Integrating an interactive information literacy module for future K-12 teachers course

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“Learning Module is a tool that provides course materials in a logical, sequential, order, guiding students through the content and assessments in the order specified by the instructor. Instructors can insert formatted text, files, weblinks, Discussion Topics, Assignments, Tests & Quizzes, and soon, Assessments. Content can be structured in such a way as to require students to complete content before they are allowed to proceed to the next content.”

Taken from [UF eLearning Help](http://www.ufelarninghelp.com)
Information Literacy Module for Future K12 Teachers
LIS 120: Instructional Technology for Educational Settings
First I will talk about the instructional context. There is a group of instructors teaching LIS 120: Instructional Technology for educational settings. The title of LIS is a little deceptive - this is an online, asynchronous course for anyone at UNCG who plans on teaching - so anyone getting a teaching licensure at UNCG. So mostly SOE students, but some Health Sciences students (PE), art (art teachers), etc. The students are typically advised to take this early in their major - so we are typically dealing with undergraduate freshmen and sophomores. But I think it’s important to note we also get a fair amount of transfer students from community colleges and adults changing careers - so adult learners.

The group of instructors of LIS 120 got together before Fall 2016 in order to update the content in the course. The learning objectives of the course and modules are based on ISTE (International Society for Technology and Education) teaching standards for teachers and NC ITES (Information and Technology Essential Standards). This is a 1 credit, 1 hour course.
Why?
Script:
Now I am going to talk about the thought process behind creating this new information literacy module for this course. I volunteered to create this module in the revamp. We wanted to add in a module solely dedicated to information literacy for future K12 teachers. I decided on using the interactive module creation software SoftChalk because it was easy to use, online and cloud based, provided interactive activities, and students could take it through Canvas (UNCG LMS) modules with grades automatically being recorded in the Canvas gradebook.

I wanted to take the interconnected core concepts of information literacy that were coming up again and again in this course - K12 information literacy, plagiarism, citations, and website evaluation and provide a flexible option for implementation by creating a module that could be easily edited and implemented in any UNCG Canvas course. I hoped that this would get the students more involved with the concepts and learn to apply these concepts in the course assignments given later in the semester. I also wanted to leave room for this SoftChalk module to be adapted for other programs, courses, library programs, and audiences that are teaching information literacy. This allowed the module/digital learning object to be content and audience driven, but still leave room for adaptation later.
Explore:

Introduction

This SoftChalk module is for students in LIS 120: Introduction to Instructional Technology for Educational Settings.

This module is to orient students on information literacy, citations, plagiarism, and evaluating websites in relation to teaching in a K-12 environment.

This module will provide you with resources and reading on information literacy.

This module was created by Samantha Harlow and made in collaboration with the LIS 120 instructors Sandra Bates-Hart, Rebecca Croston, Michael Renne, and the Teaching Resource Center.

ISTE Standards for Teachers

4. Promote and Model Digital Citizenship and Responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

1. Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources.

2. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources.

3. Promote and model digital etiquette and responsible social interactions related to the use of technology and information.

4. Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital age communication and collaboration tools.

Navigation and Rules of Module:

*You must use Firefox browser to complete the quizzes in these modules. If you do not have Firefox on your computer, please download it.

Click on the Next button at the bottom of this page and each page in this module to move forward. You can also navigate through the tabs at the top. In order to complete the quizzes at the bottom of each page, please go through the materials in sequential order.

There will be a quiz group of questions at the end of every page. The scoring will automatically be calculated in your Canvas course. The total of these quizzes will equal an assignment that is worth 10 points. Be sure to go through all the pages of this module, take all 4 quizzes, and click Finish at the bottom of the ResourceLink page. This module needs to be completed in one sitting. Please allow yourself 1-2 hours to take this module, including the quizzes. This module/assignment is due September 21st at 11:59pm.

return to top | next page
Script:
Let’s briefly go over the module components ....
https://www.softchalkcloud.com/lesson/serve/K1WIUE9IHeRuxP/html
Information
Literacy
Standards
Now that you understand what the module is I want to talk about the important things I learned or implemented when I created this module:

Though in higher education we rely a lot on the ACRL information literacy framework, I thought that introducing a lot of these concepts to future K12 teachers could be overwhelming. Also because this is a one credit course about instructional technology in educational settings, there is no research project/paper in this particular course. We did want to connect to definitions of information literacy to larger standards in the K12 community (elementary, middle, and high school) - so we connected this module back to the learning objectives of the course, which is based on ISTE standards while also connecting these modules to information literacy in K12 School Media, particularly the “American Association of School Librarians (AASL) Standards for the 21st-Century Learner.” This has shifted to a new format, so we now base it on this pamphlet:
https://drive.google.com/file/d/0BzFoXBqJqxG5SUNvSEICNJ3T0JpU3BzUTIvQnZNOUl4ekZr/view?usp=sharing

And even now our learning objectives have changed to the NC Digital Learning Competencies for Classroom Teachers:
https://drive.google.com/file/d/0BzFoXBqJqxG5dHM1QU5JQW80NlFDQkcyT25MOG8tZVJkdS1r/view
Integration
Script:
One of the best things about using the cloud based software SoftChalk, is that it allowed us to create a multimedia module that can be integrated with the course learning management system (LMS) Canvas, but also the course Gradebook. This means that we were able to create this lesson plan as a part of the course as an assignment - not just a one shot instruction session with no assignment grade. This creates a higher stake situation for students to learn about information literacy as it applies to K12 teachers.
Content Based Digital Learning Objects
Like I mentioned before, we really tried to focus on catering to our audience with this information literacy module - future teachers training to enter the K12 environment. This module includes readings and videos, but with content that made connections to K12 educational components, such as the American Association of School Libraries, NC Department of Public Instruction, NC Learn, and more. So we weren’t just making or using a generic digital learning object that we found on the web from another library or university, but making a digital learning object catered to a specific course, learning objectives, and audience.
Creating Interactive Learning Online
Every section of this module had a quiz or activity at the end that connected to the reading and required the students to perform critical thinking about information literacy in a K12 setting. This forced students to think deeply about the topics and to interact with the content in an asynchronous online course without overwhelming students with learning a new technology since these modules were integrated with Canvas. Hopefully this not only makes this a useful module within LIS 120, but helps model how technology can be integrated in an online environment for future K12 teachers.
Library Partnerships
Though I created this module in my role as an instructional technology consultant (ITC) for the School of Education, this module is still a great example of library outreach, especially now that I am in the role as Online Learning Librarian at UNCG. Throughout this module, I worked with librarians at UNCG in order to create an appropriate module on information literacy. I worked directly with the director the UNCG Teaching Resource Center (TRC). The TRC provides instructional materials, equipment, and services that support the students, faculty, and staff of the School of Education, the UNCG campus, and teachers throughout the Piedmont Triad. The TRC also serves as a model school library media center offering a large collection of picture books, young adult fiction, nonfiction, audiobooks, board books, big books, kits, manipulatives and DVD’s. And lastly, they have professional resources useful in preparing lesson plans, all K-12 state adopted textbooks, and study guides for NC teacher exams. My background has always been in higher education libraries and settings, so working with the director of the TRC helped me better understand my audience of future K12 teachers. This led me onto the appropriate information literacy standards of the AASL (mentioned above) that helped break down the modules into appropriate lessons for K12 teachers. I also reached out to the Library and Information Studies (LIS) department in the School of Education, particularly the School Media instructors for their input. And lastly I worked with the UNCG School of Education library liaison, who on top of having a background in K12 education as a former teacher, she has taught many workshops and presented on the ACRL Information Literacy Framework. This last partnership helped connect the AASL standards to the ACRL standards, without confusing the audience of LIS 120 students.

These partnerships were also a subtle way to lead to library outreach: we used examples from School Media resources, NC Learn, and UNCG Libraries tutorials in this module in order to promote the library as service - even though it is information literacy module geared towards future K12 teachers, without a research paper component.
Universal Design for Learning
The term UNIVERSAL DESIGN FOR LEARNING (UDL) means a scientifically valid framework for guiding educational practice that:

(A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and

(B) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient.

The LIS 120 module is an example of providing UDL because the online module was through a platform that allowed for multiple means of content, from text, visual, and video - all through an ADA compliant educational software. This way students are connecting with the LIS 120 information literacy lessons in a variety of ways, and hopefully able to better absorb the information through these multiple means of representations.
Student Engagement
Script:
UDL is particularly important to online learning because students in an asynchronous, online environment particularly need to be engaged through a variety of methods. An asynchronous online course provides a challenge in terms of student engagement because not only are you not there face-to-face, but there are no synchronous sessions to engage the students. This means that we had to think of ways to engage the students without using face-to-face active learning strategies.

I believe that this module is promoting active learning in an asynchronous environment because of the quizzes embedded within the content - while also keeping the module embedded in Canvas. Students are prompted to engage in the content, and then are held accountable for the retaining the information. Also, this module is referenced throughout LIS 120 within the projects where we are having the students make websites, digital posters, and multimedia assignments.

So overall, this module has taught me, the other instructors, and librarians some very valuable lessons that we can move forward with in terms of creating more modules/online digital content for specific courses.
Designing and creating online learning objects
In this day and age, many librarians now have experience creating a variety of digital learning objects. Some examples of this are libguides, text guides on library resources, and tutorial videos on library resources, research and evaluation methods, and more. With more and more learning going online in education, it’s important to be able to make digital learning objects as librarians, but it’s also important to make effective online learning objects. Effective online learning objects follow principles of UDL, are catered to a specific audience and/or learning objectives, and are interactive or engage with the audience. This module shows me as the Online Learning Librarian (and hopefully all of you all) how to create digital objects that can go beyond describing how to use a database - it connects to information literacy as a whole and makes information literacy relevant to this particular set of students. I think that creating interactive, relevant, and accessible digital learning objects that can be integrated with the school LMS and other higher education online environments will help promote a diverse amount of library programs, instruction, and departments.
Collaboration
When it comes to integrating information literacy within online courses, working together with instructors and librarians is key. Hopefully this module shows you how librarians and instructors working together to create and design an online learning object catered to course learning objectives hopefully will lead to future collaborations.
SoftChalk keeps the assessment in the course LMS gradebook, so we can track how the students are doing with questions focused on the learning objectives of the module and course. Having the modules in the course also leaves room for student surveys at the end of the course.

Currently we are in the third semester of leading this module, which means we are still in the process of tweaking and refining it based on how the students are doing with the quizzes. But the students are overall doing well in the module, and they are doing well connecting these lessons to other assignments in the course.

What was successful about this assignment is that SoftChalk allowed us to create a multimedia modules that can be seamlessly integrated in a course LMS (including the gradebook). Currently, UNCG does not subscribe to SoftChalk. SoftChalk is a cloud based annual subscription. License costs vary depending on the size of the university (FTEs), but it does cost money. Because of the potential for future module creation, hopefully UNCG Libraries can help convince UNCG ITS of the buy in for SoftChalk. In the end, hopefully this collaboration and creation of this module can lead an an example of how SoftChalk can be not only useful for UNCG online teachers, but also for UNCG Libraries creating online learning objects that can be catered toward course learning objectives, assignments, and even be graded and integrated with the UNCG LMS.
Another platform that is free that I have seen success with is H5P. Here is an example:
https://h5p.org/node/277824

There are ways to create interactive tutorials that can be embedded in HTML. Currently since this is free software, there is no way to integrate with Canvas or other LMS’s gradebooks - but maybe this is coming or with a little tweaking of code (H5P is open source) it’s possible.

Until then, the success of this module leaves us with valuable lessons on how we can create digital learning objects on information literacy for higher education, including getting started on research for students, finding the appropriate online resources for an assignment or course, citations, plagiarism, and more. Currently we have a multimedia UNCG libraries research module called PATH (People, Access, Technology, Help) http://library.uncg.edu/tutorials/ that many undergraduate students can take and get a certificate of completion for. This has been highly used and successful for UNCG Libraries, but we are currently looking at revamping this tutorial to update the content and look. Ideally moving forward we can think of a way to revamp this module to keep the interactive elements, update the materials, and find a way it can be integrated with the UNCG LMS Canvas. We are creating our own homegrown tutorial platform by working with library IT, but we can use the successes and failures of this module to help us with this rebuild. Looking at the LIS 120 module as a guide, we now know it’s possible to form a roadmap to this kind of integration.
Questions?
Images:

Information Literacy by Nicola, https://flic.kr/p/sB3mnN
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Digital Learning Objects by NASA Goddard Space Center, https://flic.kr/p/aYNAhP
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