1. **Project title:**

   Digital Learning Objects for Primary Source Instruction

2. **Project objective(s):**

   Many students, especially undergraduates, lack a conceptual understanding of primary and archival sources that inhibits their ability to successfully navigate primary source discovery environments when completing assignments and doing research. Our project objectives were to develop and create a suite of interactive digital learning objects (DLOs) to help students develop the information literacy skills necessary to perform primary source research successfully. After using the suite of DLOs developed as a part of the project, we wanted students to improve their understanding of what a primary source is, be able to identify primary sources, learn how to locate them, and understand how to use them appropriately in their research across a range of disciplines.

3. **Project description:**

   Three tutorials were created. Two tutorials were created using the software Adobe Captivate and were interactive, while one video tutorial was created using video editing software Camtasia. Borchard and Jarosz worked with a student assistant in the design and development of these tools. All three tutorials were completed by the Spring 2015 semester.

   The first tutorial created was *What is a Primary Source?* This self-paced interactive tutorial includes text, images, and audio. It provides a definition of what a primary source is, along with examples of primary sources in various disciplines. Throughout the tutorial, emphasis is placed on the fact that identifying a primary source is dependent on one's research topic. An 8-question quiz is embedded in the tutorial in which users
are asked to identify whether a particular source is primary or secondary with respect to a specific research topic. For each question they are given immediate feedback so that even if a student gets an answer wrong, he or she immediately sees an explanation as to what the correct answer is and why.

The second interactive tutorial is *What are Archives?* It focuses on providing a definition and examples of archives, and discussion of their relevance in research. This tutorial also includes images, text, and audio, and is self-paced.

The third tutorial we created is a 3-minute video about what users should expect when visiting the Special Collections and Archives department at the Oviatt library. All three tutorials have been integrated into an online subject guide that focuses on discovery and use of Special Collections and Archives materials.

4. **Evidence of project implementation:**

Tutorials developed as a part of this project are all available online and can be accessed by students, faculty, and others whether on campus or not via the subject guide for Special Collections and Archives on the "Tutorials" tab ([http://library.csun.edu/guides/SCA/tutorials](http://library.csun.edu/guides/SCA/tutorials); see attachments). They were also used as a part of Professor John Paul Nuño's History 369 course in the Spring 2015 semester.

List of tutorials created:

- **What is a Primary Source?** (interactive web-based tutorial available on tablets and mobile devices)
- **What are Archives?** (interactive web-based tutorial available on tablets and mobile devices)
- **What to Expect in Special Collections** (YouTube video)

5. **Description of procedures used for measuring objectives**
The authors conducted several usability and accessibility tests before they were published online. The two interactive tutorials were tested on desktop computers, tablets, and phones to make sure that the interactivity worked on all devices.

In order to test the effectiveness of the tool, as well as the functionality, a sample of 10 CSUN students completed the tutorials. The effectiveness of the tool was measured by how well each student did on the quiz, as well as feedback each student provided on the clarity of the content in each tutorial. Out of the ten students, two got 3 or more questions wrong. All of the participants had positive things to say about the tutorial, felt that the content was clear, felt the content was presented in an interesting way, and appreciated that the tutorials were self-paced.

Usability testing was done using JAWS (screen reading software), the tabbing functionality was tested for users using only keystrokes, and closed captioning was also added to all three tutorials. In this phase of testing we discovered some issues, especially that the quiz embedded in the What is a Primary Source? tutorial is not accessible by keystrokes. The authors then developed an accessible PDF document that includes the quiz as a way to provide access to the content for users with disabilities.

6. Project results

A suite of interactive digital learning objects (DLOs) that helps students develop the information literacy skills necessary to perform primary source research successfully now exists, and has been used where courses or assignments require students to demonstrate primary source literacy. The tutorials can be incorporated into Moodle and Drupal pages, and can be integrated into other online publishing platforms such as Scalar.

Assessment data and one-on-one interactions with students at the Special Collections and Archives reference desk indicates that student learning outcomes have improved
through use of the tutorials. Additionally, the tutorials are freely available online, can be used independently of any course or assignment, and can be used outside of CSUN.

Moving forward, the tutorials could also be used to support a flipped classroom instructional approach or to replace face-to-face information literacy instruction either in whole or in part, depending on instructional need.

7. What we learned about student learning

Based on the feedback we received during the testing phase, students liked that they had control over the pace of the tutorials, and found them to be engaging and easy to understand. This type of content is often challenging for students with no prior exposure, so we really wanted to create tools where information is built upon as the tutorial progresses. Allowing a student to spend more time with various parts of the tutorial or to go back and review content makes these more effective learning tools.

The primary source tutorial was embedded in Professor John Paul Nuño's History 369 course in the Spring 2015 semester. The tutorial was completed by 31 students with an average score of 78%. The average amount of time students took to complete the tutorial was approximately seven minutes. The quiz embedded in this tutorial gives students immediate feedback on whether their answer was correct, so even if they don’t score well on the quiz the learning objectives are still met.

8. What we plan to implement in the future as a result

The authors would like to make this a part of the Oviatt Library’s information literacy curriculum for courses that use primary sources in their research. They have also already been incorporated into an online guide that provides assistance for research. Moving forward we plan to use these tutorials to promote primary source research, as well as promote available resources within the Special Collections & Archives department, along with resources available online.
The tutorials are currently available online through the library’s website. They will also be added to the Oviatt’s Information Literacy Toolkit in Moodle. This Moodle course is available to all students and faculty, the tutorials will be available for use and can be imported by faculty into their Moodle courses. The content of the tutorials and the way the information is presented is unique within the field of librarianship. In an effort to share our work to the wider community, we will be submitting the *What is a Primary Source?* and *What are Archives?* tutorials to MERLOT, which is a peer-reviewed open access digital learning object repository.

In terms of assessment, the more that these tutorials are used within the library and the university, the more data we’ll have to assess their effectiveness. Based on the feedback we receive, we may wish to edit the tutorials in the future or create more.