

Writing the Scripts for Interactive Library Skills Tutorials

Christine Bombaro, Dickinson College

Online information literacy tutorials can be highly successful supplements to traditional library instruction sessions. Although the creation of tutorials is initially a time consuming process, designing them and using them can make the work of an information literacy librarian easier and more productive. Well-designed tutorials can help students learn discreet, skill-based research activities, such as reading a call number or locating a journal article, at their own pace and outside of class time. Such rote skills, which an instructor has little choice but to demonstrate and are frankly boring to teach, may take one-quarter to one-third of a librarian's allotted time to teach in a classroom setting because the librarian must ensure that all students are caught up through each step of the process. Online tutorials can provide librarians with the flexibility to "flip" their classrooms and spend their time addressing more difficult research concepts, such as evaluating sources and incorporating them ethically into an original project, rather than on search mechanics.

Educause (2012) defines the "flipped classroom" as "a pedagogical model in which the typical lecture and homework elements of a course are reversed. Short video lectures are viewed by students before the class session, while in-class time is devoted to exercises, projects, or discussions." This teaching method has numerous benefits in addition to freeing the librarians to address more complicated concepts during their limited time in the classroom. Online lessons allow students to learn at their own pace, on their own time, and to review material that may at first have been unclear without interrupting a class session for questions. The element of interactivity keeps students engaged, and allows for instant assessment of student learning. In addition to serving as supplements to classroom learning, library tutorials can be embedded at strategic places on the library's website to help students use library tools at times when help may not be immediately available.

Effective tutorials take a considerable investment of time to create, as much as twenty hours per three-to-five minutes of tutorial (Slebodnik & Riehle, 2009, p. 37). In addition to the technical skills required to create tutorials, it is imperative that they are guided by an effective script. The script behind an interactive online tutorial is without a doubt the most critical element of a tutorial, and it is also one of the most challenging elements in the process of creating one. Writers who are used to having space and time to develop an idea on paper may at first find the

script-writing to be a difficult, possibly frustrating, process. Due to the nature of this largely unfamiliar style of writing, it can be it all too easy for a writer for whom any particular task is second nature to conflate concepts, to attempt to cram too much information into a brief lesson, and to be too verbose or too vague. When failing to break down a skill set into its individual components, script writers may also inadvertently make inaccurate assumptions about the learners' knowledge base, which could easily derail the goals of the tutorial.

Script Design Principles

The book *How Learning Works* by Ambrose, et al. (2010) can help focus tutorial script writers on the important principles behind creating any classroom lesson or learning object. Some principles of *How Learning Works* that are particularly relevant to script writing include:

- **Students' prior knowledge can help or hinder learning** (Ch. 1). In the case of writing tutorials, it is helpful to decide before you begin what you will assume about students' existing library and computer skills. For example, does the tutorial require students to know how to do simple tasks such as access the library's website? Are words and phrases such as "click the Next button" used consistently, and will students know what that means? It is important to think about all the terms you expect students to understand and tasks you will expect them to perform in order to fully benefit from the tutorial. Any terms or skills that may be otherwise unfamiliar may need to be built into the tutorial if you cannot assume that they are common knowledge, or that students will learn them elsewhere, such as in a required course or another tutorial that preceded the one they are currently taking. It is generally better to err on the side of assuming that students may not know something, rather than running the risk of leaving them confused during the lesson.
- **Students' motivation generates, directs, and sustains what they do to learn** (Ch. 3). Before you write the tutorial, you should be reasonably confident that it will be used and that students will recognize the value in taking it. Why would students complete this tutorial? Will it be used as part of a credit-bearing information literacy course? If the intention is to use it in conjunction with a "one-shot" session,

will the professor allow it to be required as pre-session work or homework that will then be combined with a research project? Will it be used in place of information literacy class sessions? Can you use it during a reference transaction? Can you embed it at points of need on your website?

- **Goal directed practice coupled with targeted feedback is critical to learning** (Ch. 5). At the outset, any tutorial should state its goal and arrive at its point quickly and without distraction. Online tutorials allow the designer to embed interactivity, which provides immediate feedback to learners, and should be worked in at strategic points throughout the tutorial so that students know that they are grasping the concept. In addition, most tutorial-building software allows for formal assessment to be built in, so that librarians can change or improve the tutorials as results reveal that changes may be necessary.
- **Create a climate conducive to learning** (Ch. 6). Online tutorials offer asynchronous, self-directed learning that students can review repeatedly. Students can move through tutorials as fast or as slowly as necessary. However, the language used in the tutorial must be at a level appropriate to the lesson. The pace should help to keep students engaged in the lesson, moving neither too slowly as to be boring, nor too quickly as to cause important points to be missed. Thoughtfully designed tutorials provide links to help for those who have questions or need additional assistance.

Writing Considerations

Writing a script for an online tutorial is a difficult process. The author must accept that a script demands a terse writing style. The script must be tight and concise, using only simple words and phrases. This is no place for clever turns of phrase, alliteration, hyperbole, or metaphor; nor should a script be riddled with an overabundance of adjectives and adverbs. Since a tutorial script ultimately will be read aloud, the author must keep in mind the demands associated with speaking clearly and distinctly that will be placed on the person who will serve as narrator. As well, the tutorial's audience is likely to include non-English speakers and others not familiar with library jargon.

The tutorial's pacing should be kept in mind throughout the writing process. Approximately 140 words can be read at a reasonable pace in about one minute.

A small cohort of Dickinson College script writers commented on what they thought was the most challenging aspect of script writing. They responded:

- “How to avoid using terms and phrases that require further explanation, thereby precipitating an endless chain of digressions increasingly distant from your initial objective.”
- “Deconstructing a skill into its separate steps is not easy as you might think.”
- “Figuring out how to reduce what is often a fairly complicated and amorphous topic into something that can be communicated concisely and unambiguously.”
- “Translating a theoretically framed concept into a short, simple, and streamlined tutorial.”

Best practices for writing tutorial scripts include:

- Define goals for the learner, state them at the outset, and stick to them throughout the tutorial.
- Provide a brief introduction to the concept and why it is necessary to learn it.
- Clearly organize the progression of the tutorial: present the problem to be solved, clearly label each step when transitioning, and summarize the objective afterward.
- Include only the minimum instruction needed to teach the skill.
- Do not conflate multiple concepts.
- Include opportunities for interactivity as much as possible.
- Write the script for a speaker, not a silent reader. Read aloud as you write and avoid awkward phrasing, flowery writing, and long sentences.
- Include an example to illustrate each concept.

Other tips for creating successful tutorials that writers should keep in mind include:

- Be clear on what prior knowledge the learner needs in order to accomplish the task. Build all expected knowledge into the tutorial as necessary, but avoid straying from the tutorial's goal.
- Don't overdo multimedia (graphics, text, etc.). Use it where needed, but not excessively. Keep screens sparsely illustrated in order to direct the students' attention to the most important elements of the images.
- Use text and narration together. Generally, the narrator should read any text that appears on the screen, and describe the important aspects of all images presented.
- Visually emphasize the most important aspects of the illustration on screen, for example by using highlight-

- ing, underlining, or arrows in contrasting colors.
- Pause for interactivity and learning feedback at various points during the tutorial.
- Allow the user to control the pace of the tutorial where possible.
- Ensure that the script will fit within a short, defined time frame when read aloud.
- In order to ensure that the tutorials are effective, take advantage of software options that allow you to embed quizzes, gather use statistics, and conduct surveys.

Conclusion

Well-designed online tutorials can be highly impactful learning objects that improve students' information literacy skills. The script is the most important element of a successful tutorial, but, because a script is such a distinct type of writing, it requires new writers to familiarize themselves with solid learning theory prior to writing one. It is not unusual for scripts to be subject to heavy revision before they can be considered final, and new writers should expect to spend many hours getting them right, even for tutorials that last only a few minutes. The time investment is worth it, though. Librarians who make the commitment to create learning objects will find that their libraries' information literacy goals can be met creatively and efficiently, and that their time spent in the classroom is more productive. Most importantly, the act of creating an online learning object forces the authors to think deeply about learning processes as well as how to teach specific concepts, which in turn will inevitably help to improve teaching performance in the classroom.

Further Reading

Literature about creating tutorials, particularly those related to information literacy, is sparse. Some of the articles we found helpful when beginning this process include:

Ambrose, S., Bridges, M.W., DiPietro, M., Lovett, M.C., Norman, M.K., & Mayer, R.E. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.

Bowles-Terry, M., Hensley, M.K., & Hinchliffe, L.J. (2010). Best practices for online video tutorials in academic libraries: A study of student preferences and understanding. *Communications in Information Literacy*, 4(1), 17-28.

Educause (2012). *7 things you should know about flipped classrooms*. Retrieved from <https://net.educause.edu/ir/library/pdf/eli7081.pdf>

Oud, J., (2009). Guidelines for effective online instruction

using multimedia screencasts. *Reference Services Review*, 37(2), 164-176.

Slebodnik, M., & Riehl, C.F. (2009). Creating online tutorials at your libraries: Software choices and practical implications. *Reference & User Services Quarterly*, 49(1), 33-37, 51