Standardizing and Managing Online Tutorials for Improved Learning

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A number of factors have guided the creation of online tutorials in libraries: the rapid growth of distance learning programs, administrative pressure to provide services online as quickly as possible, the just-in-time expectations of our students, lack of strategic planning for online objects, and the democratization of tools to develop and deliver tutorials. This has led to little time for planning in many institutions, resulting in an online presence that is fractured and lacks a common theme or message. This presentation will discuss our experience in this effort, including the process and tools used to improve and standardize tutorials, tips for developing a common look and feel that represents the institution's brand, guidance on the best way to host these tools, and lastly, advice for navigating the political issues that arise from such an initiative in a large academic library system.

Introduction

Many academic libraries face challenges associated with online tutorials. These tools are being created and deployed with increasingly frequency, not only to support distance learners but to allow for point-of-need instruction, that is, instruction that is available 24/7. These tools also help libraries meet the growing need for assistance for users in a time when expectations are increasing while resources are decreasing.

Online tutorials address several different types of the instruction, from skills-based instruction to library-related concepts and procedures to information literacy. The demand for these tools has increased significantly over the past few years—and this is not likely to slow down. The pace at which programs are being added to institutions of higher education, including online, is outpacing libraries' ability to provide high quality services online. As a result, many online tools reflect the lack of time that goes into creating and maintaining them and worse, a total lack of strategic planning for online objects. The result is a slap dash approach to building online content that is not only unattractive and inaccessible, but is not likely to be meeting any learning objectives. This misshapen and fractured online presence also does not reflect well on the institutions as they compete for more students.

Background

George Mason University Libraries in Fairfax, VA is a large distributed library system that serves a large (FTE 35,000), diverse student population. Like many large research institutions, the University is also growing its distance education programs in order to serve distance learners, working adults and others who may seek online education options. The demand for online services has resulted in the creation of a suite of digital learning objects such as tutorials to meet the information literacy and research needs of students.

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The online tutorials at Mason Libraries serve students in both face-to-face classes, as well as remote learners. These have covered the basics of information literacy, addressed library specific tasks (for example, how to request a book through the consortium) and how to use specific databases. Over the past eight years, these tutorials were created by a number of individual librarians and library staff members with a wide range of instructional design skills, various tools (some more sophisticated than others) and for a host of different purposes (such as to support a class or address a recurring question on virtual reference). The result was a wide array of tools of varying quality, accessibility and value.

The Gateway Teaching and Learning Services department of Mason Libraries, opened in 2013, was created to serve undergraduate students in the Gateway Library. Located in the Johnson Center, the biggest student union building on campus, it is a busy and diverse meeting place that houses the media collection, textbook borrowing program, a video recording studio, undergraduate collections and private and group study areas. One of the goals of the new unit is to provide instructional design support for the institution’s subject librarians. To that end, when the department was created, it was determined that an instructional design librarian would be an important addition to the team in order to support face-to-face and distance learners, as well as the subject librarians in their role in teaching upper level undergraduate and graduate students.

The Process

In July 2013, the new instructional design librarian conducted an inventory and review of the existing Mason online tutorials. More than 125 items were found on various YouTube channels, LibGuides, and library webpages. Many of the tutorials found were outdated, contained confusing language and/or library jargon, and were not universally designed (no audio, no captions, not keyboard accessible, inappropriate use of color, and so on). Furthermore, most of the original or raw files of the tutorials could not be located. Based on these factors, it was determined that everything would be scrapped and a collection of replacement online tutorials would be built from scratch.

In order to put this plan in motion, several things had to occur. First the Libraries needed a place to create tutorials that was quiet, had a complete suite of appropriate tutorial creation software, high quality computers and a microphone. Additionally, a team needed to be formed to create and evaluate tutorials for Mason Libraries, as well as get buy-in. Both ideas were approved by the Associate University Librarian (AUL) for public services.

The team, or tutorials taskforce, consisted of seven members from different departments of public services (distance education, learning technologies, instructional design, subject librarians, and reference specialists) and different Mason campuses (Fairfax, Arlington, and Manassas). The mission was to develop a framework for tutorials that would guide the process going forward. The taskforce looked at technology challenges/issues and requirements and usability/design requirements (universally and mobile designed with Mason branding). It developed a communication plan, tutorials process and workflow that outlined staff responsibilities (for both internally and externally created tutorials), and a systematic review process. The taskforce submitted its report to library management and was approved in November 2013.

At the same time a proposal was submitted to library administration to have a lab built to support the creation of high-quality tutorials. The resulting Learning Technologies Lab, opened in 2014, is located in the Gateway Library on the Fairfax campus and provides a space to create online learning objects and other tools to support instruction, reference and outreach at Mason’s main campus. It contains a host of hardware and software designed for graphic design, video editing, screen captures, web development and more. Scheduling of the room, which is open to all library staff, is accomplished via the intranet. (See Appendix A for a complete list of hardware and software available in the lab).
In addition to advertising the opening of the space to the entire library staff, Teaching and Learning Services also offered orientations to the space; these thirty-minute sessions provided overviews to the equipment and advice on creating, organizing, and backing up work. From there, training was scheduled on some of the specific programs, for example, Adobe Captivate, TechSmith Camtasia, etc.

With the lab set up and the taskforce’s plan in place, tutorial creation was expected to move quickly. However, issues arose. The library’s website was being redesigned and the launch date was moved back five months. There was resistance to taking down the old tutorials, which we did not anticipate. Many librarians and staff members indicated that there was still a need for some of the older, out of date material, and the decision to replace them likely caused some hard feelings. Additionally, many librarians and staff members who were creating new tutorials to support their instruction were unwilling to share their tutorials with the members of the taskforce. Many chose to use them in Blackboard but their unwillingness to see them used more widely made them unavailable for publication on the Libraries’ website. Some of the reasons given for their reluctance included insecurity about the quality of their work, concerns about their appeal/utility to a wider audience, and other reasons that were not shared.

In order to implement the taskforce’s plan, a tutorials working group was formed in the Teaching and Learning Services department. The working group consisted of four people: instructional design librarian, distance education librarian, assistant to the distance education librarian, and a reclassified specialist position. The working group first needed to set up the reviewing process. Based on the taskforce’s plan, tutorials were evaluated/reviewed twice, a content review and a final review, prior to going live. A content review rubric was developed using the ACRL’s Peer-Reviewed Instructional Materials Online Selection Criteria and Standards from the QM Higher Education Rubric. Once drafted, two tutorials were created to test and norm the rubric. For the final review, it was decided that all members of the working group would examine the tutorial and send final comments/feedback to the creator.

Next, templates for video, Guide on the Side, handout/PDF, and webpage (patterned after WikiHow) tutorials were designed. Mason branding was incorporated in the templates based on Mason University branding guidelines and Credo Learning Solutions developed the introduction and conclusion clips for the video tutorials. After the templates were designed, they were submitted to Mason’s Assistive Technology Initiative to test for accessibility, and the templates were updated based on this feedback.

The working group then focused on storage, servers, and backups. The members met with the head of the Digital Programs and Systems (DPS) department for assistance in these areas. It was decided that the tutorials and all of their pieces (images, audio files, scripts, reviews, etc.) would be stored on the Teaching and Learning shared server space. All members of the working group would be given Drupal credentials to make webpage tutorials. Video tutorials with no interactivity would be uploaded to YouTube. Guide-on-the-Side tutorials would continue to be located on their own designated server set up prior to the establishment of the Teaching and Learning Services department. All others, including interactive tutorials and handouts, would be housed on a separate server. Naming conventions, read files, and file structures were created/established to maintain order and consistency. Also, during the taskforce’s planning process it was decided that the online tutorials would be backed up in three places. Again, with the assistance of the head of DPS, the first backup was a 1TB Guardian MAXimus RAID device in the Learning Technologies Lab. The second backup was the internal Backup drive on the Learning Technology computer. And the third backup was the masonlibraries GoogleDrive. Ideally, tutorials are backed up once a month, with more frequent backups when there is a high volume of production.

As mentioned above, Mason Libraries previously had various YouTube channels, at least six. In order to provide consistency and a unified Mason Libraries presence, it was decided to move all content to one channel
(https://www.youtube.com/user/masonlibraries\textsuperscript{7}), update the designated channel, and delete the other YouTube channels. Updating the masonlibraries channel included changing video statuses, (public, unlisted, private), creating a channel banner to reflect the Mason Libraries’ brand, writing a channel description, and setting up featured channels. Also, because all library employees were given access to upload content to the masonlibraries YouTube channel, standards were put in place for the naming, tagging, describing of content, and creating of title thumbnails for each video. The result is a much more attractive, unified and easy-to-use portal.

With the launch of the new library website in May 2014, a new tutorials landing page needed to be designed. The taskforce looked at many sites and setups (Films on Demand, Netflix, other library websites, etc.), but in the end the page was designed after the Common Craft\textsuperscript{8} site. A graduate research assistant was hired to design the tutorial icon template and many of the tutorial icons. To assist with findability, the page was broken into five categories (basic research concepts, research process, library tools and services, finding material, and advanced research concepts). Also, a tutorial type legend was created to assist users in selecting tutorials based on format. At the same time a tutorials request form was created for users (inside and outside the library) to request tutorials to be built, which can be found on the Libraries’ website.

### Discussion

A bank of tutorials is now in place on the Mason Libraries tutorial page. They are mapped to both the ACRL information literacy framework\textsuperscript{9} and the Gateway Instruction Learning Outcomes.\textsuperscript{10} This helps the working group identify areas with content and areas without content. Also, with the assistance of the head of the Scholarly Communication and Copyright Office, Mason Libraries created tutorials are licensed with creative common licenses (unless otherwise indicated, Mason Libraries created learning tutorials are licensed via Creative Commons Attribution 4.0 International License).

Currently, usage statistics are gathered from two places, YouTube and Piwik. The number of views and the average view time are kept for the videos uploaded to YouTube. From Piwik the number of views is recorded for all tutorials on the tutorials webpage and for the webpage itself. Furthermore, an assessment plan is being developed to determine the impact of the tutorials on student learning at all levels.

Also, the working group is looking for ways to make the tutorials webpage more navigable. The tutorials are being tagged (with the tags created for the YouTube channel) and facets are being constructed to assist users in finding appropriate tutorials.

Yet, still more work remains. In the coming year we expect to have another, larger website redesign mandated by the university, which will require the reproduction of many of our tools. We hope to expand our current suite of tutorials to incorporate more interactivity and interest, and are looking at how to add animation, for example. We intend to implement our student learning assessment plan. And we prepare to train additional staff members to learn to create tutorials as we continue to see many undergraduate classes migrate to an online environment.

### Conclusion

The process described here took more than three years to implement and involved a great deal of time, energy and political wrangling. The very slow pace of progress, a source of frustration for many within the Libraries, speaks to the many barriers we encountered, from waiting for web redesigns to occur, negotiations for server space and equipment, and managing the political implications of a major redesign in a large bureaucratic organization. However, the outcome, almost 120 online tutorials that are universally designed and Mason branded, is a good starting point.
For those considering undertaking a similar project, seek partnerships inside and outside the library to assist with the project. Maintain proper storage and backup sites for completed tutorials and all of their pieces (audio files, images, etc.). Establish reviewing processes and assessment plans to ensure quality made products. And be prepared to be flexible.

Acknowledgements
We would like to express our thanks to the following individuals at George Mason University: Jason Byrd, Mika Endo, Michael English, Wally Grotophorst, Claudia Holland, Izzie Hunsberger, Joi Jackson, Teresa Kan, Kara Kibbling, Denise Klasen-Lopez, Tricia Mackenzie, Chris Magee, Richard Todd Stafford, and Andrew Stevens.

Appendix A: Mason Libraries’ Learning Technologies Lab Equipment

**Hardware:**
- Recording Microphone
- Headphones
- WebCam
- Speakers
- 2 TB Working Drive
- 2.5 TB Back Up Drive
- 500 GB Time Machine drive
- 1 TB RAID Backup Drive
- Samsung Television

**Software:**
- Adobe Creative Cloud: Photoshop, Illustrator, Premiere Pro, After Effects, Media Encoder, Bridge, Speedgrade, Prelude, Flash, Audition
- Adobe CS6: InDesign
- Captivate
- Camtasia
- Final Cut Pro
- Audacity
- GarageBand
- VLC Media Player

Notes
2. “PRIMO Selection Criteria.”
4. “wikiHow to Do Anything.”
7. “George Mason University Libraries YouTube Channel.”
8. “Common Craft.”
10. “Gateway Instruction Teaching Philosophy.”

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