



# Connecting Primary Sources & Technology for Formative Assessment

*Educators with no foundational training in teaching inquiry with primary sources from the Library of Congress may wish to **begin with the Inquiry with Primary Sources TPS** micro-credential prior to completing this one.*

## Competency

Educator connects primary sources with technology for formative assessment to meet instructional goals and increase student engagement with course content.

## Key Method

Educators create or revise a lesson that uses technology for formative assessments of primary sources.

## Method Components

Primary Sources & Technology

[The Library of Congress](https://www.loc.gov/teachers/usingprimarysources/) describes primary sources as “the raw materials of history — original documents and objects that were created at the time under study. They are different from secondary sources, accounts that retell, analyze, or interpret



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

events, usually at a distance of time or place.” They foster literacy and content knowledge and support the development of 21st-century skills, helping students communicate and collaborate and build the capacity to solve problems in a constantly changing world.

Through technology, students and teachers have instant access to millions of digitized primary sources that represent human thought and achievement across time and geography. These digitized primary sources are both instructional ideal and technologically ready for integration into classroom teaching. But effective technology integration requires educators to make purposeful pedagogical decisions that support learning goals, objectives, and assessment outcomes. When done successfully, combining appropriate instructional approaches for primary source learning with technology allows educators to spark students’ interest and guide them through analysis and inquiry towards higher levels of critical thinking.

## SAMR Model

The letters “SAMR” stand for **Substitution, Augmentation, Modification, and Redefinition**. The SAMR model was created to share a common language across disciplines as teachers strive to personalize learning and help students visualize complex concepts. Think of SAMR as a spectrum helping teachers to choose the best approach in terms of pedagogy, engagement, and facilitation. Teachers use this model to evaluate how they are incorporating technology into their instructional practice.

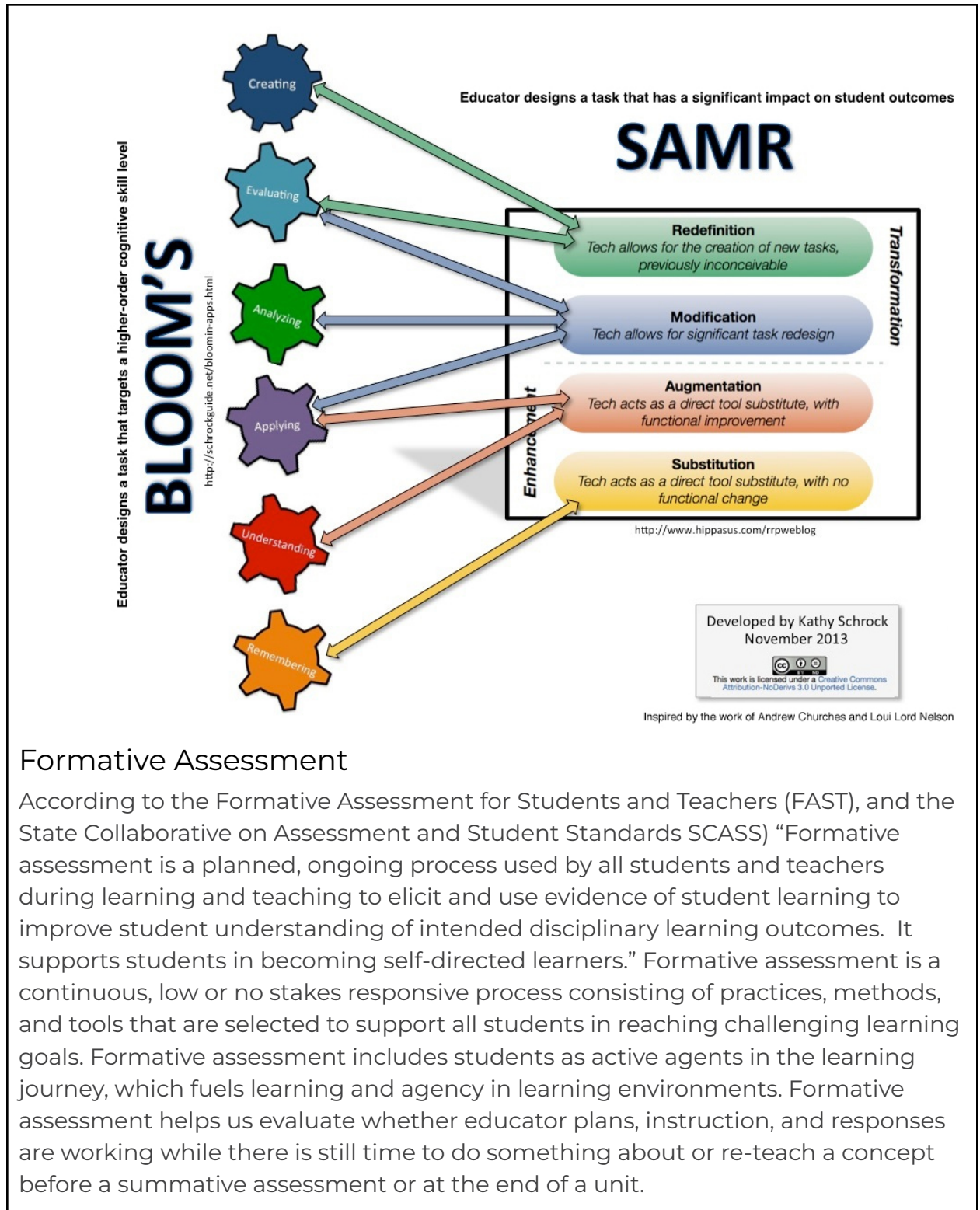


Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022



## Formative Assessment

According to the Formative Assessment for Students and Teachers (FAST), and the State Collaborative on Assessment and Student Standards SCASS) “Formative assessment is a planned, ongoing process used by all students and teachers during learning and teaching to elicit and use evidence of student learning to improve student understanding of intended disciplinary learning outcomes. It supports students in becoming self-directed learners.” Formative assessment is a continuous, low or no stakes responsive process consisting of practices, methods, and tools that are selected to support all students in reaching challenging learning goals. Formative assessment includes students as active agents in the learning journey, which fuels learning and agency in learning environments. Formative assessment helps us evaluate whether educator plans, instruction, and responses are working while there is still time to do something about or re-teach a concept before a summative assessment or at the end of a unit.



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

# Supporting Rationale and Research

## Primary Sources

Engaging All Learners with Primary Sources, *TPS Quarterly*, Vol. 2, No. 1, Winter 2009.

<https://www.loc.gov/static/programs/teachers/about-this-program/teaching-with-primary-sources-partner-program/documents/differentiated-instruction.pdf>

Beyond Typescript and Photographs: Using Primary Sources in Different Formats, *TPS Journal*, Vol. 4, No. 2, Fall 2011.

[https://www.loc.gov/static/programs/teachers/about-this-program/teaching-with-primary-sources-partner-program/documents/ps\\_formats.pdf](https://www.loc.gov/static/programs/teachers/about-this-program/teaching-with-primary-sources-partner-program/documents/ps_formats.pdf)

Teaching with Primary Sources Mississippi Cognitive Tasks.

<http://www.msstatetps.org/wp-content/uploads/2019/09/TPS-Mississippi-Cognitive-Tasks-SEP-2019.pdf>

Goodman, Noah. Promoting Student Learning Through Primary Source Inquiries: An Opportunities to Learn Checklist, Education Development Center, May 29, 2018.

<https://cct.edc.org/publications/primary-source-inquiries-opportunities-learn-checklist>

## Technology Integration

Technology Integration, *Teaching With Primary Sources Quarterly*, Vol. 2, No. 2, Spring 2009.

<https://www.loc.gov/static/programs/teachers/about-this-program/teaching-with-primary-sources-partner-program/documents/technology.pdf>

McGlynn, Kaitlyn and Kelly, Janey. Using Technology to Sensitive and Sensibly Meet Students' Needs in the Science Classroom, *Science Scope*, Vol. 43, No. 4, November/December 2019, pp. 22-27, National [Science Teachers Association](#).

<https://www.jstor.org/stable/26899096>

## SAMR Model



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

Hamilton, Erika R., Rosenberg, Joshua M., Akcaoglu, Mete. The Substitution Augmentation Modification Redefinition (SAMR) Model: A Critical Review and Suggestions for its Use, *TechTrends*, 60:433–441, Association for Educational Communications & Technology, 2016, published online: 28 May 2016.

<https://www.common sense.org/education/videos/introduction-to-the-samr-model>

Hilton, Jason Theodore. A Case Study of the Application of SAMR and TPACK for Reflection on Technology Integration into Two Social Studies Classrooms, *Social Studies*, Vol. 107, No. 2, 68–73, published online: 12 Feb 2016.

[https://www.researchgate.net/profile/Jason-Hilton-2/publication/294264019\\_A\\_Case\\_Study\\_of\\_the\\_Application\\_of\\_SAMR\\_and\\_TPACK\\_for\\_Reflection\\_on\\_Technology\\_Integration\\_into\\_Two\\_Social\\_Studies\\_Classrooms/links/5771ead708ae10de639def25/A-Case-Study-of-the-Application-of-SAMR-and-TPACK-for-Reflection-on-Technology-Integration-into-Two-Social-Studies-Classrooms.pdf](https://www.researchgate.net/profile/Jason-Hilton-2/publication/294264019_A_Case_Study_of_the_Application_of_SAMR_and_TPACK_for_Reflection_on_Technology_Integration_into_Two_Social_Studies_Classrooms/links/5771ead708ae10de639def25/A-Case-Study-of-the-Application-of-SAMR-and-TPACK-for-Reflection-on-Technology-Integration-into-Two-Social-Studies-Classrooms.pdf)

Puentedura, Ruben. SAMR and Bloom's Taxonomy: Assembling the Puzzle, *Common Sense Education*, Common Sense Education, 28 Apr. 2020,

<https://www.common sense.org/education/articles/samr-and-blooms-taxonomy-assembling-the-puzzle>

## Formative Assessment

Granberg, Carina, Palm, Torulf, and Palmberg, Björn. A Case Study of Formative Assessment Practice and the Effects on Students' Self-regulated Learning, *Science Direct*, Volume 68, March 2021.

<https://www.sciencedirect.com/science/article/pii/S0191491X20302030>

Jarvis, Joanne. Using Formative Assessment Practices to Lift Student Achievement, *Journal of Professional Learning*, Semester 1, 2015.

<https://cpl.asn.au/sites/default/files/journal/Joanne%20Jarvis%20-%20Using%20Formative%20Assessment.pdf>



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

# Resources

## Primary Sources

[Getting Started with Primary Sources | Teachers | Programs | Library of Congress](#)

[Primary Source Collection Template](#)

[Selecting Primary Sources: Criteria for Classroom Use](#)

[Selecting Primary Sources: Learning Activity Criteria](#)

## Technology Integration

[Developing student's visual literacy through scaffolded image inquiry](#)

[Integrating tech Archives - Citizen U Primary Source Nexus](#)

[SAMR: A Powerful Model for Understanding Good Tech Integration | Edutopia](#)

## SAMR Model

[Introduction to the SAMR Model | Common Sense Education](#)

[SAMR Model: A Practical Guide for K-12 Classroom Technology Integration | PowerSchool](#)

[SAMR Model Tasks to Apply or Demonstrate Knowledge Using Technology](#)

## Formative Assessment

[Kate Jones & Professor John Hattie talking about formative assessment in t...](#)

# Submission Guidelines & Evaluation Criteria

*To earn this micro-credential, you must receive a passing score in Parts 1 and 3, and receive proficiency for all components in Part 2.*



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on [Apr 24, 2022](#)

## Part 1. Overview

(250-500 words)

*Please copy and paste the following contextual prompts and questions into a document and respond to them without including any identifying information.*

1. List the grade(s) and subject(s) that you teach, along with general information about your class composition. How do your students engage with technology throughout the school day or week?
2. Describe how you and your school use primary sources, including typical means of access and differentiation of use of primary versus secondary sources in instructional activities.
3. Describe your use of formative assessment in the classroom, in lessons and unit plans to inform quality instruction?
4. Think about challenges faced when you used technology in the classroom. What goals do you have for better integrating technology with primary source learning to meet pedagogical goals and student engagement with content?

**Passing:** Responses provide reasonable and accurate information that addresses the current use of technology, primary sources, and formative assessment. They also describe goals for completing this micro-credential.

## Part 2. Artifacts

*To earn this micro-credential, please submit the following **four artifacts** as evidence of your competency in this area. Please do not include any identifying information for you or your students.*

### **Artifact 1: Primary Source Collection**

Consider how you might revise a current lesson plan or create a new one to better integrate technology with primary source learning, to increase engagement, and enhance critical thinking.



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

Make a copy of the [Primary Source Collection template](#). Think about the instructional goals primary sources can help you accomplish (see the Primary Sources sections under Supporting Research and Rationale above). Consider how you might accomplish those goals as you search for and identify 2-6 sources to add to your lesson plan. Instructions for completing the template are provided in the document.

**(See rubric for specific requirements.)**

Upload your completed Primary Source Collection.

### **Artifact 2: Primary Sources & Technology Lesson Planner**

Make a copy of the [Primary Sources & Technology Lesson Planner template](#) and complete each of the four sections: Formative Assessment Thought & Jot, Investigating the SAMR Model, Technology Tools Matrix, and Lesson Plan Outline. Instructions for completing the template are provided in the document.

**(See rubric for specific section requirements.)**

Upload your completed Primary Sources & Technology Lesson Planner template.

### **Artifact 3: Primary Sources & Technology Lesson Evidence**

Choose **one** of the following options.

#### **Option 1**

Implement your lesson plan with students, and submit 3-4 examples of student work with primary sources.

#### **Option 2**

If you aren't able to implement the lesson with students, enlist two colleagues to help by completing a peer review of your completed Primary Source Collection and Primary Sources & Technology Lesson Planner. Provide each with a copy of these two documents and a copy of the [Peer Review: Primary Sources & Technology for Formative Assessment template](#). Be sure to point out any specific areas where you'd like your colleagues to target feedback.

**(See rubric for specific requirements.)**

Combine each piece of evidence into one document for uploading.



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022



#### Artifact 4: Primary Sources & Technology Lesson Analysis

After reviewing student work or the peer reviews, download or make a copy of the [Lesson Analysis: Primary Sources & Technology](#) and use it to discuss what the process was like for you to teach or receive feedback and how you'll modify your lesson plan as a result.

**(See rubric for specific requirements.)**

Upload your completed lesson analysis.

#### Part 2. Rubric

	<b>Proficient</b>	<b>Basic</b>	<b>Developing</b>
<b>Artifact 1: Primary Source Collection</b>	Document includes all of the following: <ul style="list-style-type: none"><li>• primary source collection title</li><li>• unit or lesson title</li><li>• listing of lesson standards or objectives</li><li>• 2-6 primary sources, including a thumbnail image (if possible) and permanent link to each source</li><li>• title of each source</li><li>• instructional goal for each source</li></ul>	Document includes most of the following: <ul style="list-style-type: none"><li>• primary source collection title</li><li>• unit or lesson title</li><li>• listing of lesson standards or objectives</li><li>• 2-6 primary sources, including a thumbnail image (if possible) and permanent link to each source</li><li>• title of each source</li><li>• instructional goal for each source</li></ul>	Document includes some of the following: <ul style="list-style-type: none"><li>• primary source collection title</li><li>• unit or lesson title</li><li>• listing of lesson standards or objectives</li><li>• 2-6 primary sources, including a thumbnail image (if possible) and permanent link to each source</li><li>• title of each source</li></ul>



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

			<ul style="list-style-type: none"> <li>instructional goal for each source</li> </ul>
<b>Artifact 2: Section 1 Reflection on Formative Assessment</b>	Review includes all of the following: <ul style="list-style-type: none"> <li>Reflection questions are thoughtfully filled out.</li> <li>clearly references article and video information</li> <li>lists and names components of formative assessment</li> <li>description of and links to one or more specific sources used for formative assessment</li> <li>explanation of why the selected technology tools meet formative assessment best practices</li> </ul>	Review includes most of the following: <ul style="list-style-type: none"> <li>Reflection questions are thoughtfully filled out.</li> <li>clearly references article and video information</li> <li>lists and names components of formative assessment</li> <li>description of and links to one or more specific sources used for formative assessment.</li> <li>explanation of why the selected technology tools meet formative assessment best practices</li> </ul>	Review includes assembling some of the following: <ul style="list-style-type: none"> <li>reflection questions are thoughtfully filled out.</li> <li>clearly references article and video information</li> <li>lists and names components of formative assessment</li> <li>description of and links to one or more specific sources used for formative assessment.</li> <li>explanation of why the selected technology tools meet formative assessment best practices</li> </ul>
<b>Artifact 2: Section 2: Investigating</b>	SAMR activity includes all of the following for each of the 2-6 sources:	SAMR activity includes most of the following for each of the 2-6 sources:	SAMR activity includes some of the following for 1-2 sources:



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

<p><b>the SAMR Model</b></p>	<ul style="list-style-type: none"> <li>• identification of the current level of SAMR</li> <li>• example of changing level of SAMR</li> </ul>	<ul style="list-style-type: none"> <li>• identification of current level of SAMR</li> <li>• example of changing the level of SAMR</li> </ul>	<ul style="list-style-type: none"> <li>• identification of current level of SAMR</li> <li>• example of changing level of SAMR</li> </ul>
<p><b>Artifact 2: Section 3: Investigating Technology Tools</b></p>	<p>Investigating Technology Tools activity includes all of the following for each of the 2 sources:</p> <ul style="list-style-type: none"> <li>• alignment with a different technology tool</li> <li>• primary sources should be hot linked to the word LINK</li> <li>• 2 formative assessment strategy ideas</li> <li>• target SAMR level</li> <li>• outline of lesson plan</li> </ul>	<p>Investigating Technology Tools activity includes most, but not all, of the following for each of the 2 sources:</p> <ul style="list-style-type: none"> <li>• alignment with a different technology tool</li> <li>• primary sources should be hot linked to the word LINK</li> <li>• 2 formative assessment strategy ideas</li> <li>• target SAMR level</li> <li>• outline of lesson plan</li> </ul>	<p>Investigating Technology Tools activity includes the following for 1 source:</p> <ul style="list-style-type: none"> <li>• alignment with a technology tool</li> <li>• primary source should be hot linked to the word LINK</li> <li>• 1 formative assessment strategy idea</li> <li>• target SAMR level</li> <li>• outline of lesson plan</li> </ul>
<p><b>Artifact 3: Lesson Evidence</b></p>	<p>Activity evidence includes either of the following:</p> <ul style="list-style-type: none"> <li>• 3-4 examples of student work with primary sources</li> <li>• 2 completed peer reviews</li> </ul>	<p>Activity evidence includes either of the following:</p> <ul style="list-style-type: none"> <li>• 2-3 examples of student work with primary sources</li> <li>• 1 completed peer review</li> </ul>	<p>Activity evidence includes either of the following:</p> <ul style="list-style-type: none"> <li>• 1-2 examples of student work with primary source(s)</li> </ul>



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

			<ul style="list-style-type: none"> <li>• 1 completed peer review</li> </ul>
<b>Artifact 4: Lesson Analysis</b>	Lesson analysis contains examples of all of the following: <ul style="list-style-type: none"> <li>• function and impact of selected primary sources</li> <li>• integration of technology for formative assessment of primary sources</li> <li>• key takeaways from student work or peer feedback</li> <li>• changes or adjustments for the future</li> </ul>	Lesson analysis contains examples of most, of the following: <ul style="list-style-type: none"> <li>• function and impact of selected primary sources</li> <li>• integration of technology for formative assessment of primary sources</li> <li>• key takeaways from student work or peer feedback</li> <li>• changes or adjustments for the future</li> </ul>	Lesson analysis contains examples of some of the following: <ul style="list-style-type: none"> <li>• function and impact of selected primary sources</li> <li>• integration of technology for formative assessment of primary sources</li> <li>• key takeaways from student work or peer feedback</li> <li>• changes or adjustments for the future</li> </ul>

### Part 3. Reflection

(300-600 words)

Use the word count as a guide to write a personal reflection about your work on this micro-credential. For tips on writing a good reflection review the following resource:

[How Do I Write a Good Personal Reflection?](#)

*Please copy and paste the following reflective questions and prompts into a document and respond to them without including any identifying information.*



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022

1. How has this learning experience changed your thinking about formative assessment and primary sources?
2. How has the SAMR model informed your thinking about constructing assessments using technology in the classroom?
3. Create a short student feedback form to help improve your lesson in the future.
4. How can you continue to use technology with primary source learning in the classroom to meet instructional goals and enhance student engagement with content?

**Passing:** Reflection provides evidence that this micro-credential has had a positive impact on both educator practice and student success. It should also provide specific actionable steps that show how the educator will continue to build on this competency.

## Credits

This micro-credential was developed with content and expertise from Citizen U as part of the Barat Education Foundation Library of Congress TPS program grant and in collaboration with the TPS Western Region out of the Metropolitan State University of Denver.

Citizen U<sup>®</sup>



**METROPOLITAN**  
**STATE UNIVERSITY**<sup>SM</sup>  
**OF DENVER**

**LIBRARY OF CONGRESS**  
**TEACHING**<sup>WITH</sup> **PRIMARY SOURCES**  
Consortium Member



Except where otherwise noted, this work is licensed under:

<http://creativecommons.org/licenses/by-nc-nd/4.0/>

**Teaching with Primary Sources**

Last Revised on Apr 24, 2022