CLONING OURSELVES: ONE LIBRARIAN'S EXPERIENCE

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INTRODUCTION

Library instruction is on the increase, due in part to the information literacy movement, the acceptance of course-integrated instruction and the increasing complexity of research tools. Library instruction has become an accepted facet of the academic instruction environment. As demand for instruction grows, instruction librarians balance the dilemmas of demand and staffing with the purpose to serve all comers.

Such demand is certainly a marker of success, but this leads to scheduling conflicts as library instruction generally falls within several optimal time periods throughout a semester or quarter and in a limited number of time slots. Filling instruction requests as a priority impacts the librarian's time for library service and campus responsibilities, collection development time, reference hours and professional development.

Early solutions consisted of print-based handouts and workbooks and have progressed to electronic versions of the same handouts, but the increase in technologies in recent times provides a new set of solutions to academic instructional needs using various applications. One of these solutions is to clone the librarian through virtually-delivered asynchronous instruction.

INSTRUCTION TRENDS

Current pedagogy, moving from teaching standard skills (bibliographic instruction) to a course-integrated and assignment-based process of critical thinking (information literacy) has altered the instruction landscape. Designing interactive strategies and a growing number of tools has increased preparation time. The increase in research tools has reduced the amount of time

spent on each tool or creates a need for an increase in library instruction contact time with a class. This is in addition to instructing in critical thinking skills, tool selection and search strategy development.

Research shows this instruction is especially important in the college student's first-year as an aid to success and retention. Adding to the calls for instruction are the discipline-specific gateway and graduate courses due to the increasing variety and complexity of the research tools available.

Enrollment increases in higher education drives increases in the number of courses offered and follows with an increase in requests for instruction. Predicted growth in higher education enrollment is 12-16% between 1997 through 2009 (Gerald & Hussar, 2000). Crosby (2000) predicted zero growth in numbers of employed librarians, including those providing instruction, although some existing positions may be altered to include instructional duties.

As distance education becomes a larger segment of higher education, with anytime/anywhere instruction, demands increase for librarians to work with flexible instruction schedules, travel to distant venues (if feasible) and be incorporated into courses as needed while still managing their entire workload.

The challenges presented by technological or physical challenges must be addressed to ensure educational equity. This places additional demands on the librarian to consider all instructional aspects, tools and technologies involved and resolve any issues prior to instruction.

As a result, we are 'victims of our own success' in being expected to provide appropriate and effective instruction anytime, anywhere.

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Options

Is there such a situation of too much instruction? Librarians generally think not, as we are aware that students need multiple exposures to information-seeking processes before full retention of concepts. My own anecdotal evidence from working with first-years supports this, although there will always be exceptions, as with every rule. Even upper-division and more experienced students may 'get it' in fewer exposures, but will still be confounded by extraordinary situations as they frequently perform research, using their tried and true strategies and tools regardless of the relevance to the current research need.

What can one do?

- Turn down requests—but that does not serve students or faculty needs.
- Hire more librarians which will only happen in an ideal world with an ideal budget.
- Rely on existing colleagues, although they are likely to be as busy as you are as well as covering reference and other duties to free you for instruction.
- Evenly distribute instruction throughout the semester, although that does not meet the optimal 'time of need' instruction scenario.
- Give up other tasks such as collection development and reference. This will be resisted by many as interaction in instruction informs the bibliographic and reference duties.

Trial Solutions

In developing options, I considered the needs of 21st century college students, my abilities and the institution's available resources to evaluate the following options:

- Shorten the instruction time, in order to be able to visit 2 classes in one time period. This is not enough contact time to cover the multitude of basic tools and concepts as well as meet classroom instructor's expectations.
- 'Teach the teacher' by training the classroom instructor to expand the pool of 'library resource' instructors. This works to a limited degree, but the 'alternate' rarely has time or opportunity to keep up to date on new technology, changes and additions and in many cases is not interested in what they see as teaching *process* (use of tools and critical evaluation), but still wants the *product* (better quality research materials and ethical use of resources.)
- Combine two or more sections of a class for one instruction session. This was tried with the CSUSM first-year writing program. This works only if the

instructors are in complete alignment as to the course pacing, content and assignment. Otherwise, at least one class is not prepared or does not have an assignment that relates to the instruction.

- Obtain help from colleagues in either course preparation or presentation. This asks equally-overloaded colleagues to take on more and can only work if their instruction schedule has availability when yours is busy. Also, these colleagues may be already covering other duties you would be required to undertake if you were not teaching.
- The remaining solution is to clone the librarian. This has been done in a limited fashion, to duplicate and support our instruction through handouts and workbooks and has been extended to online tutorials and web pages. With newer technologies, there are more options than ever, ranging from synchronous, real-time instruction to archived instruction by either text-based tutorials or virtual visual and aural recording.

Cloning with Video Technology

Creating a virtual librarian clone using a video presentation tool supports multiple learning styles, especially the visual and aural, using the internet, which has become a ubiquitous means of communication and information access.

Cloning also provides opportunity for a response to the "canned" feel many viewers and presenters remark on when viewing a fixed slide presentation.

There are a variety of streaming media providers of presentation tools and software, both free and fee-based. California State University San Marcos' Instructional & Information Technology Services chose Mediasite from Sonic Foundry for campus-wide use. When presented to the librarians, it was immediately seen as an opportunity for collaboration with faculty, other librarians and the IITS staff in a variety of instruction delivery situations.

Mediasite

Setup for using Mediasite requires the proprietary software and recording hardware as well as recording camera and microphone. The hardware can be set up in a dedicated studio or kept portable if needed. At CSUSM, all presentations are loaded on a CSUSM server dedicated to Mediasite and accessed through a main page as seen in Figure 1. These presentations are available for public access once completed as loading to the site is automatic. Each presentation has its own URL for direct linking.

Figure 1: *The CSUSM home page for Mediasite presentations*

A customized skin (frame) is presented in Figure 2. Default icons are included to enable email to the presenter (ask), participate in a poll (% poll) or jump to a particular screen shot through the options at the top of the larger screen. Any number of skins can be created.

Figure 2: *A view of a presentation with a customized skin. The customized portions are the "Kellogg Library" and "Cal State San Marcos" logos which link to the library and campus websites.*
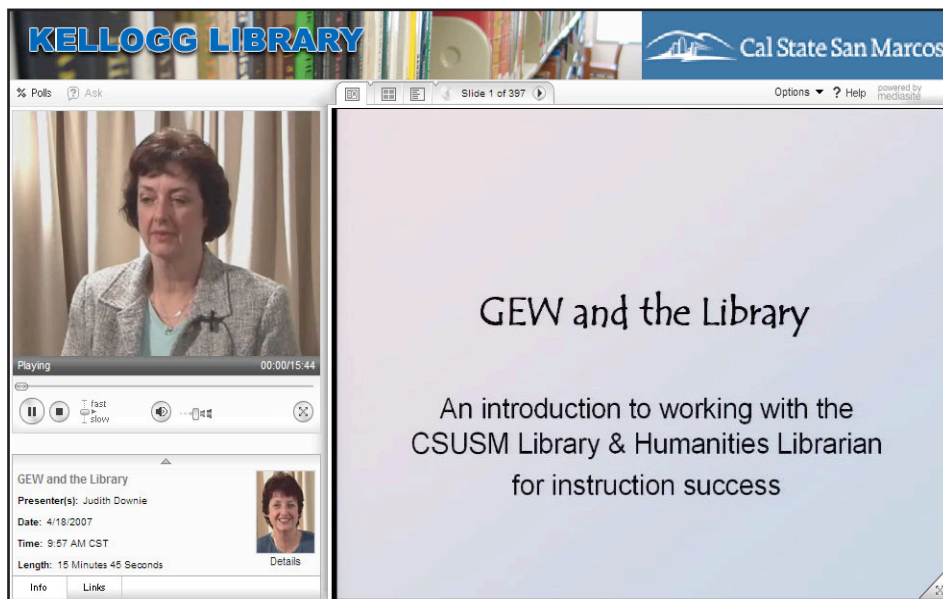
POSITIVE ASPECTS

• Access and viewing is available to the end user without cost or additional software. This material can be retrieved any number of times and there is some simple navigation to allow 'pause and review" of material presented to aid student learning and retention.

• Although the various functions and capabilities are not prominently labeled, most users will click and explore and find the site easy to learn. There is navigation capability to jump ahead or back and to enlarge the computer view screen or video display screen to fill the entire monitor.

• Various generic segments can be created (e.g., use of the library catalog) and re-used in a variety of instruction sessions.

• This presentation can be projected anywhere, in classrooms as well as a library instruction lab. This means a classroom instructor can project the presentation, pausing to interject comments or ask questions of the student audience.

• At CSUSM, as the system was chosen by the Instructional & Information Technology Services department, they have been committed to providing support as they want to see this choice be successful and widely used.

• This system has also been embraced by many classroom faculty, especially in sciences and education disciplines, although it seems the strongest use is by those who are teaching distance education and have adopted video presentation technology.

• The entire presentation can be burned onto a CD or the audio can be loaded onto a portable listening device for off-line use.

ISSUES

Some issues the librarians at CSUSM have discovered are:

• The librarians do not have the level of access to create folders or skins, leaving them dependent on others and their availability for support. In some ways, this is helpful, in that there is less for the librarian to learn, but it does remove a level of autonomy.

• Scheduling space and personnel can be challenging, especially at the beginning of the semester when a high number of users are recording presentations. Since this is a shared space and equipment situation, scheduling is arranged through a shared calendar. Conflicts have occurred and are likely to increase with an increase in usage.

• The interactivity is limited for viewers. They can control the speed of presentation and click forward or back to different slides, and participate in polls or web links if available. It is up to the presenter to devise some accompanying materials or pose questions during the presentation to invite participation.

• How to measure effectiveness? The librarian does not have the ability to fully gauge the student learning as a result of the instruction unless collaboration with the classroom

instructor provides access to completed assignments, bibliographies or some sort of evaluation tool.

• Availability through the web is a double-edged sword if you are using components such as licensed databases. Viewers, such as the general public, who are not authorized for access to the tools you are teaching will be frustrated by access barriers and may not know how to gain access to similar resources.

LIMITATIONS

Not all limitations listed here will exist for every institution and user as it depends on the discipline, institution and materials being used.

• The amount of 'Real Estate' can be problematic for those with vision issues or if too much text is on the screen at one time. Currently, the entire Mediasite presentation cannot be enlarged to fill the entire monitor, although the individual screens can be enlarged. The monitor resolution can be changed, but the user may not know how or be able to change the monitor resolution to enlarge the scale.

• Editing a recorded presentation is limited to trimming the beginning and ending of the recording. If a screen needs to be replaced such as when a database revises its look and function, the entire segment must be re-recorded.

• It is essential to spend time writing a script and practicing your presentation, which may not be as big a part of preparing for a face-to-face presentation. Impromptu presentations run a high risk of not presenting well as the presenter may miss a key point or run over-long. Creating a presentation using screen capture is highly recommended over live screen due to speed issues with screen loads that may create a distracting lag in the pace.

• Connection speed for users and for servers will both affect the delivery. Slower connections will not load at all or present choppy and unintelligible presentations.

• Usage and access data is not readily available, although a hit counter can be created to measure access. Once presentations are published they are live and available for access and use without the creator's knowledge. For example, I discovered a previously recorded course set was being used after having been contacted by a student who had viewed the segments and wished to make an appointment for additional help.

• Some features are neither intuitive nor readily visible. This may not be a concern for adventurous users who will click on anything until they figure it out, but can be a problem for the less technologically adept or someone with visual or other disabilities. The distractions occurring while the viewer explores during a presentation could mean that the viewer misses an important concept, and will they go back to review once they figure out how everything works, or assume they 'got' it all in spite of the distractions?

Assessment

To clarify, this section addresses assessment of student learning and NOT evaluation of instruction. Assessment is an area of interest to the regional accreditation agencies, providing an impetus to include assessment in any instruction session. Learning assessment has been integrated into the CSUSM Information Literacy Program from its inception through the use of a variety of tools and delivery methods.

Some assessment can be performed by using Mediasite's polling function. Options are true/false and multiple choice questions, although if the presentation is asynchronous, any correction to a poorly misunderstood concept or tool will have to be in a new recording or a post-presentation follow-up.

The CSUSM librarians have been using a recently-acquired separate survey product. It was decided to incorporate this survey tool into the presentation to simplify and codify response compilations in the shared evaluation file.

SurveyMonkey

SurveyMonkey was purchased by the library for student assessment but also made available for professional research purposes.

As with the many survey products on the market, this collects data anonymously and automatically compiles the resulting scores. Most web editors also allow creating survey forms, but the commercial product simplifies creating the form and data collection. In the case of SurveyMonkey, survey templates can be stored indefinitely and shared among the authorized users. Creating or adapting a survey is easy to learn and the result sets can be downloaded and manipulated using Excel.

This type of product is a good fit with the web-based for anytime, anywhere access of the Mediasite recordings.

Results to Date on the Cloning Experience

This report is based on findings from early application of these technologies. I anticipate changes as I gain more experience and insight from the poll and survey tools. These findings may provide some points when considering development of your own presentation and assessment tools.

Positive
- Using this combination of streaming media and online survey tool, I was able to meet faculty's calls for instruction in spite of schedule conflicts as well as serve courses taught online.
- There is a time savings over the long run if the segments are carefully designed to be re-usable either as a package for the next time the course is offered or incorporated as individual segments in other courses.
- This technology appeals to students wanting or needing web-based access for remote access, review or to resolve

scheduling conflicts of their own.
- This does clone the librarian to be anytime, anywhere when instruction requests would cause a conflict, for review or if physical location is a barrier to face-to-face instruction.

Negative
- As with any first use, there is room for refinement by the presenter, especially as some segments seem too long. Resolving such problems requires re-writing the script and accompanying screen captures and then re-recording the presentation.
- Higher speed connections are a must for access, much less optimal viewing. Slower connections from either end may contribute to partial loading, choppy sound and video or freeze the computer.
- The evaluation tool is notable for its low use. This is especially true of remote users who are not in a computer lab with an instructor to reinforce the request. This low use in comparison to paper-based tools has been corroborated by other colleagues using this evaluation tool.

Tips
Some guidelines became immediately apparent, such as:

- Record short segments (8-10 minutes appears optimal.)
- Practice and time yourself.
- Check yourself on screen before starting the full recording session.
- Prepare screen shots beforehand rather than 'going live'.

And more came from the evaluation experience:

- Interject interactivity (pose questions to promote attention, use the polling feature.)
- Provide guided notes or fill-in worksheet to accompany the presentation (either to the classroom instructor or an accompanying web page.)
- Promote any survey and its importance.

Future Considerations

There are aspects that need to be explored in terms of practical application or research on user acceptance and instructional effectiveness.

- User issues
  - ADA compliance
  - Extent of faculty and student acceptance (who will embrace and why?)
  - Effectiveness based on educational experience or discipline
- Back-end issues
  - Copyright issues
  - Classroom Management System integration
  - Impact of upgrades or new versions in software or tools

- Non-classroom applications
  - o Outreach
  - o Generic research tools or 'library helps'
- Tools
  - o Podcasting
  - o Additional technologies such as document cameras in the studio

CONCLUSIONS

This presentation tool was successful in meeting instruction needs and offers opportunity for repeat uses in future semesters. Using Mediasite to record a presentation resolved most scheduling conflicts, which is a problem likely to grow in the semesters to come. The series created for the online course's instruction need was used again the following semester. Future presentations will have the advantage of more training and practice.

Although streaming media technology is not for all instructional situations, it does meet a variety of needs and learning styles scenarios and is well worth a look as a means to clone the librarian.

NOTES

1. Bibliography of additional materials http://library.csusm.edu/about/people/judith.asp

2. CSUSM Mediasite collection http://prawn.csusm.edu (LIBRARY section)

3. Mediasite http://www.mediasite.com

4. SurveyMonkey http://www.surveymonkey.com

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