

# Synthesis of Learnings from the Museums for Digital Learning Initiative

Kate Haley Goldman

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# Museums *for* Digital Learning

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## Introduction

Museums for Digital Learning (MDL) was an online platform populated with collections content from museums nationwide, used by teachers and students to enrich learning. MDL was conceived by the Institute for Museum and Library Services (IMLS) and developed through a cooperative agreement between IMLS and several museum partners, including Newfields, History Colorado, and The Field Museum. IMLS funded the effort from 2018 to 2025, when the agency made the decision to sunset the project. IMLS has asked HG&Co, the long-term evaluator of the project, to document what was learned from the creation and growth of the platform, so that future efforts, both those directly and partially related, could learn from MDL.

This synthesis is built from a detailed review of project timelines, goals statements, meeting notes, software documentation, and evaluation reports, along with in-depth interviews of members of the MDL project team from early through late stages of work. For a detailed listing of the sources for this document, consult Appendix A.

## Project Background and Context

### Goals and Vision

Museums for Digital Learning (MDL) was conceived as an ambitious national initiative designed to connect museum collections with K–12 classrooms nationally. At the time of its development and still presently, there are no comparable platforms specifically focused on a centralized online site to enable educators to access and use digitized museum collections across museums. While online repositories of lesson plans and educational materials exist, MDL occupied a distinct space: one grounded in digitized collections, leveraging authentic museum content as primary sources for classroom instruction.

The project was intentionally broad in scope. MDL was designed as:

- National, aggregating contributions from museums across the United States
- Cross-disciplinary, spanning history, science, art, and other domains
- Multi-institutional, enabling participation from both large and small museums



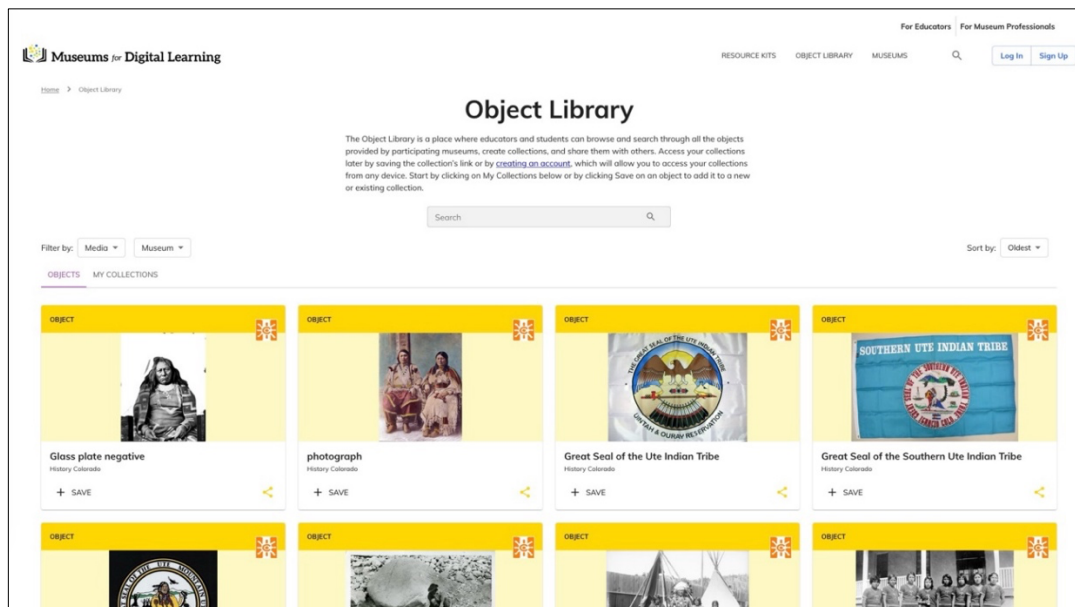
In an early conceptual document describing MDL’s innovative vision, Balboa Park Online Collaborative wrote,

*“The diversity of products available is broad and inconsistent; they are often buried deep within museum websites and built on legacy technology. The models and efforts are siloed, fragmented, lack scale and are not of a quality that generates the powerful outcomes and impact they need to. The resources often lack context and meaningful interpretive content...This project is intended as “learner-first”, rather than collection-first, that is to say the current inside-out model of collection-based museum education, where themes, topics and modes of learning are driven by the collection objects will be flipped to define the themes, topics and modes first.”*

In this “flipped” version of a collections-based platform, the contextual information, activities, and prompts provided would be easily integrated with topics and lessons, allowing a teacher-facing, rather than museum-facing, classroom-ready set of resources.

The intended outcomes of this vision were equally ambitious. MDL aimed to:

1. Broaden the use of museum collections in K–12 education by making them more accessible and discoverable
2. Change teacher practice, encouraging educators to incorporate primary sources and object-based learning into their instruction
3. Elevate museum collections as active educational assets rather than static archives



## The Foundational Elements of MDL

### Digitized Collections

IMLS has spent decades supporting the digitization of collections content at museums of every size. This effort is absolutely critical to museums. Objects and documents that may have been hidden in storage for decades or more can finally be viewed, searched, and cross-referenced if tagged with metadata and placed in an organized, searchable, online-accessible database. Digitized collections enable many core activities within a museum, such as exhibition curation. Public access to digitized collections has enriched knowledge of history, science, and art.

Despite all of these important benefits, digitization projects are generally not regarded as exciting or forward-looking. The actual process is time-consuming and expensive, often prohibitively so for smaller museums. Decades of effort have only captured a portion of the objects in collections, though members of the public frequently assume that all the objects in a museum have already been digitized. Once items have been digitized and made public, those items reside on the websites of individual museums, making discovery and cross-referencing challenging.

IMLS saw multiple opportunities within digital collections. First, a single platform where content was contributed by museums across the United States would provide much greater access. For example, a member of the public seeking certain objects from a specific indigenous tribe would be able to search across many museums, including museums they had previously not known about. By maintaining a clear link to the museum that owns the object, the platform would allow the public to discover new institutions both nearby and across the country. Smaller museums that may not be able to maintain their own website with a digital catalog of their collections would have a place to showcase them.

### Building on the Credibility of Museums and IMLS

Museums are known to be one of the most trusted institutions in America. When the public seeks facts, they know that museums will offer vetted, accurate information. Teachers value that expertise and the authenticity of the content and objects. The institutional credibility of museums allows educators to trust the content provided and to be able to defend their choices to their school administration.

IMLS could and did serve as the convenor for this platform, a role it would be challenging for other organizations to play. A single museum would face challenges in creating a cross-institutional platform, as other museums might fear that their contributions and name recognition would decrease. A commercial effort across museums to build a collections-based



platform for educators could also be fraught, bringing challenges around content ownership, lack of participation from smaller local museums, and costs to educators, museums, or both.

As a primary funder, with relationships with hundreds of museums of all sizes and types, IMLS had the ability to bring these museums to the table and the positionality to instill trust in the effort.

### Collections-based Resources for Educators

A collections-based online platform for educators would be quite unique among the large number of online educator resources available. There are many websites, both commercial and free, that offer classroom activities and curriculum for educators to utilize. Museums also offer such resources. It is less common for these sites to base their lessons and activities on actual museum objects, photographs, and documents. Teachers seek primary sources for their lessons, and museum educators often take an objects-based learning approach, yet the opportunity to connect objects and teachers remained unrealized until MDL. By providing a centralized resource, MDL could provide teachers with access to trustworthy sources that would otherwise remain distributed and difficult to locate.

### Core Project Partners and Roles

IMLS, primarily through Paula Gangopadhyay, the 2016-2021 Deputy Director of the Office of Museum Services, provided the vision for MDL, and convened the three core partners. In addition to the core partners, the team worked a set of teacher ambassadors, who represented a diversity of subjects, grades, geography, and experience. They strongly informed the pedagogical approach we took with the resource kits, as well as the site's interactivity.

At the start of the project, **Newfields**, at the time called the Indianapolis Museum of Art (IMA), was well-known within the museum technology community for its IMA Labs, which designed and launched innovative museum technology experiences both for IMA and other museums. Newfields served as the lead institution from 2018 to 2020, and the technology platform development partner throughout the project.

**History Colorado** was one of two primary content partners for the project, and the lead institution from 2021 to 2025. They have co-created the strategy, user definition and experience, framework, tactics, templates; and contributed significant data, assets, interpretative content, collaborated on the technical strategy, and oversaw the educational content creation for the project.



**The Field Museum** was selected for its in-depth process in creating high-quality content for educators. The Field Museum led the educator ambassador group, soliciting their expertise and knowledge. The Field Museum was also a primary content partner, particularly in the earlier years of the grant, also contributing assets and interpretive content.

As a direct project of IMLS rather than a project conceived elsewhere and funded by IMLS, IMLS funded the development of MDL through a cooperative agreement. Cooperative agreements can be seen as similar to a grant but with substantive involvement of the federal funder. In this case, IMLS provided the vision, selected the partners to carry out that vision, and remained an active partner throughout the project.

## MDL Structure and Approach



At its core, MDL operated through a content aggregation and distribution model, in which museums contributed materials that were then accessed and used by teachers. Digitized objects, and potentially previously written educational context and activities, were embedded within a broader educational context. By situating objects within a structured interpretive framework, MDL aimed to make them more meaningful and usable for educators.

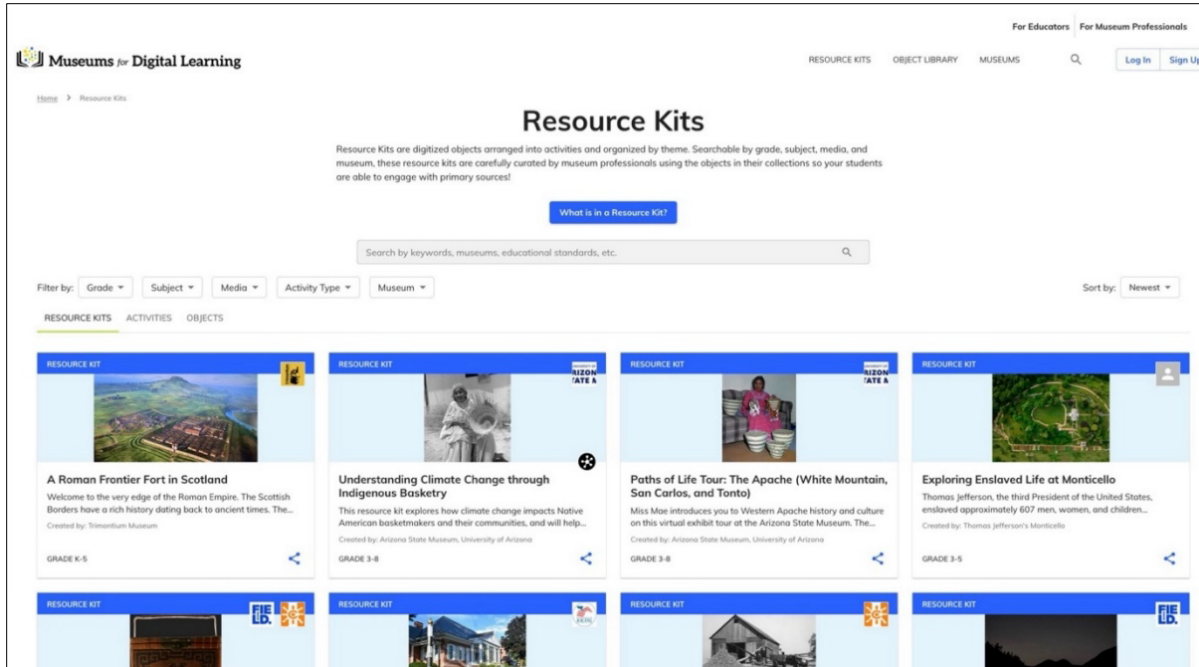
What MDL contained evolved over time. At initial launch, the platform contained a Collections Hub, where the collection items and their interpretive content were located. Later, based on teacher feedback, the Collections Hub became the Objects Library.

## Resource Kits

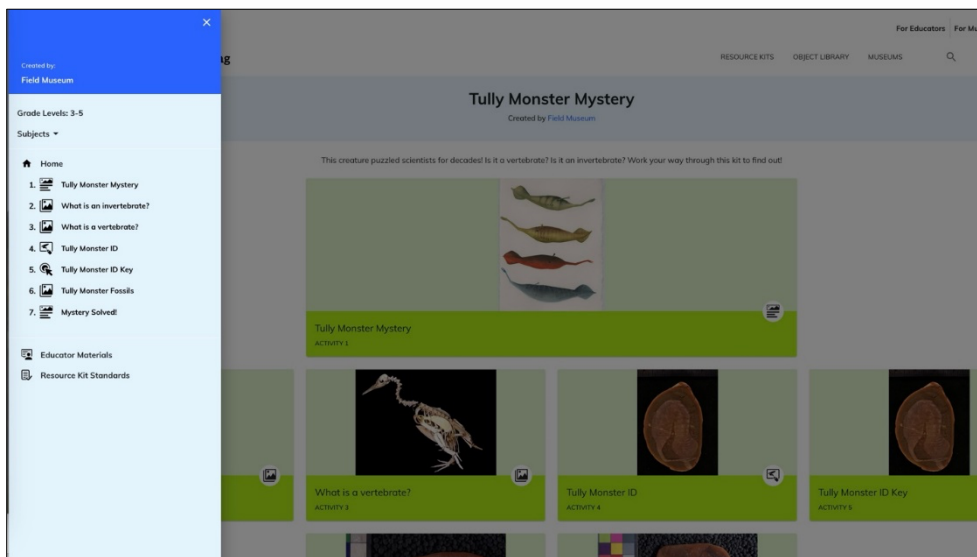
Resource Kits and the Objects Library formed the core of the MDL platform. The core of MDL was the collection of resource kits. Resource Kits included objects and interpretive materials, such as contextual information and guiding questions. At the time of launch, Resource Kits contained features such as the ability to annotate or draw on the images of the objects, an escape room activity, and a game titled Apples to Oranges.

Both the Resource Kit and the Object Library used a tile design, where options appeared as a tile containing the name of the Resource Kit, icons for different types of objects or kits, and a picture of the core object or related content.





Opening a Resource Kit, the first page that would appear was a set of tiles, with one for each section of the Resource Kit, and icons indicating the type of activity. Teachers could click on a table of contents to see each of the sections about the object, as well Educator Materials, and Resource Kit Standards.



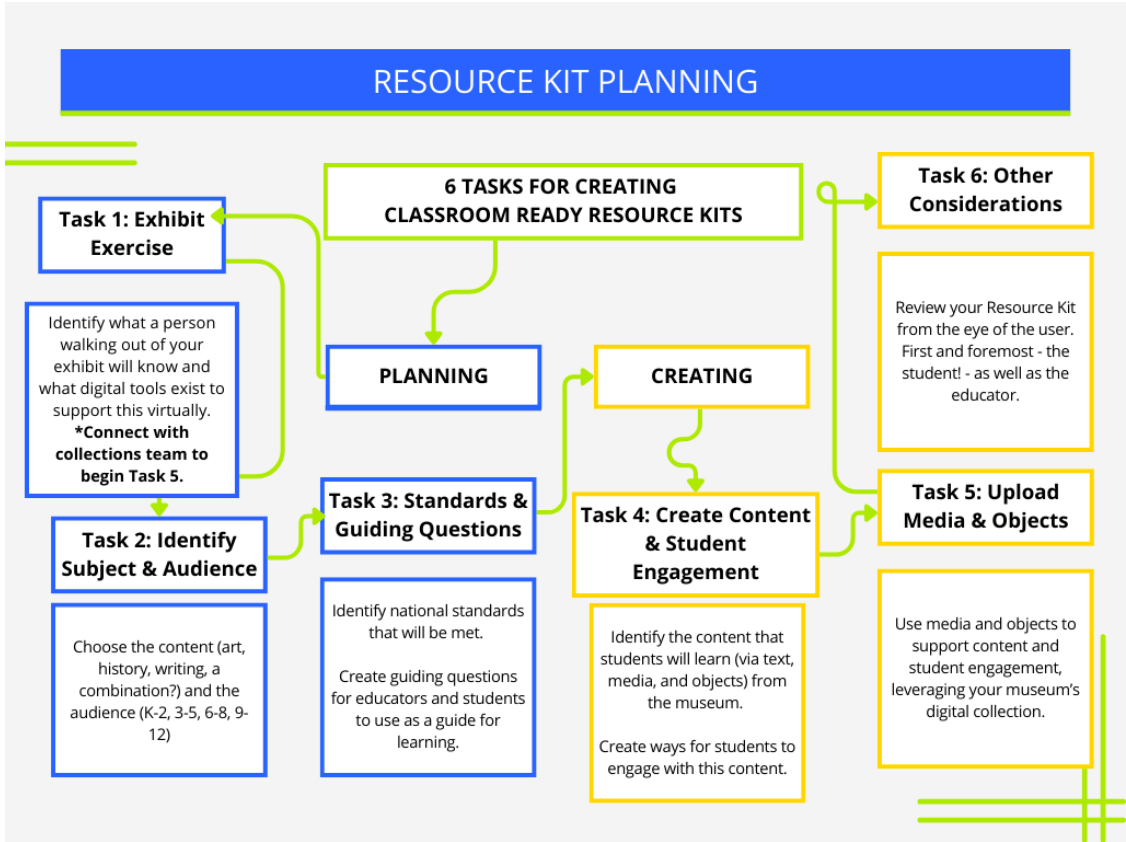
# Learnings from MDL

The process of building, growing, and sustaining MDL yielded many insights, strategies, and resources. One goal of this synthesis report is to enumerate these insights and strategies so that future collections-based platforms for educators may benefit.

## Generating Content to Meet Teacher Needs

Teachers have very specific needs for resources to be used in the classroom. Having high-quality resources is fundamental. Many museum contributors were used to crafting educational materials that worked during a field trip, or as a pre or post-visit exercise. Seeing the gap between what teachers needed and what museums were providing, MDL developed a process to teach museum staff how to create and format materials to be high-quality and classroom-ready.

Figure 1: Resource Kit Planning Flow-Chart



MDL’s process was to create overviews and templates for museum staff to follow in creating content. Early feedback suggested that museum staff were challenged by the effort to upload assets and create content.

## Understanding the Teacher Adoption Process

One central insight derived from the MDL process is how teachers discover, evaluate, and potentially adopt the use of online resources and how this was considered throughout the platform design.

Teachers have a complex set of criteria and processes for evaluating a resource before adopting it through regular use. When teachers encounter a new online resource platform, their evaluation process is typically rapid, pragmatic, and shaped by the constraints of classroom planning. One of the earliest considerations is whether the site appears credible and trustworthy. Teachers look for signals such as recognizable institutional affiliations, clear authorship, and alignment with established educational or cultural organizations. Museum-backed platforms have an advantage in this regard, as the association with known institutions can convey accuracy and reliability. This initial assessment is not deeply analytical, but it is decisive; if the site does not quickly communicate legitimacy, teachers are unlikely to invest further time exploring it.

### Teacher Pathway Through the MDL Site

The image shows a screenshot of the Museums for Digital Learning website. The main header features the logo and navigation links for 'RESOURCE KITS', 'OBJECT LIBRARY', and 'MUSEUMS'. There are also links for 'Log In' and 'Sign Up'. The main content area has a blue background with the text 'Welcome to Museums for Digital Learning' and 'Bringing museums into your classrooms, digitally!'. A green button at the bottom says 'Start Exploring'. Three callout boxes provide insights into teacher pathways:

- FIRST** (after exploring the home page briefly): most teachers click on **Resource Kits**, though some start with *Object Library*.
- SECOND**: most go to **Object Library**. Those who started here go to *Resource Kits* second.
- LAST**: Most leave the site after exploring one or two Resource Kits.
- A few go to *For Educators* or *Museums* (but not both) before leaving the site.

Once a platform passes this initial credibility check, teachers move quickly to a more practical test: whether the site contains material that is directly relevant to what they are currently

teaching. Rather than browsing broadly, teachers typically search for specific topics, grade levels, or units they are actively planning. This is a targeted, time-sensitive process, often occurring under significant time pressure. Teachers are looking to determine, within a short window, whether the site can help them solve an immediate instructional need. If they are unable to quickly locate relevant content—or if the search process is confusing or requires too much effort—they are more likely to abandon the site and return to more familiar or efficient resources.

In this early stage of evaluation, teachers are not yet focused on deeper qualities such as pedagogical richness or long-term value. Instead, they are assessing whether the platform meets a set of threshold criteria that allow them to proceed:

- The site appears credible and trustworthy
- The purpose of the platform is immediately clear
- Relevant content can be found quickly and with minimal effort
- The material appears usable within their existing classroom context

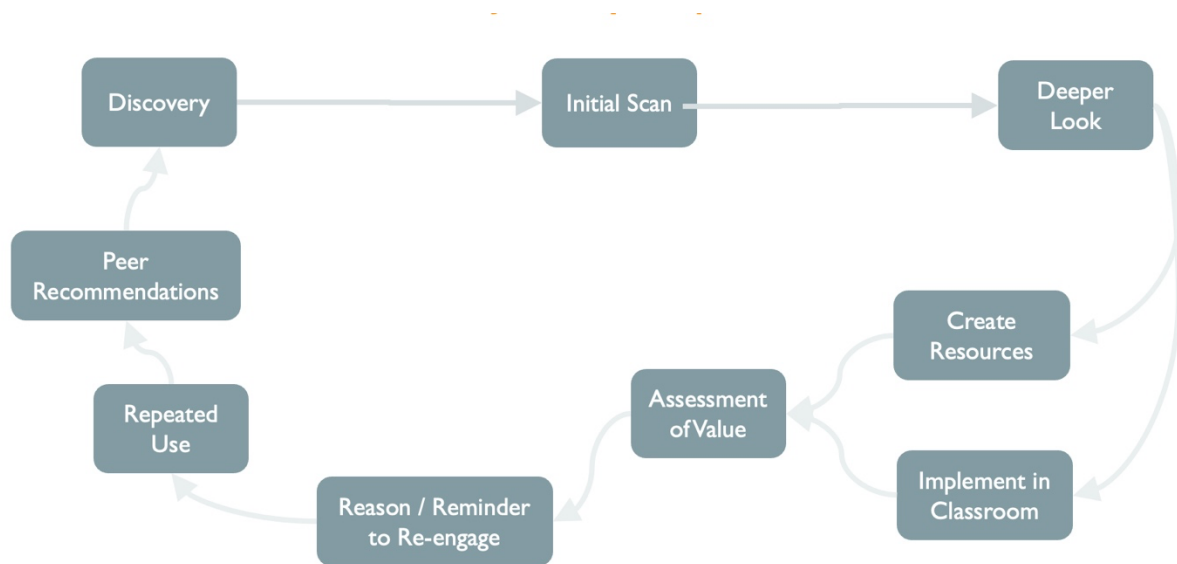
Generally, teachers will not continue to explore the platform in greater depth if these criteria are not met. If any of these elements are missing or unclear, the site is less likely to become part of a teacher's regular set of instructional resources.

This initial scan is the first step on the road to teacher adoption of an online resource. If, in the initial quick scan, teachers feel the site meets their criteria, they may begin a deeper look to determine whether the site has the specific resources they need for an upcoming lesson, including whether the resources are high-quality, age-appropriate, adaptable to the needs of their particular classroom, fit well into the curriculum being taught, the amount of time the teacher has, how much time and effort it will take to get the resources ready to use in the classroom, and other considerations.

If, after considering all of those elements, the teacher goes on to implement within their classroom, afterwards they will reflect on whether resources added value to the lesson, and whether they would use that online resource platform again. Concluding that the resource platform might be something they will want to use in the future does not guarantee they will actually become repeat users. They may need to have a reminder or a specific reason to re-engage. For those creating an online resource platform such as MDL, the goal is for teachers to engage in repeated use and recommend the resource platform to other teachers, growing the use of the platform.

For museum staff deciding whether or not it makes sense for their institution and is worth their time to create resources, the path is very similar. The museum staff will make an initial scan, and if they believe it might be worth pursuing, take a deeper look to understand what is needed to contribute content before actually creating the resources or modifying the resources they already have.

**Figure 2: Schematic of Teacher Resource Adoption & Museum Contribution Path**



This path has several implications for the design and deployment of an online resource for educators. Each step along the path to adoption has several criteria that the resource must meet for teachers to proceed.

### When to Launch

Several of the issues MDL encountered led to considerations around when and how to launch resource platforms, particularly a collections-based resource platform.

#### Teachers Need More than a Minimal Viable Product

Software in the commercial world is frequently launched in a beta, or even alpha, format, with the understanding that the software features and capabilities will be continually improved after launch, including more features and better usability. Launching what is known as a ‘minimal viable product’ (MVP) requires early adopters of the software to expect a rocky or incomplete experience and be willing to continue to use it as the product gets better. For busy teachers and

museum educators, however, time is limited enough that if an initial assessment of a software or product is not useful or not functioning well, they will be unlikely to return.

### Gaining Critical Mass

When teachers engage with a site they deem reputable, engaging, and easy-to-use, early in their process, they are going to browse or search for content resources that will work with their subject matter, such as a particular genre of art or a time period in history. When their search turns up little information or missing topics, their confidence that the site will be useful for them decreases. For example, a history teacher seeing one resource for the Civil War, or resources for the Civil War and the War of 1812, but not the Revolutionary War, would lose some confidence that the site will meet their needs.

### Start with a Narrow Scope of Topics or Grades

MDL was designed to be a multidisciplinary site, holding resources from many different types of Museums. Partially due to the nature of the collaboration, when launched, MDL had multiple topics of content, but not significant content in any one grade, subject, or instructional problem. This compromised teacher perception of usefulness. Reflecting later, the project team recommended that future projects consider building out resource platforms by concentrating on a single domain and set of topics first, and then expanding. A site that has high-quality, useful, easy-to-use content covering many aspects of the Civil War will give an impression of competence. When that site expands to cover the Revolutionary War, then other topics in history, perception will be a useful resource platform is expanding the topics it covers, not that the resource site may or may not ever cover a topic well. This decision has, in turn, further implications for design and development, such as recruiting museum partners from certain disciplines, and emphasizing more narrow content, at least at the early stages.

### Balancing Vision and Stakeholder Needs

Having a vision or set of goals is a hallmark of a well-developed museum project. Another key element of a successful project is understanding and responding to stakeholder needs. MDL was born of a strong vision, and for a variety of reasons, struggled to balance that vision with stakeholder needs.

MDL was a unique platform, and as such, needed to create the demand, rather than fill the need for an already articulated demand. Museums did have existing interest in expanding access to digitized collections generally, if not specifically for teachers. Teachers, however, did not have unmet needs in the availability or number of content resources. The MDL team knew that building traction takes a long time, especially with teachers who have a wealth of online



resources to choose from. Growing these stakeholders requires considerable human effort; there is no “build it and they will come” for this type of platform.

### Alignment with Stakeholder Goals

There was also interest in the concept among museum professionals. Across interviews, focus groups, and surveys, museum staff expressed alignment with the core idea of sharing collections more broadly, supporting educators, building stronger ties with schools, and increasing the educational impact of their work. For individual museums MDL may have been a main or minor aspect of achieving those goals.

### Initial Recruiting of Content Partners

Prior to launch and continuing afterwards, MDL used a number of strategies to gain content partners, including attendance, presentations, and workshops at museum conferences. Being a direct project of IMLS rather than a funded grant gave MDL leverage, which likely encouraged other museums to sign on sooner.

Other strategies included direct solicitation of certain museums, outreach to individuals, conference attendance and booths in the vendor areas, a regular newsletter to participants and interested others, and social media posts. Museums were asked to put their logos on the site and their specific resources, so that other museums might be encouraged by the caliber of their peers involved.

### Symbiotic Nature of Stakeholder Needs

Once the platform was launched, expectations of the two primary stakeholders, museum staff and educators, created symbiotic roles within the development and use of MDL. Museum staff, often the museum education staff, served as content producers, responsible for:

- Selecting objects from their collections
- Creating interpretive and educational content
- Uploading and maintaining resources on the platform

In this model, growth and sustainability depended on mutual reinforcement between the two groups. Teacher engagement was expected to drive museum participation, while increasing content availability was expected to support teacher adoption.

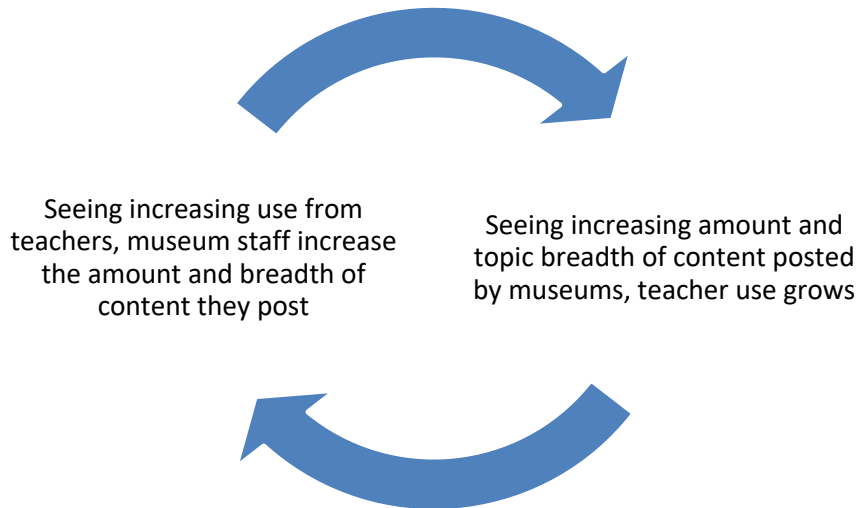
As the amount of content from museums increased on the platform, individual museums would see a corresponding increase in educator awareness of their institution and use of their content. Educators would be the users of the content provided, integrating selected materials



into their lessons, spreading the word to peer teachers of the availability of this content by trusted sources, and continuing to return to MDL and use further resources in their teaching.

This model, where more content grows more use, which encourages creating more content, which in turn creates more use, was referred to by the project team as the “chicken and egg” dynamic.

**Figure 3: Interdependent Relationship of Key Stakeholders**



Museums needed to see that teachers were using the platform to be willing to contribute more content; growing the teacher audience meant meeting many needs, including enough high-quality content of different subjects. This dynamic is not the only one at work, and more content alone does not necessarily translate to greater use. The content still needs to be high-quality, easy to use, engaging, and add value to the lesson.

The need for museum staff to see increasing use underscored the importance of data analytics. The MDL team worked to provide both aggregate and individual museum analytics. The individual analytics allowed museums to see how often their content, and different sections of the content, were clicked on.

### Generating Short-term Value

The MDL platform aligned well with the strategic goals of the stakeholders, but struggled to generate short-term value for museums. Their contribution required significant labor, and especially at the beginning, the educational context was time-intensive to create. This lack of

short-term value and high visibility in results hampered efforts to increase museum contributions.

### Unique Implications of the Funding Mechanism

Slower feedback cycles were an indirect consequence funding through the cooperative agreement. When undertaking a project, all federal agencies are subject to the Paperwork Reduction Act. Under these regulations, any seeking of feedback from 10 or more members of the American public, including project team members, must undergo Office of Management and Budget clearance. To obtain clearance, an agency must submit an application for approval containing all of the survey questions and any other evaluation instruments, sampling, and research design. These materials are placed online for the American public to comment on; the comment period lasts 90 days. Hopefully, the evaluation is then approved and can go forward, otherwise it must repeat the process. This requirement significantly delayed the frequency and number of evaluation feedback cycles the team could undertake.

Developers of websites and other technology-based products frequently use an ‘agile’ development method, whereas rules and regulations mean government-based projects must take a ‘waterfall’ approach. Agile is an iterative, team-based project management approach that focuses on delivering high-quality work in small, incremental cycles called sprints. It prioritizes flexibility, collaboration, customer feedback, and fast, adaptable changes over rigid planning and rigid documentation. It is widely used in software development to quickly respond to shifting project needs. In contrast, a waterfall approach is a linear, sequential project management approach.

Waterfall can be more rigid, and works better where user needs are well-documented, and the project requirements, features, and other elements are not likely to change. While this approach was necessary as a federal project, it made evolving and adapting the platform over time challenging. The combination of only being able to query stakeholders at best a few times a year, coupled with the challenges of having discussion and decision-making spread across multiple organizations, introduced an uneven development cycle. Development often outpaced feedback or decision-making, requiring the team to backtrack once a developed feature did not meet the needs of the stakeholders.

The funding mechanism also set a perception of a different type of relationship between IMLS and the partners. Project partners initially viewed the project as work-for-hire, as contractual work often is. In work-for-hire, the product being created isn’t necessarily for the benefit of those contracted to do the work, and institutional buy-in may be lower than it would be in a grant situation. Building a community is quite challenging as a work-for-hire project, as that work continues after the contract has ceased. Work-for-hire is generally not expected to be



self-sustainable after the contract is concluded, nor can those contracted truly implement sustainability measures.

## Sustainability

Finding a mechanism for sustaining museum online platforms is challenging. Contributory online platforms such as MDL require substantial human work, including encouraging current and new partners to keep submitting content, providing support and guidance for what types of content will be classroom-ready, and making educators aware of the product. There are technical costs as well, the human effort of fixing bugs and issues, creating analytics reports for individual museums, and the costs for server space. The need for human and financial support remains as long as the site is active.

At the IMLS Convening about MDL in January 2025, outside experts in online museum platforms discussed the feasibility of different sustainability models. The group discussed three possibilities: 1) full open-source collaboration, 2) identifying a lead institution willing to financially support the platform, and 3) becoming a paid platform.

MDL was not a good candidate for a fully open-source collaboration, as consistency and reliability were key attributes. In order for a lead institution to be willing to undertake the financial and staff support, the platform would need to address a key priority and need for the museum. Supporting a platform such as MDL was not a high priority for most museums, especially during the financially tight environment in 2025. Finally, moving towards a paid platform wasn't viable for MDL for a number of reasons. It would have been challenging for a federal agency to maintain a paid platform, and neither educators or museums would be likely to pay in the near term.

## Considerations for Other Collections-Based Resource Platforms

This review highlights the strategies and resources the MDL platform developed, including the guides and templates for museums to better understand teacher's needs when using collections objects in the classroom. **A future similar online platform should make use of these extensive tested resources.**

Any similar platform designed in the future should consider **how to balance stakeholder needs.** Museums need to see enough direct result from their participation to continue to contribute staff time and effort. Even knowing that teachers generally benefit from these resources might not be enough when weighed against putting staff time and effort specifically towards local



teachers. **Increasing museums' motivation to participate will build momentum for the site.** If IMLS is involved in a future effort, the agency might have the ability to compel museum participation through changes to the requirements to digitization and other solicitations.

On a design and development level, MDL highlights strategic ways to create and launch such a platform. Based on how teachers evaluate sites, and the nature of their resource adoption, **future platforms should select specific attributes, such as topics and grade-level, and concentrate on building high-quality materials within a narrower set of options.** By concentrating on a more limited scope, the project team can focus on ensuring the site meets teacher needs at each step of engagement. Once the platform is launched, other topics and grade-levels could be added one by one. This will increase teacher perception of the site.

Carefully consider the pros and cons of different funding methods. The funding mechanism for a platform like MDL has implications for the process of design and development, including increasing the public's sense of the credibility and trustworthiness of the site. Museum educators spoke about trusting the site's content, and that content would be reliably there in the future, due to the combination of IMLS as a federal agency and the brand names of the contributing museums. **The IMLS backing definitely enhanced the perception of the site.**

The expertise brought to the table by each partner was rich and highly useful for MDL. This expertise might not be present in a single institution. Yet, if the primary content provider and the lead technology development were within the same institution, there could be a number of benefits. Those benefits include an agile management style, with content and technology informing one another more rapidly, and feedback quickly incorporated into the development. Having a single lead institution requires the museum's leadership to be invested, and the effort to be part of the organization's strategic priorities. This creates a more natural sustainability model. Finding a single museum with the necessary skills and capacity would limit the choices to very large institutions with a robust development team and a high degree of buy-in.

**Build in a sustainability model from the design of the project.** Certainly, platforms evolve over time, and it may not be realistic to have all the details regarding sustainability in the future. Future projects may want to track the amount of time and cost needed to keep the platform running, in order to make an informed decision.

## Appendix A: Synthesis Source Materials

Balboa Park Online Collaborative (April 2019) MDL Project Overview.

HG&Co (November 2019) MDL Project Team Collaboration Report, Internal Report.

HG&Co (December 2019) MDL Educator Think-Alouds Report, Internal Report.

HG&Co (April 2020) MDL Educator Think-Alouds Part Two Report, Internal Report.

HG&Co (July 2020) MDL Project Team Collaboration Report, Internal Report.

HG&Co (December 2020) Museum Content Partner Survey Report, Internal Report.

HG&Co (December 2020) Educator Survey Report, Internal Report.

HG&Co (August 2022) MDL Project Team Collaboration Report, Internal Report.

HG&Co (September 2022) Museum Partners Focus Group Report, Internal Report.

HG&Co (March 2023) Teacher Focus Group Report, Internal Report.

HG&Co (July 2023) MDL Strategic Planning Workshop

HG&Co (November 2023) MDL Gap Analysis, Internal Report.

HG&Co (June 2024) Teacher Feedback on MDL, Internal Report.

HG&Co (July 2024) Museum Feedback on MDL, Internal Report.

HG&Co (November 2021 – March 2025) MDL Partner Meeting Notes.

HG&Co (2025) Transcripts of Interviews with Core Project Team Members.

History Colorado (July 2021) Phase Three Cooperative Agreement Proposal.

MDL Partners (December 2018 – November 2021) Partner Meeting Minutes.

MDL Partners (November 2021) MDL Analytics Strategy, Internal Document.

Newfields (August 2021) Dissemination and Discovery Master Plan, Internal Document.

Wondrus (March 2023) Positioning the Smithsonian to be in every classroom: An environmental scan of the PK-12 educational technology market for the Office of Educational Technology, Internal Report.



## Appendix B: MDL Resource Kit Template (2024)

# MDL Resource Kit Template

**Title:**

## Front Matter (Descriptive information about the Resource Kit)

<b>Resource Kit Description:</b> (150 characters)
<b>Cover Image:</b> (Suggested image pixel ratio is 4:3, with a minimum size of 500 x 375 pixels.)
<b>Subject:</b> (e.g., Science, English, Social Studies, Art)
<b>Educator Materials:</b> (These are materials that support educators. Examples may include background information or links to other resources and lesson plans):
<b>Student Materials:</b> (These are materials that support students. Examples may include background information and ways for students to learn more (i.e. take this offline)):
<b>Grade Band (K-2, 3-5, 6-8, 9-12):</b>
<b>Essential Question:</b> (This is the primary question students will investigate and explore throughout the resource kit.)
<b>Supporting Questions:</b> (These are additional questions about other concepts the students will learn about in the resource kit.)

**\*Please note: Other languages besides English can be used in the kit but must be copied & pasted into fields to retain accent marks.**



## Activity Types (copy and paste as needed; minimum of 3 required but use as many as needed)

### Narrative

Supporting Question(s): (This field is included here to help you with planning and organization, and is not something you need to include on the website itself.)

Title:

**Description:** (150 characters):

Header image:

**Body:** (Can include video, audio, media images, objects, and/or text. Use as many as needed. Note that it is suggested to prepare captions for video, audio, and media images.)

**Additional Materials:**

**Keyword Tags:** (to be used for search and discovery of your content)

**Standards:** (Currently loaded standards sets on the MDL platform include College, Career, and Civic Life (C3), Common Core English Language Arts & Mathematics, and Next Generation Science Standards (NGSS.))

## Slideshow

Supporting Question(s): (This field is included here to help you with planning and organization, and is not something you need to include on the website itself.)

Title:

Description:

### Slide 1 (use as many slides as needed)

Media or Object:

Description:

### Slide 2

Media or Object:

Description:

### Additional Materials:

### Keyword Tags: (to be used for search and discovery of your content)

**Standards:** (Currently loaded standards sets on the MDL platform include College, Career, and Civic Life (C3), Common Core English Language Arts & Mathematics, and Next Generation Science Standards (NGSS.))

## Hotspot

Supporting Question(s): (This field is included here to help you with planning and organization, and is not something you need to include on the website itself.)

Title:

Description:

Header Image:

### Hotspot 1 (use as many hotspots as needed)

Title:

Image (optional):

Description:

### Hotspot 2

Title:

Image (optional):

Description:

**Additional Materials:**

**Keyword Tags: (to be used for search and discovery of your content)**

**Standards:** (Currently loaded standards sets on the MDL platform include College, Career, and Civic Life (C3), Common Core English Language Arts & Mathematics, and Next Generation Science Standards (NGSS.))



## Annotation

Supporting Question(s): (This field is included here to help you with planning and organization, and is not something you need to include on the website itself.)

Title:

Description:

### Media:

Tools activated (Paint, Shapes, Text Tool, Highlight):

### Additional Materials:

### Keyword Tags: (to be used for search and discovery of your content)

**Standards:** (Currently loaded standards sets on the MDL platform include College, Career, and Civic Life (C3), Common Core English Language Arts & Mathematics, and Next Generation Science Standards (NGSS.))

## Timeline

Supporting Question(s): (This field is included here to help you with planning and organization, and is not something you need to include on the website itself.)

Title:

Description:

**Featured Event (Featured events are the primary focus of this activity. For example, a featured event on a women's suffrage timeline would be August 18, 1920.)**

Date:

Title:

Description:

Media or Object:

**Contextual Event (Contextual events provide information about what else was going on in the world at the time. For example, World War I could be a contextual event on a women's suffrage timeline. You do not need to include contextual events if they are not necessary to your kit.)**

Date Range (Year to Year):

Title:

Description:

Media or Object:

**Additional Materials:**

**Keyword Tags: (to be used for search and discovery of your content)**

**Standards:** (Currently loaded standards sets on the MDL platform include College, Career, and Civic Life (C3), Common Core English Language Arts & Mathematics, and Next Generation Science Standards (NGSS.))



## Appendix C: Content Creation Cohort FAQ (2024)

### **What is the anticipated timeline of this Creation Cohort? What are the dates and times of the six virtual sessions?**

Please see the flyer for details about meeting dates. There will be 6 total virtual meetings (60-75 minutes each), February-April 2025. In between meetings, your organization will be tasked with completing work connected with your Resource Kit. Time required will depend on; staff dedicated to the task, status of current digital content, related educational materials already prepared. Your Resource Kit must be completed by May 2025.

*Optional:* 1:1 meetings or small groups can be arranged for additional support or to make up for missed meetings.

### **What work do you anticipate needing to happen between meetings and beyond? i.e., can you provide a bit more information about institutional capacity needs?**

Work to be completed between meetings may include;

- Reviewing templates for RK creation
- Organizing and reviewing related materials (ex. Lesson plans, objects and media collections, in-person exhibits)
- Determining related standards for Resource Kit content
- Collecting and leveling text about content
- Digitizing collections as needed
  - Uploading and organizing made and objects into folders
- Completing templates for RK planning
- Creating activities for Resource Kits

The capacity and time needed will be dependent on what your organization has already created or can reference in support.



**Would there be a tutorial or webinar to explain the process of creating the Resource Kits or is this intended for organizations who are already familiar with the process and wish to expand their digital educational opportunities?**

We will use our 6 virtual meetings to support museums in creating Resource Kits with efficiency and consistency. This is ideal for museums that have created RKs as well as museums that have not yet created RKs, as the MDL team will support museums in creating RKs that;

- consistently target student users,
- use MDL activities most effectively,
- help to implement an efficient process for doing this across museum organizations.

**What is the current reach of MDL? Is there anything you can share about the teachers/students who use it? Do you have target age groups for Resource Kits or do we have flexibility within the K-12 range?**

Current statistics show that there are more 6-8 grade level resources available on the platform, predominantly falling under History and the Sciences. We are interested in increasing the number of RKs in all grade levels and subject areas.

For MDLs reach, you can check the [Google Analytics website](#). You can examine things like a) use across states, b) search terms and c) how the site is found.

On the back end of the platform, you can also access your own Google Analytics for your organization's activities.

**Do we have to have already created Resource kits to be able to participate?**

No.

**How many digital assets (objects) do you recommend to have ready in MDL to optimize our participation?**

We recommend a minimum of 1 object from your digitized collection for each activity. This is the opportunity to showcase your amazing digital collections for students to learn from. Please note that additional media used to supplement the Resource Kit may be needed.

We recommend a total of 3-7 activities per Resource Kit.



**We would be happy to hear about features or aspects that you'd like to use more of or that we can incorporate into what we design.**

We are excited to support museums in identifying what activities best suit the needs of the learner and how to best utilize the platform. We are also interested in allowing museums to share their own knowledge and experiences with the features of the platform in order to make recommendations to other museums as well as the MDL team.



## Appendix D: Planning Guide Template for Museums (2024)

Resource Kit Name HERE



<b>Task 1: Exhibit Exercise</b>	Plan:		Notes:	
<b>Task 2: Identify Subject &amp; Audience</b>	Grade levels: 6-8	Subject(s): Science Careers in Museums	Topic(s):	
<b>Task 3: Determine Guiding Questions &amp; Standards</b>	Guiding Question #1	Guiding Question #2	Guiding Question #3	
<b>Task 4: Plan content and student engagement</b>	Background Knowledge:	GC #1 Content & Engagement	GC #2 Content & Engagement	GC #3 Content & Engagement
<b>Task 5: Upload Media &amp; Objects</b>				
<b>Task 6: Other Considerations</b>				

Use the blank boxes to put in any other information (ex. Supplies needed, links to PDFs or documents related to the material, tasks for your team, notes about media and objects)



## Appendix E: Educator Overview Template for Museums (2024)

# Educator Overview

Resource Kit Name HERE



<b>Audience</b>	Grade levels K-2	Subject Careers in Museums	Topic
<b>Guiding Questions</b>	1.	2.	3.
<b>Background Knowledge</b>	Activity 1:		
<b>Guiding Question #1 Activities</b>	Activity 2:		
<b>Guiding Question #2 Activities</b>	Activity 4:		
<b>Guiding Question #3 Activities</b>	Activity 6:		
<b>Other Notes</b>			

<p>(Supplies needed, independent vs. whole class engagement)</p>	
--	--

## Appendix D: Suggested Stakeholders List (August 2021)

<b>Stakeholders</b>	
<p>The list of people below are suggested stakeholders who would use or interact with this content. Although these have been mentioned in multiple ways throughout the MDL process, we have outlined many again here in an effort to provide more detailed information on connecting with them in the classroom, museum, and other settings.</p>	
<b>Stakeholder Group</b>	<b>Connections/Details</b>
<i>Pre-School</i>	Connections to early education standards and the beginning of foundations for learning.
<i>K-5 Educators</i>	Connections to standards and content study across a variety of content areas.
<i>6-8 Educators</i>	Connections to standards and content study across a variety of content areas. ( World History, American History, Geology, Earth Science, Language Arts and Math )
<i>9-12 Educators</i>	Connections to standards and content study across a variety of content areas. (Humanities, American Studies, Global Studies, Economics, Math, Language Arts, World History, American History, Geology, Earth Science)
<i>District Social Studies Coordinators</i>	Allows for the connection of resources to district scope and sequence, units of studies, resource banks, etc.
<i>National Organizations</i>	Organizations such as NCSS and ISTE could be interested in promoting this content and sharing it on a wider basis because of their mission (In both content and skills development)

<i>Higher Education</i>	Consider how these resources can be used not only by professors but for research by students in their work in their classes.
<i>Pre-Service Educators</i>	Would be a great idea to model a lesson or do a screencastify overview to share the resources with professors and students in pre-service education. Coupling the resources with strategy tools such as the LOC analysis sheet, Project Zero work, Analysis sheets from the National Archives, and strategies from SHEG.
<i>Museum Educators</i>	How can these digital online resources be used in a learning setting inside another museum to make connections, critically analyze what they are seeing online or in person etc. How could you use these resources on a tour? In a small group experience
<i>Homeschool Groups</i>	Connecting to homeschool virtual experiences and standards.
<i>Boy Scouts and Girl Scouts</i>	Consider how the resources will connect to the badging programs of each group. Suggested that a sample cross reference sheet for items in the collection be created so that it models the information. <a href="#">SAMPLE HERE</a> .
<i>Small House Museums</i>	Small house museums can use the materials to make global connections, tie to standards and provide access to resources their limited collection may not have.
<i>Local/State/National Historic Sites</i>	How can the resources offered online in MDL be used to start the process of inquiry for this site?
<i>National Park Service</i>	Consider how the resources here in this collection can be used by National Park Service sites that have rich content but limited digitized collections  Consider how the resources can be used to augment

	the lessons in he teaching with historic places
<i>Professional Researcher</i>	Provide a searchable database with references, dates, additional resources and materials - print, digital, media, etc
<i>Local Researcher</i>	In addition to the items highlighted above, also provide an easy to navigate platform, search by topic and location
<i>Clubs</i>	Premade kits/packets for easy download (i.e. scout activities)
<i>Community Organizations</i>	Highlight community partnerships, ways for local organizations to get involved and provide a contact liaison to better coordinate. Establish a community database to easily reach community groups with materials, events and relevant information
<i>Business Partners</i>	Highlight how these resources can connect schools and prepare students in workforce readiness skills with their work.

## Appendix E: MDL Media Toolkit (August 2024)



### MDL Media Toolkit

We designed this toolkit to help you communicate with your organization and share the Museum for Digital Learning resources with teachers in your network.

#### About MDL

Museums for Digital Learning was created to **give museums a free to use, virtual home for their unique, digital collections** that would help aid educators in teaching national standards across the nation. MDL supports museum professionals to **create student friendly resources for K-12** children to explore unique museum objects virtually, engage with museum collections they may not be able to access in person, and learn about a specific topic.

Searchable by subject and grade, teachers across the country can engage with authentic, curated museum collection resources, and activities that meet national education standards. Educators in K-12 classrooms will explore these resources to find the best items for their students and the content they are teaching.

There are two main components to MDL: Resource Kits and the Objects Library.

- **Resource Kits** have activities grouped together by a theme. These activities are Narrative, Hotspot, Slideshow, Annotation, Timeline, Apples to Oranges, and an Escape Room.
- **The Object Library** is where teacher and student users can access all of the museum objects you and other museums have created and curate their own collection to use in a classroom.

The MDL website has been funded by the Institute of Museum and Library Services and is presented in collaboration with History Colorado, Newfields Lab of the Indianapolis Museum of Art at Newfields, and the Field Museum. Visit the [website](#) to learn more about MDL's offerings.



#### Participating Museums



MDL Learnings Synthesis

Museums across the world are continuing to contribute interdisciplinary resources on a regular basis and the list of participating organizations is constantly growing. Some of the participating museums are History Colorado, the New-York Historical Society, The Field Museum, The Georgia O'Keeffe Museum and more. See the rest of our [participating museums!](#)

## Marketing to your Community

### Website Copy

Museums for Digital Learning (MDL) was created to **provide K-12 educators with free to use, student friendly resources with unique, digital objects** from museum collections. These resources support national standards and allow children to explore unique museum objects virtually, engage with museum collections they may not be able to access in person, and learn about a specific topic.

The MDL website has been funded by the Institute of Museum and Library Services and is presented in collaboration with History Colorado, Newfields Lab of the Indianapolis Museum of Art at Newfields, and the Field Museum.

Visit the [website](#) to explore these free resources to support your classroom today!

\*Consider using quotes (on page 3) from educators on your website as well.

### Sample Email Newsletter

Calling all K-12 Educators!

Museums for Digital Learning (MDL) was created to **provide K-12 educators with free to use, student friendly resources with unique, digital objects** from museum collections. These resources support national standards and allow children to explore unique museum objects virtually, engage with museum collections they may not be able to access in person, and learn about a specific topic.

The MDL website has been funded by the Institute of Museum and Library Services and is presented in collaboration with History Colorado, Newfields Lab of the Indianapolis Museum of Art at Newfields, and the Field Museum.

Visit the [website](#) to explore these free resources to support your classroom today!



## Sample Social Media

Calling all K-12 Educators!

Museums for Digital Learning (MDL) was created to **provide K-12 educators with free to use, student friendly resources with unique, digital objects** from museum collections. These resources support national standards and allow children to explore unique museum objects virtually, engage with museum collections they may not be able to access in person, and learn about a specific topic.

The MDL website has been funded by the Institute of Museum and Library Services and is presented in collaboration with History Colorado, Newfields Lab of the Indianapolis Museum of Art at Newfields, and the Field Museum.

Learn more here: <https://MuseumsForDigitalLearning.org/>

#Museums4DL #DigitalResources #InquiryOnline #VirtualFieldTrips #OnlineLearning  
#RemoteLearning #Museums

(include photos from Visuals & Logos (linked below) or your own)

### Visuals & Logos

Use images from this [folder](#) to promote MDL to your community.

You can access MDL Logos [here](#).

### Social Media Account

Twitter: <https://twitter.com/Museums4DL> @Museums4DL

### Frequently Asked Questions

Use our [FAQ](#) resource to find additional information. You can find information from how to create an MDL account, subject areas covered, to the types of the museums involved.

### Quotes from Educators

- "I want to show my kids something that they might never get to see."
- "Primary sources are really important to me. MDL is one of the first resources I've seen where it's all compiled in one place."



# Appendix F: MDL Resource Planning Kit



## Resource Kit Planning Guide

Planning Guide Template found [here](#) | Educator Overview Template found [here](#)

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## Overview:

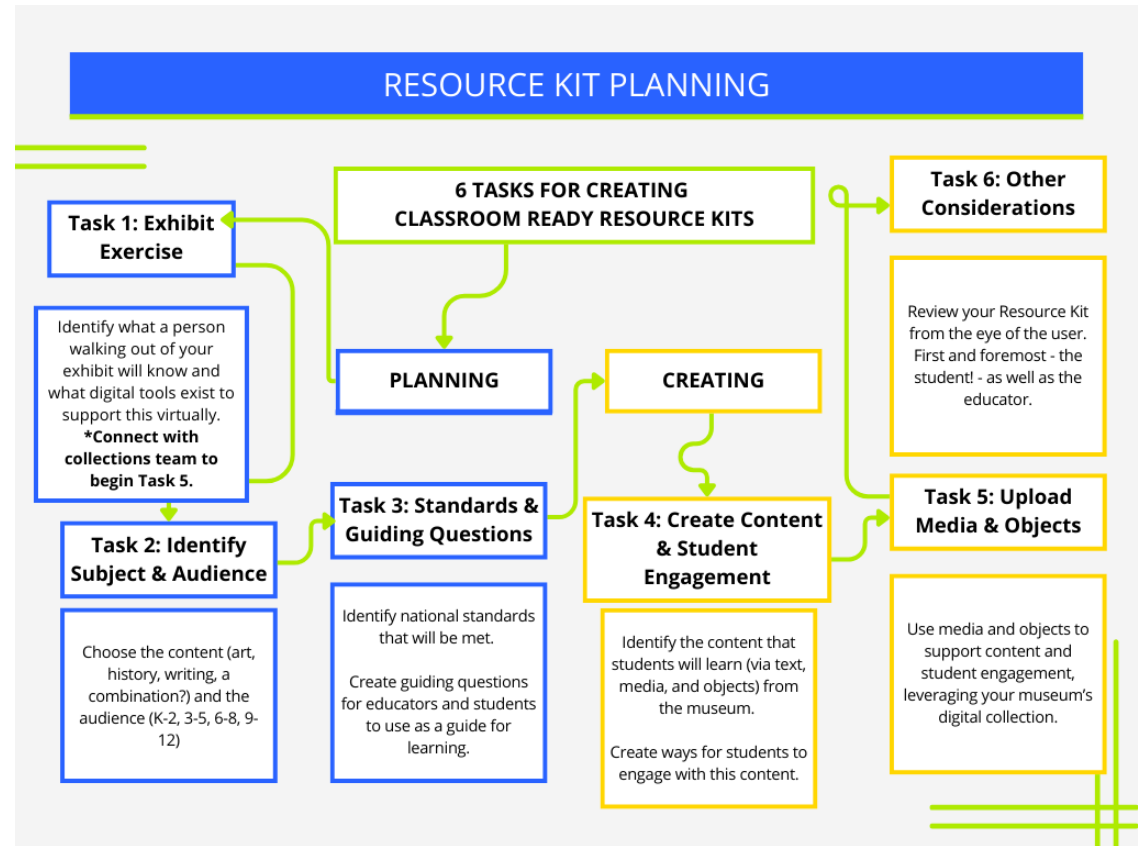
This Planning Guide was created to help you **create high quality Resource Kits for students in K-12 classrooms** to support them to reach learning goals that are standards aligned. This Planning Guide will support you in creating engaging educational experiences while leveraging your museum's unique collections. *This tool should be used in conjunction with the Planning Guide Template and the Educator Overview Template (linked on the cover page).*

Resource Kits are...

Learning tools for educators to assign for independent student learning

A way to bring together unique museum collections & educational standards to support learning goals

Created by museum professionals, assessed by educators for classroom use, and assigned to be used by students



## Preparation

Before getting started we recommend that you;

- Create your Museums for Digital Learning Profile
- Add each member of your team to the profile, each user will have their own individual login
  - A participant from your education team and digital collections team is highly recommended
- Familiarize yourself with the back end of the platform
- Attend an [Info Session](#) or a [Cohort](#) with the MDL team



## Task 1: Exhibit Exercise

To get started, you should explore the exhibit that you intend to use as a guide for your Resource Kit. This helps you to work backwards from the learning goals, since whatever a person would leave the exhibit knowing is where you want students to be after completing the Resource Kit! To explore your exhibit;

4. Walk through your exhibit, possibly with a colleague
5. Look through related digital resources that your organization has created or used in connection with the exhibit
6. Review anything that has been created to support this content; PDFs, videos, visuals created by your organization (like titles or other exhibit visuals)

As you explore, ask yourself the following questions:

- What stands out in the exhibit as *interesting* and *exciting*?
- How do the *sections* of the exhibit connect to one another?
- What are some *big ideas* or concepts in the exhibit?
- What *objects* in the collection are particularly unique to our organization? Are these *digitized*?
- What do people walk out of the exhibit *knowing*?
- Are there big questions that students will be able to answer after visiting the exhibit?
  - ***You will return to this question during Task 3.***

**REMINDER:** Your audience is students!

Students will be the final viewers of your Resource Kit, teachers will examine the Resource Kit to determine if it is right for their classroom. Going into everything with this idea in mind is key!

Here are some additional resources that can help to ensure that your *content focus* is narrow enough for a student audience. **This step is ESSENTIAL!**

- Four Steps to Narrow Your Research Topic [video](#) by University of Guelph McLaughlin Library
- How to Create a Concept Map [video](#) by University of Guelph McLaughlin Library
- Brainstorming Strategy: Narrowing a Topic [article](#) by Grand Valley State University
- Choosing a topic from a Theme [article](#) by Grand Valley State University

## Task 2: Identify Subject & Audience

Use the table below to consider what subject(s) and topic(s) will be addressed by your content. In some cases, you may have one subject and 1-3 topics (Ex. everything falls under Social Studies) or you could have multiple subjects (ex. Mathematics and Science, The Arts and Careers in Museums).

Subject	Careers in Museums	English Language Arts	Mathematics	Science	Social Studies	The Arts	World Languages
Topic	Careers	Language Reading: Foundational Skills Reading: History/Social Studies Reading: Informational Texts Reading: Literature Reading: Science & Technological Subjects Speaking and Listening Writing Writing: History/Social Studies Writing: Science & Technological Subjects	HS Algebra HS Functions HS Geometry HS Modeling HS Number & Quantity HS Statistics & Probability K-8 Mathematics	Application/ Practice of Science Earth and Space Science Engineering and Technology Life Science Physical Science	Civics and Government Economics Geography World History	Dance Music Theater Visual Arts	French Spanish

### Audience

- Once you have decided what your subject(s) and topic(s) are, think about the audience. Options include;
  - Elementary School: K-2 or 3-5
  - Middle School: 6-8
  - High School: 9-12

- Once you look through the standards you will see that many subtopics are covered multiple times. For example, space Science will be taught in Grade 1, Grade 5, and again in Middle School and High School. Consider what age range your exhibit is most likely targeted at in order to choose your audience.

### Task 3: Standards & Guiding Questions

#### Standards

Search the standards based on your subject, topic & audience (determined in Task 2). The table below links to guides for each set of standards.

Subject	Careers in Museums	English Language Arts	Mathematics	Science	Social Studies	The Arts	World Languages
Standards	Not available at this time	<a href="#">CC Overview</a>	<a href="#">CC Overview</a>	<a href="#">NGSS Overview</a>	<a href="#">C3 Overview</a>	<a href="#">NCAS Overview</a>	Not available at this time

Don't feel intimidated by the standards! You can use our guides to make sense of the standards or explore the standards on the MDL platform. Once you are logged in, you can filter by standards and search terms to easily select the standards.

#### Categorizing Standards

It can be helpful to group related standards in order to identify Guiding Questions. See this example from a history museum -

Historical events leading up to the war	The lasting impacts of war on law	The lasting impacts of war on people
<p>D2.His.4.6-8. Analyze multiple <b>factors that influenced the perspectives</b> of people during different historical eras.</p> <p>D2.His.1.6-8. Analyze <b>connections among events</b> and developments in broader historical contexts.</p> <p>D2.His.14.6-8. Explain <b>multiple causes and effects</b> of events and developments in the past.</p>	<p>D2.Civ.10.6-8. Explain the relevance of <b>personal interests and perspectives</b>, civic virtues, and democratic principles when people <b>address issues and problems in government</b> and civil society.</p> <p>D2.Civ.12.6-8. Assess <b>specific rules and laws</b> (both actual and proposed) as means of addressing public problems.</p> <p>D2.Civ.13.6-8. Analyze the purposes, implementation, and <b>consequences of public policies</b> in multiple settings.</p>	<p>D2.His.5.6-8. Explain how and why <b>perspectives of people have changed</b> over time.</p> <p>D2.His.15.6-8. Evaluate the relative influence of <b>various causes of events</b> and developments in the past.</p> <p>D2.His.2.6-8. Classify <b>series of historical events</b> and developments as examples of change and/or continuity.</p>

Considerations;

- Standards are not content-specific. They target skills and understandings - perspective, cause & effect, people changing and being changed by events - as highlighted above,

- If you are creating two copies of your Resource Kit (for two age ranges) you can simply copy and paste the related standards for the other grade level at the same time. This can simplify the process of creating the second RK,

### Guiding Questions

Let's go back to our question from Task #1 - **Are there big questions that students will be able to answer after visiting the exhibit?** Education is driven by questioning! To support educators and students, writing Guiding Questions for your content is extremely important.

Based on the groups of standards you identified, brainstorm a Guiding Question for each category. The questions should be something the students can answer by the end of the Resource Kit, but there should not be just one right answer.

### Guiding Questions Example

Historical events leading up to the war	The lasting impacts of war on law	The lasting impacts of war on people
<p>D2.His.4.6-8. Analyze multiple <b>factors that influenced the perspectives</b> of people during different historical eras.</p> <p>D2.His.1.6-8. Analyze <b>connections among events</b> and developments in broader historical contexts.</p> <p>D2.His.14.6-8. Explain <b>multiple causes and effects</b> of events and developments in the past.</p>	<p>D2.Civ.10.6-8. Explain the relevance of <b>personal interests and perspectives</b>, civic virtues, and democratic principles when people <b>address issues and problems in government</b> and civil society.</p> <p>D2.Civ.12.6-8. Assess <b>specific rules and laws</b> (both actual and proposed) as means of addressing public problems.</p> <p>D2.Civ.13.6-8. Analyze the purposes, implementation, and <b>consequences of public policies</b> in multiple settings.</p>	<p>D2.His.5.6-8. Explain how and why <b>perspectives of people have changed</b> over time.</p> <p>D2.His.15.6-8. Evaluate the relative influence of <b>various causes of events</b> and developments in the past.</p> <p>D2.His.2.6-8. Classify <b>series of historical events</b> and developments as examples of change and/or continuity.</p>
<p>What factors impact the ways that different cultural groups interact with one another? Do these change over time?</p>	<p>What impact does war have on public policy and the relationships between cultural groups?</p>	<p>What are the lasting impacts of war on people and their perspectives?</p>

**Need support writing a guiding question? See the blog posts below;**

- a. [Asking Questions by Museum-Ed](#)
- b. [How can I form strong guiding questions? by Thoughtful Learning](#)
- c. [What Is a Good Guiding Question? by ACSD](#)

## Task 4: Create Content and Student Engagement

### Framework

<b>Activity 1</b>	
<b>Prior Knowledge</b>	
<p>Make sure to start with an activity that helps students get their brain ready to learn the content by activating prior knowledge! Consider what students need to know to access the content in the activities that will follow.</p> <ul style="list-style-type: none"> <li>● Possible approaches;             <ul style="list-style-type: none"> <li>a. timeline of events leading up to the start of your content,</li> <li>b. discussion question related to an Object or Media from the collection,</li> <li>c. or videos with background information.</li> </ul> </li> </ul>	
<b>All other activities should be a mix of Content and Student Engagement</b>	
<p><b>Content Activities</b></p> <ul style="list-style-type: none"> <li>● present information and Objects from the museum collection</li> <li>● include content that allows students to build knowledge to answer the Guiding Questions</li> <li>● check out these <a href="#">tools</a> to support your grade appropriate writing and limit the amount of text based on grade level</li> </ul>	<p><b>Student Engagement Activities</b></p> <p>allow students to engage with the content they have been presented with</p> <p>connect to the Guiding Questions</p> <p>may or may not include Media and Objects</p> <p>written for student audience</p>
<b>Final Activity</b>	

## Reflection

Consider how you guide students to wrap up the learning or put pieces together.

Possible approaches;

Escape Room where students answer questions about content from the whole Resource Kit in order to escape!

A slideshow with the Guiding Questions

Some type of application of learning, through an activity online (for example with the annotation activity) or off of their device to turn in to their teacher.

This framework encourages student engagement in response to new content being presented. You might decide to have 1 student engagement activity per content activity but you should be flexible with the organization of your content. See the resources below if you need support with strategies to engage students;

[Project Zero Visible Thinking Routines](#) and [resources](#) from the Library of Congress [their [Google Drive of Task Cards](#) can be helpful as well] Overview for Resource Kit activities and linked video how tos; [Narrative, Slideshow, Timeline, Hotspot](#) and [Escape Room, Apples to Oranges, Annotations](#)

## Task 5: Upload Media & Objects

Understanding Media & Objects:

Media	Objects
<b>Upload media via image, audio or video files OR provide links from YouTube, Vimeo, SoundCloud, or Sketchfab. Content from your Media Library can be used throughout your Resource Kits and can be combined with metadata to create Objects in your Object Library.</b>	<b>Add metadata to your uploaded Media files to create Objects, which are digital representations of physical items/works from your museum collection in the MDL platform. Objects can be embedded in your Resource Kits and published to the Object Library.</b>

As you upload Media & Objects, give each item a specific name. You can use the format recommended below;  
Object medium (ex. Photograph, glass plate negative, bowl)

Followed by the subject (ex. Abraham Lincoln, Ute)

Do not make the title too long, the description can have more details that support search when educators or students are looking for objects

Examples;

Photograph, Abraham Lincoln OR Photograph of Abraham Lincoln

Bowl, Mesa Verde OR Bowl from Mesa Verde

You can upload media & objects in bulk! A good strategy can be to collect all of your files in a folder, and then upload the folder in one step. Next, put media into a folder with the Resource Kit name.

Once media is uploaded, it's important to create objects. You can create objects by attaching media (one media file is required, but you can add additional files) and adding collection information. Copyright information is required.

## Task 6: Other Considerations

It's time to look at your Resource Kit from the eyes of your viewer - the student (and the educator)! This looks different for all Resource Kits depending on the age, the standards, the background knowledge required, etc. Below are some suggestions for things to consider before checking the Publishing Checklist (on the final page).

### Student View

4. Be thoughtful about what your Resource Kit is named;
  - a. How can you clarify for users what the Resource Kit includes in it, without being too long?
  - b. Think about your student audience and their ages
5. Be thoughtful about what photo you use for the Cover Image - you want to catch the attention of the students and showcase your collection!

### Educator View

6. Make sure that you are tagging your activities to support searchability! Tagging helps teachers to find your Resource Kit and there is no limit to how many tags your activities can have. Consider using multiple formats for the same topic (world war two, wwii) and use words that may not appear in the text of your Resource Kit.
7. Does your RK require any other considerations for teachers to be aware of? Ex. supplies needed, activities are independent, small group, or whole class? Include these notes in the [Educator Overview](#).

### Examples

Examples are included here for your convenience. Return to these as you work through the tasks.

<b>Little Town on the Plains: Keota, Colorado</b>	<b>Colorado Borderlands</b>
<a href="#">Completed Planning Guide Template</a>	<a href="#">Completed Planning Guide Template</a>
<a href="#">Completed Educator Overview</a>	<a href="#">Completed Educator Overview</a>
<a href="#">Resource Kit</a> on MDL	<a href="#">Resource Kit</a> on MDL

## Publishing Checklist

# Resource Kit Checklist

### Am I ready to publish?

#### Student Facing Components

YES

*Text and length of written components are appropriate for chosen student audience (K-2, 3-5, 6-8, or 9-12).*

*There is a combination of new content for learning, and engagement activities for exploring the new learning*

*Object information has been added to museum media to help students engage with unique collection items.*

#### Teacher Components

YES

*Educator Overview is complete (and includes additional information and resources as needed).*

*Guiding Questions have been included in the Educator Overview as well as throughout the Resource Kit.*

*Standards have been selected for each activity*

