Developing Fully-Online Asynchronous Training Materials for VIULearn

Stephanie Boychuk

Introduction

My project was to develop a piece of a larger training course for the Desire2Learn (branded VIULearn) learning management system (LMS). My training material will be hosted outside of the VIULearn system and will be used to help faculty members with the initial navigation and login process before entering the in-system training. The training course is being designed to be deliverable fully-online, asynchronous, and with minimal need for staff members at the Centre for Innovation and Excellence in Learning (CIEL) to "check in" to the course. The larger course is to be built over the next 2 to 3 months, and will be divided into levels to allow faculty to gain mastery over the different tools within VIULearn. I am part of the two-person team developing this course; from planning and storyboarding to collecting and building resources.

The project-specific piece of this training course was built using Articulate Storyline (http://www.articulate.com/products/storyline-overview.php), a piece of software new to CIEL. Part of my role is to use the skills I gained while building the initial training materials to cross-train other members of the CIEL staff on the use of this software. This software is designed to provide more interactive elements into courses, by allowing for screen-simulation, screen-interaction and drag-and-drop activities. Originally, more material was going to be built using this software, but there was concern it would not be an authentic experience in VIULearn for instructors should CIEL go that route.

As my original project is a piece of the larger training course I will be part of building, for the remainder of this report I will refer to the material hosted outside of the VIULearn LMS as "initial training materials". I will also discuss the development of the larger training course, and will refer to it as the "VIULearn training course".

I wish to clarify that in the scope of my role at CIEL and within my union I am not permitted to council faculty members on pedagogical concerns. Faculty members can, however, seek help with pedagogical concerns from other members of the CIEL team. Due to this limitation in my role, I will only discuss pedagogy as it pertains to faculty members generally, and will focus more on technology adoption.

Rationale

The reasons for developing both the initial training materials and VIULearn training course are two-fold. First, it is hoped that by moving the majority of training materials online faculty members will be able to access high-quality support and training without having to be present at face-to-face training, leading to a higher adoption rate of the software (Ya-Ching, 2008). The training is set to outline the usefulness of the software while trying to minimize the perceived cost of learning to use the software, following the ideas presented in the Technology Acceptance Model (TAM), originally developed by Davis (1989). The TAM model of technology adoption assumes that the perceived ease of use and the perceived cost of adoption of a technology will affect user attitude toward using the technology. The attitudes a user develops will influence behaviour and, ultimately, whether or not the user will continue to use the technology.

Once basic adoption of the software is established, the VIULearn training course aims to help faculty develop their use of the VIULearn system following the TPACK framework (Koehler

& Mishra, 2009). The basic Technology Knowledge (TK) needed to use the software will be the first focus. After competency has been achieved, faculty will be encouraged to build Technological Content Knowledge (TCK) and Technological Pedagogical Knowledge (TPK) by being exposed many different ways of delivering content through the system. It is hoped that faculty will find a way of learning in VIULearn that works for themselves as learners, which will lead to more comfort when they begin building content and course materials for their students. Within the VIULearn training course will be some department-specific resources to help faculty use VIULearn in a way the respects their contexts while building Technology Knowledge (TK) (Koehler & Mishra, 2009). There will be additional supports outside of the VIULearn training course to help faculty develop skills designing and teaching online course materials within the system – the purpose the VIULearn training course is to supply basic skills with tools and processes within the system.

The second reason for the move to fully-online and asynchronous training materials is to build a model for faculty to use when developing their own courses. Essentially, CIEL is "practicing what we preach" by creating a course that is interactive and engaging. We are attempting to use many if not all of the tools within the VIULearn system, in additional to pulling in other resources faculty may be interested in using themselves. We are trying to increase the perceived usefulness (PU) of the VIULearn system and develop a higher PU for the variety of tools within it, while training faculty to use the system. We know from experience that instructor attitude toward the system impacts the students' perception of the system, so we are hoping this new method of training will have a positive impact on faculty experience.

Additionally, there are an increasing number of faculty members on campus who have developed their TK to the stage where they have a high level of comfort using VIULearn. They are beginning to focus more exclusively on TCK and TPK – and as such are feeling limited by the tools within VIULearn. While CIEL recognizes that some needs must be met outside the system, we will have modules within the VIULearn training course designed for advanced users so they can get the most out of the system. Many of our "advanced" faculty members have begun to self-organize within their departments to develop supports outside of CIEL. Some of the most innovative uses of the system come from these faculty members, as they generally have a strong Content Knowledge (CK) background and a well-developed TK; which allows them to focus more energy and time in TCK and TPK.

Overall, the initial training materials coupled with the VIULearn training course are designed first to increase adoption of the system following the very basic TAM model (Davis, 1989). Once initial adoption has been achieved, the VIULearn training course aims to support the development TK, TCK and TPK in faculty.

Planning

During the planning of the initial training materials, I conducted a review of the current training materials hosted in VIULearn. As these materials are intended to be used as a supplement to face-to-face workshop-style training sessions, much of the material did not meet Universal Design for Learning (UDL) standards (CAST, 2008). Additionally, using the Rubric for Online Instruction (ROI) (California State University, Chico, n.d.) I was able to focus on the most pressing barriers to bringing this material into a fully-online and asynchronous format.

After the review of the material, I used the pre-existing competencies (please see Appendix 1) associated with the "Basics" training workshop as a scaffold for my initial training materials. The materials were modularized so that one module would address one competency, and ordered so that competencies would be able to build up on each other. The backwards design principles of Wiggins & McTighe (2005) were utilize during the planning process of these materials in order to ensure the training addressed all the basics skills necessary to utilize VIULearn.

The planning process for the VIULearn training course is following a similar process. We started by plotting out what skills and processes were being addressed in the various workshops and training sessions offered by CIEL. Once plotted, the skills and processes were ranked according to whether they were considered basic, intermediate or advanced skills. As most workshops covered the tool specifically, and were not geared toward the skill level of the user, this was an important step in order to build appropriate scaffolds into the materials. Looking at these skills, we are in the process of creating clear competencies and addressing how they will be demonstrated, to build mastery within the VIULearn LMS (Glowa, 2013). We plan to build in a set of quizzes or other assessments of mastery at the beginning and end of content modules in order to allow faculty members to skip training content they have already learned and focus on content they still need to master (Gunawardena & McIsaac, 2001).

The VIULearn training course will have a presence outside of the LMS, currently planned to be housed on either Wordpress (http://wordpress.viu.ca) or as part of the CIEL mediawiki (https://mediawiki.viu.ca/wiki/Main_Page). The purpose of the out of LMS portion of the VIULearn training course is to help users successfully set up accounts and login, as well as to provide a "public face" for the system. In addition to training materials, CIEL hopes to capitalize on this space to showcase exemplary faculty and teaching, distribute resources and exhibit the other tools CIEL offers for faculty. Once users are oriented to the system and logged in, the majority of the training course will remain in the system. It is expected that the more time the users can spend in the system the more comfortable they will be in it. Learning VIULearn within the system will also allow for a more authentic experience from the perspective of the students – which will give faculty a different frame of reference when designing and building their own course materials.

Development

The development of the initial training materials began in the second week of November, 2013. Development began with learning various fundamental parts of the software, Articulate Storyline. I made use of Lynda.com (http://www.lynda.com/) which requires a subscription to view training videos in their online library. The online training available for Articulate Storyline was a single video playlist (six hours total time) with a downloadable package of "practice materials". After watching approximately two hours of video, I chose to stop watching the videos and "play" with the software in a less structured way. From this initial learning process, I made a conscious effort when designing my initial training materials to build in more interaction and minimize passive watching of videos or reading screens.

While building my initial training materials, I made extensive use of the Articulate community (http://www.articulate.com/community/). The community, and specifically the E-Learning Heroes support and tutorial area, were extremely helpful. The community is a mix of

paid experts and users of the software; so in addition to excellent tutorial blogs and videos, there is a forum where users troubleshoot software issues and discuss ways to work around limitations of the software. I was also able to search for different uses of the software to enrich the material I was building. I had a much more positive experience learning through experimentation and going to the Articulate community than I did through the professional training available through Lynda.com.

From my experience learning the software independently, I know that online training material needs to be more than video in order to be engaging. Faculty members need to be able to control their pace through the materials, and they need to be encouraged to build a community of support. As mentioned in the rationale section of this report, many advanced users of VIULearn tend to self-organize into support communities without intervention from CIEL. The VIULearn training course, while it will be asynchronous, aims to keep a forum-like space open to faculty to begin the self-organizing process.

The initial training materials were developed to offer choice to faculty members. They could choose, at the beginning of each new module or competency, to watch a video or to walk through an interactive screen simulation that covered the same material. They were given an overview of what the module would cover, including some instruction on how to use that module. At the end of each module or competency, faculty were given a summary of what they were supposed to know or understand and then asked whether they wanted to review the material or move on to the next module.

In the last week of November, the materials I developed were reviewed by the director of CIEL. At that time, I received significant feedback on my work; including comments that helped to improve navigation and ease of use for faculty members. Additionally, branding for CIEL needed to be applied to the initial training materials. The interactivity of the modules was increased, and the amount of information on each screen was reduced (CAST, 2008).

In the first and second weeks of December, the plan for the VIULearn training course was developed in detail and the decision to move away from training modules housed outside of the VIULearn system was made. The process was started following the procedure outlined in the planning section. To date, we have not begun building up the course structure or materials.

Deployment

The VIULearn training course is schedule for deployment in mid- to late February 2014. A detailed deployment plan has yet to be developed. The plans for testing of the material before release include extensive in-house testing and development, as well as reaching out to the members of the VIULearn pilot groups who may be interested in trouble-shooting and offering suggestions on the material.

My understanding is that the course and materials will initially be rolled out with a focus on instructors teaching in fully-online programs that have a low level of comfort in VIULearn. A least one department has requested this type of material for their faculty members, and they will likely be involved in the initial launch of the course. Additionally, advanced users will be directed to the training material where appropriate when they submit training or tool inquiries. At the initial stages of the launch, CIEL will likely gather feedback using Fluid Surveys (http://fluidsurveys.com/) which allows for detailed data gathering and has advanced data

presentation tools. It is expected that some faculty will not feel comfortable with online training, and we will make affordances for their comfort level and needs as required.

Conclusion

The initial training material and VIULearn training course are being designed to increase the adoption of the VIULearn system following the basic TAM model (Davis, 1989). Following initial adoption, the TPACK model (Koehler & Mishra, 2009) will be used to develop TK so faculty can more confidently cultivate TCK and TPK. The materials are being planned following the backwards design principles of Wiggins and McTighe (2005), with careful consideration of competencies and developing mastery of the system. While much work has been completed in the development of the initial training materials, the VIULearn training course is still in the planning process. By late February 2014, these materials will be launched with a focus on support fully-online instructors. These materials should help faculty develop their confidence and competency in a more flexible format then the face-to-face workshops offered.

References

California State University, Chico (n.d.). *Welcome to the Rubric for Online Instruction (ROI).* Retrieved from: http://www.csuchico.edu/roi/

CAST (2008). *UDL Guidelines Graphic Organizer | National Center On Universal Design for Learning.* Retrieved from: http://www.udlcenter.org/aboutudl/udlguidelines/udlguidelines_graphicorganizer

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3): 319–340.

Glowa, L. (2013). Re-Engineering Information Technology: Design Considerations for Competency Education. *CompetencyWorks Issue Brief*, International Association for K–12 Online Learning. Retrieved from: http://www.competencyworks.org/wp-content/uploads/2013/02/iNACOL_CW_IssueBrief_ReEngineeringCompEd_final.pdf

Gunawardena, C. N., & McIsaac, M. S. (2001). Distance Education. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology*: *A project of the Association for Educational Communications and Technology* (pp. 355-395). Mahwah, N.J.: L. Erlbaum Associates.

Koehler, M. J., & Mishra, P. (2009). What is Technological Pedagogical Content Knowledge (TPACK)?. *Contemporary Issues in Technology and Teacher Education, 9* (1), 60-70. Retrieved from: http://www.editlib.org/p/29544?nl

Wiggins, G. & McTighe, J. (2005). Chapter 1: Backward Design. In *Understanding by Design* (13-34). Alexandria, VA: Association for Supervision and Curriculum Development. Retrieved from: http://www.ubdexchange.org/resources/backwards.html

Ya-Ching, L.(2008). The role of perceived resources in online learning adoption. *Computers & Education, 50* (4), 1423-1438. http://dx.doi.org/10.1016/j.compedu.2007.01.001.

Appendix 1: Desire2Learn Basics Workshop Outcomes

D2L Basics Training Learning Outcomes

Getting started in Desire2Learn is very quick but there are a few things that are helpful to know.

Most importantly, you will need information on how to get your course content into your course and make that course available to students. It's also a good idea to know about backing up your course in case of emergencies.

It's also helpful to have a tour around the different Desire2Learn pages and know where to adjust account settings.

After completing this training, you will know how to:

- Navigate D2L My Home, Course Home, and Course Content
- Access your D2L courses
- Check your classlists for student enrollment verification
- Import course content from other courses
- Make your course visible to students
- Back up your course
- Change your Notification, Account, and Personal Profile settings