metadata Field	Input Type	Field Instructions
		Congress Subject Headings. Use for the 6xx fields on a MARC record.
Comments	A large text box with HTML formatting tools.	Information about the grant/funding source. Include a URL to the grant/funding source. Use for the 536 field on a MARC record.
Upload File	Radio button to upload a file or link out externally.	This is the location of the resource. Use for the 856 field on a MARC record. For cataloging, the URL should go to the record in Digital Commons.

Appendix B. OER Submission Form

The scope of the OER collection is resources adapted and/or created by Georgia Southern (GS) faculty. Eligibility for inclusion is based on the OER Champion's recommendation.

Required Information

1.   Title of the OER:
2.   Names of GS faculty who adapted/created the OER:
3.   Publication date *(At a minimum, provide the year. Provide the semester or exact date if known.)*:
4.   URL where the OER is available *(Provide the link to the exact OER that we are adding to the collection)*:
5.   Description or abstract of the OER:
6.   What work is this OER adapted from? Provide a link to the original resource if available. If this OER is a creation, write N/A.
7.   What is the subject area for this OER?
a.   Chemistry
b.   Biology
c.   Education
d.   Engineering
e.   History
f.   Mathematics
g.   Other…

8.   What type of material is the OER? Material types are defined by OER Commons here: https://help.oercommons.org/support/solutions/articles/42000046908-material-types-

a.   Activity/Lab

b.   Assessment

c.   Case Study

d.   Data Set

e.   Diagram/Illustration

f.   Full Course

g.   Game

h.   Homework/Assignment

i.   Interactive

j.   Lecture

k.   Lecture Notes

l.   Lesson

m.   Lesson Plan

n.   Module

o.   Primary Source

p.   Reading

q.   Simulation

r.   Student Guide

s.   Syllabus

t.   Teaching/Learning Strategy

u.   Textbook

v.   Unit of Study

w.   Other…

9.   What is the educational purpose of this OER?

a.   Curriculum/Instruction

b.   Assessment

c.   Professional Development

d.   Other…

10.   Does this OER include … *(check all that apply)*:

a.   Text/documents

b.   Video recordings

c.   Images

d.   Audio recordings

e.   Other…

Optional Information

If this is known; it helps with discovery.

1.   Is the OER static or dynamic? Static content is fixed and will not change. Dynamic content has changed or updated since first published.

a.   Static
b.   Dynamic
c.   Both (if both, please email a PDF of the OER as it was first published)
2.   Course Title
3.   Course Number
4.   Who is the audience for this OER?
a.   Undergraduate Student
b.   Graduate Student
c.   Faculty

Appendix C. OER MARC Record

=LDR 04016nam a2200601 i 4500

=001 on1393224450

=003 OCoLC

=005 20230810023909.0

=006 m\\\\\o\\d\\\\\\\\

=007 cr\|||||||||||

=008 230810s2023\\\\gaua\\\\ob\\\\000\0\eng\d

=040 \\ $a GPM $b eng $e rda $c GPM

=035 \\ $a (OCoLC)1393224450

=041 0\ $a eng

=050 \4 $a D767.25.H6 $b B45 2023 (Online)

=049 \\ $a GPMM

=100 1\ $a Belzer, Allison Scardino, $e author.

=245 14 $a The Enola Gay controversy, 1945-1995 /$c Allison Scardino Belzer & Alena Pirok with Zach Graham, Breanna Lively and Eric Thompson.

=250 \\ $a Version 2.1

=264 \1 $a Athens, Ga. :$b University System of Georgia ;$c 2023

=300 \\ $a 1 online resource :$b illustrations (some color)

=336 \\ $a text $b txt $2 rdacontent

=337 \\ $a computer $b c $2 rdamedia

=338 \\ $a online resource $b cr $2 rdacarrier

=385 \\ $a Students $2 lcdgt

=504 \\ $a Includes bibliographic references.

=505 00 $t Introduction $g 3 --$t Basic features of role-playing games $g 4 --$t Suggested schedule of classes $g 6 --$t Historical background $g 9 --$t Timeline $g 14 --$t Game mechanics $g 17 --$t Available documents $g 23 --$t Suggestions for further reading $g 24

=506 0\ $a Open access $f Unrestricted online access $2star $5 GAGAL

=520 \\ $a This role-playing game for the classroom focuses on the turmoil surrounding the planned exhibit of the Enola Gay aircraft in 1995 at the National Air and Space Museum. The materials help students engage in debates over who controls history, and the role museums and/or the government should play in shaping culture and identity. Materials include a game book for students, character roles from the period, an Instructor's Manual, and sources to encourage research on World War II and the 1990s culture wars. The LibGuide includes primary and secondary resources for reference. - From Digital Commons OER record

=536 \\ $a Supported by an Affordable Learning Georgia grant from the University System of Georgia: https://alg.manifoldapp.org/projects/enola-gay-controversy-game

=540 \\ $a This work is licensed under a Creative Commons Attribution-Noncommercial-ShareAlike 4.0 license that lets others remix, adapt, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms. $f CC BY NC-SA $2 cc $u https://creativecommons.org/licenses/by-nc-sa/4.0/

=580 \\ $a Created for use in the Department of History, courses HIST 1112, HIST 2110, HIST 3050, and HIST 7631 at Georgia Southern University.

=651 \0 $a Hiroshima-shi (Japan) $x History $y Bombardment, 1945 $x Study and teaching.

=610 20 $a Enola Gay (Bomber) $x Study and teaching.

=650 \0 $a Historiography $x Case studies.

=650 \0 $a Decision making $x History.

=610 20 $a National Air and Space Museum $x Exhibitions.

=610 20 $a Georgia Southern University $x Curricula.

=655 \7 $a Instructional and education works $2 lcgft

=655 \7 $a Role-playing games. $2 lcgft

=700 1\ $a Pirok, Alena, $e author

=700 1\ $a Graham, Zach, $e author

=700 1\ $a Lively, Breanna, $e author

=700 1\ $a Thompson, Eric, $e author

=700 1\ $a Cannon-Rech, Nikki, $e contributor

=700 1\ $a Hopkinson, Caroline, $e contributor

=787 08 $i Created for use in: $a Georgia Southern University. Department of History .$t HIST 1112 - World History II

=787 08 $i Created for use in: $a Georgia Southern University. Department of History. $t HIST 2110 - U.S. A Comprehensive Survey

=787 08 $i Created for use in: $a Georgia Southern University. Department of History. $t HIST 3050 - Ethics and Values in History

=787 08 $i Created for use in: $a Georgia Southern University. Department of History. $t HIST 7631 - Readings in American History

=856 40 $3 OpenALG $u https://alg.manifoldapp.org/read/shrine20230605-28768-1u91eoc/section/abb1cf53-8e83-481d-96bd-794f324c11be $ 70

=856 42 $3 Digital Commons @ Georgia Southern $u https://digitalcommons.georgiasouthern.edu/oer-history/1/

=994 \\$a C0 $b GPM