Reflection

Beth Kauppila

edu 767 Designing Computer-Based Training

Instructional Strategies

In the course, *Structured Literacy: Who Benefits,* the target audience includes school district decision-makers who may or may not have experience teaching literacy to emergent readers. While they are not directly responsible for teaching literacy skills, they often have a great deal of influence over curriculum decisions and learning paths selected for individual students at data meetings. All administrators want to see students succeed but may not feel confident in their ability to make sound decisions. To address the knowledge gap and build confidence in making these decisions, I drew on constructivist learning theories. I chose to introduce the content to the learners through a real-world simulation with a branching scenario to build background knowledge and experiences, then link what they learned in that activity to the research the learners need to understand. Using realistic student characters was a strategic choice using ARCS theory of motivation to contextualize the learning, grab learner attention and build confidence for real-world application. This also provided realistic feedback to learners in low-risk experiences.

Decisions made along the way

Several development decisions changed as I authored this course. The first was my initial idea to use a drag and drop feature in the Data Day simulation. My original idea was to have a pile of student folders that the learner could click to reread the student information, then drag and drop it to the appropriate pile to represent the learning path. After working in Adobe Captivate, I realized the advanced actions and variables would be very complex and need additional development time. I also realized, I really don't like to drag and drop using my laptop trackpad and I probably wasn't the only learner who felt this way. I decided to use a "click to choose" action to make the scenes easier to develop and easier for the learners to interact with. I also did not intend to include a multiple-choice knowledge check, but I wanted the learner to reflect on the information presented after the simulation and found that this was a good way to reinforce what they learned.

Accessibility

As I designed and developed this course, I knew I needed high-contrast colors and checked to ensure the contrast ratio was appropriate throughout the course. I also decided to use navigation shapes rather than the typical standard-shaped buttons to make navigation more obvious. Because most of the course is narrated, I added closed captioning to any slide with voice narration. I choose not to narrate the student file slides because the text could be read by a screen reader if needed. In hindsight, narrating with closed captioning did not add much time to develop and I might redo these slides in the future. I also added alt-text to all the photos used in the course.

Interface design & visual principles

I decided to use realistic photos for this presentation because the target audience includes administrators with advanced degrees, and I wanted to replicate what an actual data day might feel like in their district. The teachers selected were dropped into a neutral meeting room to avoid seeming like they were floating. I choose white backgrounds with dark blue borders and text boxes for a clean layout and a sans serif font throughout the course. To avoid redundancy, voice narration was highlighted by only keywords and on slides where narration matched the text (in the reflection), I hid the text until the narration was complete. Navigation is limited to learners until certain criteria is met. This was accomplished through advanced actions using variables such as the number of clicks. ***The navigation panel at the bottom is included for a portfolio review, but will not be visible to learners.***

Assessment methods

Initially, my simulation activity was going to serve as the assessment. Learners need to correctly identify learning paths for all students to reveal the "Next" navigation button and advance the course. Learners would have feedback along the way to ensure they identify the correct path with understanding. However, after reviewing the first iteration, I decided one more learning check would be appropriate after the research information was explained. This knowledge check provides immediate feedback to the learner and the learner must identify the correct answer to advance in the course. Reflection questions are included at the end of the course for learner self-assessment.

Results of usability test

The results of my usability test revealed positive feedback for information in the course, appropriate narration and closed captioning, and overall aesthetic design. The tester did state she was nervous about the simulation before the research information, but that it helped her understand and absorb the information better than if the order was reversed.

I did need to adjust the states of a couple of buttons to maintain consistency throughout the course and figure out a work-around to fix the feedback pop-up for the knowledge check.

New Insights

I knew instructional designers needed to understand adult learning theories, instructional strategies, basic design skills, and authoring software skills. What I realized in the development of this course, is that for an aesthetically enjoyable CBT, I have a lot to learn about design and layout. Since developing and publishing this course, I've learned tips such as using grids to ensure layout from slide to slide and blurring backgrounds to draw attention to the important content of the page. I also learned I will not be able to learn "expert" level skills in authoring software with a 30-day trial and with the speed the software is updated. Better employable skills to claim are to be flexible, have a growth mindset, and be resourceful in learning new skills.

reflection on cbt & Professional Growth

I came into this course expecting to become an authoring software expert, but I realized there is more to developing a course than the software skills. Through the work in this course, I've realized that computer-based training (CBT) can play an important part in an overall course, but CBT should be combined with other learning

strategies to be more effective. Two limitations I see in CBT are a lack of social interaction, I believe learning is a social construct; and the time and cost involved in developing this type of learning interaction. In my course, I see the importance of social interaction for the learners to discuss, question, and work together to analyze scenarios. In the future, I would propose adding more social pieces like asynchronous or synchronous discussions or debriefings. In other learning modules of the course, I will also add interactive videos or website links to include more choices in how students learn.

Developing the course I designed was the most helpful activity in this course. This gave me the hands-on skills employers are seeking, but the most interesting activity was developing a SCORM-compliant course about SCORM. Not only did I better understand SCORM because I had to teach someone else about it (sneaky learning strategy), but I could focus on the design and development without also acting as the subject matter expert, which presented a unique and fun challenge.

Questions that arose during this course include:

How do designers balance instructor-led or virtual instructor-led training with CBT?

What are some effective strategies for making the learning more engaging without adding to development time?

What are some effective strategies for making CBT more social?

To find the answers to the questions, I've curated a list of websites and podcasts, and followed industry leaders on LinkedIn and on YouTube. I've added content from Karl G Richter, Christy Tucker, Cathy Moore, Julie Dirksen, and Connie Malamed.