Brenda Harlow
ETEC 695
Assignment 2

Boettcher, J. (2003). Designing for learning: The pursuit of well-structured content.

Campus Technology.

In this article, Boettcher discusses the concept of well-structured content as a vehicle for learning. By well-structured content the author means the content is structured in such a way that it helps with the teaching, learner, and environment aspects for online learning. Semantic content can help guide students who may be learning a subject for the first time as well as provide multiple modes of learning with different levels of support. These levels of content type include core information, well-structured problems, and less-structured problems. These levels map the learner's knowledge of a subject as well as their ability to solve problems.

As a programmer, the example given at the end about XML being complimentary to HTML as a means of well-structured content is not a great example with regard to the learning online. XML is usually used as a framework where a system interacts with the XML to input or output information. Users have very little interaction with actual XML and if the XML has any bad formatting, the processing will fail without the possibility of partial success. A better analogy would be to use valid XHTML, which is a tag-based language that is also well structured. Unlike XML, if the XHTML has a bad tag or character, the entire page does not necessarily fail in the browser. It falls back into quarks mode where it will continue rendering the page with the error. In online learning, poorly structured content does not necessarily mean the learner will fail the task, they may just have to fall back into quarks mode to get around the issue.

Brenda Harlow
ETEC 695
Assignment 2

Clark, Ruth & Mayer, R. (2008). *E-Learning and the science of instruction*. San Francisco: Pfeiffer.

In this book, Clark and Mayer discuss concepts of e-Learning and how they relate to instruction using scientific data to back their arguments. The authors define concepts of e-Learning such as their ups and downs; how people learn from such materials, utilize examples or practice, usability, simulations, and critical thinking skills. The principles of e-Learning are also examined which include multimedia, contiguity, modality, redundancy, coherence, personalization, segmenting, and pre-training. These principles are important as they provide guidance on aspects of multimedia learning such as use of text, audio, and visuals as well as how and when to use them. The principles also include aspects of how to make the material accessible without breaking the "rules" of being presented. The use of a design dilemma as an example helps illustrate the point of each chapter.

By understanding the concepts and principles of e-Learning, the authors show the learning professional audience with a better understanding on how these guidelines provide the learner with a better e-Learning experience. Clark and Mayer present important concepts that every instructional designer should be aware of, regardless if they are using e-Learning or not. For example, understanding how visuals and text interact for multimedia is just as important as laying out the same visual and text for printed piece. Overall this is an important book to understand when creating multimedia based learning material.

Brenda Harlow
ETEC 695
Assignment 2

McConnell, D. (2005). Examining the dynamics of networked E-learning groups and communities. *Studies in Higher Education*, 30 (1):25-42.

In this article, McConnell discusses e-learning groups and communities from the perspective of how the group dynamics affect the collaborative work. The author utilizes research from a part time, two-year Master's professional development course that was delivered online. Through reading the synchronous and asynchronous dialogs, it was apparent that two groups where working well together and one was not. The one group that was not working well together was thoroughly analyzed and patterns of communication issues, anxiety, personality conflicts, inconsistent decision making and ground rules, and tutor role emerged. Comparing the groups provided an interesting dynamic as the patterns were broken down and made into differences for the groups.

Overall article does a good job of showing how group dynamics can affect learners in a collaborative online environment. By showing the differences between the groups, McConnell illustrates how concepts such as identity, control, communication, and trust can either make a group successful or not. If there are too many chefs in the group, nothing will be made in the kitchen.

Brenda Harlow
ETEC 695
Assignment 2

Smith, P. L., & Ragan, T. J. (1999). *Instructional design*. New York: Wiley.

In this book, Smith and Ragan review the process of instructional design from introducing instructional design concepts and foundations through the analysis, assessment, strategy selection, design, production and evaluation phases. Each of these concepts is thoroughly explored with an extended example provided for a fictional course on "Instructional Photography Basics" aimed at instructional design graduate students at a university. Each of the processes above is defined, analyzed and then extended into a realistic example of the steps needed to develop the course from its conception to implementation and finally evaluation.

As instructional designers, Smith and Ragan, take great care in providing definitions of concepts, academic validation for the concepts, and examples of how these concepts can be developed. This method of instruction can be seen through their careful break down of the instructional analysis and instructional strategies, which account for thirteen of the twenty chapters. The presentation of the photography class example provides grounding from which Smith and Ragan bridge the conceptual elements and extends them into a relevant real-world example. Overall, the material presented on instructional design is still relevant to instructional design even if some of the media references refer to equipment that are considered outdated such as VCRs.

Brenda Harlow
ETEC 695
Assignment 2

West, C., Farmer, J.A., Wolff, P. (1991). Instructional design: Implications from cognitive science. Englewood Cliff, NJ: Prentice Hall.

In this book, West, Farmer, and Wolff discuss instructional design from the perspective of cognitive science. The authors begin by discussing what is cognitive science and how it relates to instructional design. They then review each of the cognitive strategies such as chunking, frames, concept mapping, advance organizer, metaphor, analogy, and simile, rehearsal, imagery, and mnemonics. Each of these areas is introduced with a discussion of research or issues. Some of the chapters have what is known as a designer's guide where the concept is broken down for instructional designers so that the designer can properly integrate it into instruction. Other chapters have an area known as hybridization, where appropriate combinations of concepts are discussed. In the end, the authors devote two chapters to how the previously discussed concepts relate to an instructional design template.

Overall, I found the text to be interesting. How people learn and how that affects instructional design decisions is important. Unfortunately due to the age of the text, the internet as we know it had not been invented yet and desktop computers where still very expensive and not very well used in education yet. So inferences to how these concepts map to modern technology need to be made by the reader.