

RATIONALE FOR THE LESSON ON DIGITAL PORTFOLIOS

Duquesne University

GDIT 705 - Courseware Design

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Introduction

The basic premise of this project was to develop a course lesson that fits the needs of Instructional Technology majors at Duquesne University and applies theories and principles of effective online learning from literature. According to the Instructional Technology website, the doctorate expectations states “students will prepare an electronic portfolio that contains artifacts of their work that demonstrate the alignment of their coursework with professional standards” (“Doctorate expectations,” 2009). The goal of this lesson provides students the opportunity to develop an online, digital portfolio using Weebly, a company providing individuals the ability to create free personal sites and blogs.

GDIT 703 - Foundations of Instructional Technology

When entering into the Instructional Technology and Leadership program, students are registered into two courses, one being Foundations of Instructional Technology. In this course, students are introduced to “key foundations of teaching and learning as applied to instructional technology” (“Course descriptions,” 2009). While developing the basic knowledge for the doctoral program, this could be an appropriate course to introduce students to the portfolio requirement and one option to creating an online portfolio using Weebly.

Being that this course meets face-to-face in the summer, I will be taking the approach as if this course were to meet in an online environment. This lesson would be a synchronous course using the Wimba classroom and Blackboard organizing the class documentation, as well as asynchronous components including the discussion board and out-of-class readings. Blackboard would contain the following documents and instructional materials:

- Faculty Contacts: contains faculty contact information
- Course Information: contains that week's lessons plan
- Course Documents: contains the lesson handout, PowerPoint and the two reading assignments which would be due prior to this week's lesson
- Projects: includes the digital portfolio project handout
- Discussion Board: the Digital Portfolio thread includes two threads
- Web Resources: link to digital portfolio research & links to Weebly tutorials
- Faculty Documents: includes my rationale & project PowerPoint presentation

Rationale

My rationale for including a lecture on digital portfolio into the Foundations of Instructional Technology was due to the importance of the portfolio for the program. By introducing the portfolio into the first summer session, this will allow students an understanding of the portfolio, as well as introduce to the expectable formats for portfolio requirement.

Beyond the program requirements, there are educational and organizational values for students to develop digital portfolio in their first semester. According to Housego & Parker (2009), digital portfolios “enable students to integrate their experiences at the university and make a substantial contribution to their personal development. They also have potential for transforming business education curricula through the linking of practice-oriented learning and the development of graduate attributes.” As graduate students, comprehensive exams and the dissertation are two important elements to obtaining a doctorate. Both of these rely on the understanding of the material researched and learned throughout your time in the program. The

digital portfolio allows the student to begin to develop, build and reflect upon their educational experience in one central location and creates a student-centered learning experience. In order for the digital portfolio to be a complete success, students must understand the values of the portfolio and instructors must integrate them into their curriculum to give more backing to its performance.

Another reason for integrating this into the Foundations of Instructional Technology course is the hands-on approach this course takes. Throughout the summer, students were required and instructed on how to use different instructional technologies, from learning how to establish styles in Microsoft Word to producing a training video in Camtasia. This will allow the instructor to walk through the theoretical backing of portfolio design and have students setup their Weebly accounts for the instructor to demonstrate how to use Weebly.

Design Principles

In Clark and Mayer's "e-Learning and the Science of Instruction," they establish a set of principles and guidelines for multimedia learning. From the principles outlined in our textbook, the ones that apply to this lesson include the Multimedia Principle, Modality Principle, Segmenting Principle and Pretraining Principle.

Multimedia Principle

"Based on cognitive theory and research evidence, we recommend e-learning courses include words and graphics" (Clark & Mayer, 2008). The PowerPoint designed for this lesson follows the multimedia principle. Throughout the PowerPoint, students will see a combination of

text and pictures to discuss the organization and development of digital portfolios. The integration of images into the slideshow will add a better understanding of the material being discussed and assist in putting the material into a visual context for the student. For example, each slide discussing the different sections of my digital portfolio has a visual example of how one may display their work. To help reduce overload, every image used in the PowerPoint serves a purpose for the slide and are not used as decorative elements.

Modality Principle

The Modality Principle addresses the idea of presenting words as “audio rather than on-screen text to describe graphics” (Clark & Mayer, 2008). According to the text, there is a psychological advantage for using audio over on-screen text, with audio and images being split between the auditory and visual cognitive channels, as opposed to on-screen text and images being consumed through the visual channel. For this lesson, I have included a Weebly demonstration and tutorial video in the web resources folder. Each of these videos provides visual representations of the Weebly environment with an individual narrating the step-by-step process for navigating the Weebly environment.

Segmenting Principle

One of the key concepts discussed in our textbook is the idea of cognitive processing and how multimedia designers can reduce cognitive overload. When it comes to students having to engage with large amounts of materials, the instructor can break the lesson up into manageable parts to help reduce overload. If you look at my lesson plan, I have broken the lesson up into 3 sections. The first section will introduce students to the lesson materials and provide an overview

of portfolios, both traditional and digital. The second part will provide students an overview on planning and organizing all of the assets of their portfolio. Finally, the third part of class will be a hands-on demonstration of the Weebly environment.

During the Weebly demonstration, the lesson will be broken up into mini lessons for each of the major tabs (Elements, Design, Pages and Settings). At the end of each tabbed section, there will be a few minutes for students to reflect or ask any questions on the material covered in those sections.

By segmenting up both sections of the lesson, this will help reduce the complexity of learning the basics fundamentals behind portfolio development, as well as the complexity of learning new software.

Pretraining Principle

The Pretraining Principle provides “the names and characteristics of the key concepts in a lesson” (Clark & Mayer, 2008). During the first half of the class, students will be introduced to all of the key vocabulary words and concepts for digital portfolio development. This will allow students to develop an understanding of portfolio organize and development, then can focus on understand the technology the second half of the class and applying these concepts to how they could use Weebly as a portfolio environment.

Collaboration

The final aspect and a key component to any learning environment is collaboration. There are numerous opportunities for students to collaborate throughout this week’s lesson. Prior to the

lesson, students will be divided into two groups. One group will discuss the advantages of PowerPoint for a digital portfolio and the other group will discuss the advantages of using a website of a digital portfolio. They will be encouraged to look at the groups thread and comment on other student's postings. Commenting can include agreeing with points or defending why using their technology would be a better option.

Throughout the presentation of the material in Wimba, students will be able to interact through audio and the chat box. These interactions will provide avenues for students to ask their peers for their help or advice on how they plan on developing their portfolio.

Conclusion

The portfolio has been established as a requirement of the doctoral program, but it is up to the doctoral student to decide which environment is the most effective one to present their portfolio. The digital portfolio is an integral part in higher education around the United States and the portfolio website has become a popular format to develop and disperse one's educational and professional experiences. This lesson established for the Foundations to Instructional Technology will allow students to understand what is expected from them in their portfolio and how to develop their portfolio, as well as keeping in mind the different design principles discussed in the Clark & Mayer book.

References

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