

TO: Brian Newberry (newberry@csusb.edu)
FROM: Gerald Grell
DATE: May 5th 2009
RE: ETEC 500 Session 4 - Annotated Bibliography Exercise - Grell

I used ERIC on the CSUSB library search and selected 3 articles at random for the Annotated Bibliographies exercise. I had some difficulty determining the volume/page reference for the first 2 so just entered information from the document reference that I thought fit best.

Article #1 - Training and Development through Adult Learning Theory

Citation:

Swagar, C. (1999). Training and Development through Adult Learning Theory. *ICOR '98 Proceedings from the International Conference on Outdoor Recreation and Education*, RC 021 840, 83-91

Summary:

This report analyzes the employee training program at the Outdoor Program Centre (OPC) of the University of Calgary and offers recommendations that may be of benefit to other outdoor recreation centers. The primary method used by the author was observation and analysis of physical documents applicable to the process of training an employee. No data was formally collected as part of the existing process except for some qualitative data captured from equipment report forms and counter supervisor daily logs.

The effectiveness of the training system is measured by how successful employees are after they have been through the program. The methods should be based on adult learning concepts. The design of the instructional process needs to be based on a 7 step process of:

1. Assess the Needs
2. Analyze the Target Population
3. Establish the Learning Objectives
4. Determine the Training Content
5. Develop the Training Methods
6. Design the Participants Materials
7. Evaluate the Training Effectiveness

Review:

The report was too high a level to be of any value to anyone who might request an evaluation. Nothing was measured of any value and no statistics were provided. The abstract for the paper states; "This report analyzes the employee training program at the Outdoor Program Centre (OPC) of the University of Calgary and offers recommendations that may be of benefit to other outdoor recreation centers". I feel it did not accomplish the objective of because it did not provided an analysis of the training program on which

to backup the recommendations. It was as if a check list from two different books were used for the analysis and a generic conclusion was drawn.

Another area the article mentions was cultural change however once again only vague references to the impact were made. The abstract had no mention of this which leads one to question why it was thrown into the mix. I can see how the cultural mix of customers compared to the employees background could be an issue and would be an area for instructional design but was never addressed.

This was a good article for me to start with because it was not very detailed or well written. This allowed me to “practice” for the more complex articles that followed. I would not recommend any one read this article because of its poor analysis of the environment and the “canned” answer to the design.

Article #2 - System-Based Strategies in Instructional Design

Citation:

Dyman, D. (1998). System-Based Strategies in Instructional Design. *Proceedings made to the Board of the Indiana University Center for Excellence in Teaching*, 1-16

Summary:

The article sites the initial audio-tutorial work done to produce fast paced multimedia instruction as the basis for evaluating the effectiveness of technology. It addresses how the integration of concepts and contributions from “learning” theorists, media specialists, and teaching practitioners, were optimized when system strategies derived from military management programs (PERT and CPM) were utilized. It addresses the concerns for educational improvement and accountability and identifies the influence of utilization of technology to improve the effectiveness of teaching and learning.

The paper’s instructional goal was to provide a benchmark for both evaluation and statistical analysis of achievement and a breakdown for the cognitive level of achievement as knowledge, comprehension, application, analysis, synthesis, and evaluation.

The instructional materials were designed to address fundamental learning theory. The results of applying a program management approach were a mean cognitive achievement at the level of:

- Knowledge - 79.2%
- Comprehension - 79.5%
- Application, 62.9%

Review:

Both PERT and CPM (along with GANTT charts) are fundamental tools of program management. A PERT chart is a graphic representation of a project’s schedule, showing

the sequence of tasks, which tasks can be performed simultaneously, and the critical path of tasks that must be completed on time in order for the project to meet its completion deadline. Taxonomies are probably the oldest conceptual modeling tool that is still used for indexing by terms books in libraries and very large collections of heterogeneous objects - even the WEB.

The article does an excellent job of referencing historical and applicable work done to support the approach of using the project management tools to evaluating the effectiveness of the instructional technologies. The reader is lead through the various milestones or objects measured and a systems framework is provided.

The application of the PERT method assumes a linear approach to process and does not consider an iterative approach or looping approach from shallow to deep with periodic checks to insure the delivery content meets the needs of the student and educational situation. I would be interested in the timing between activities defined in the process and what was identified as the CP (critical path).

I found the article very interesting however would like to have more information on the application of the PERT to the process. I would recommend it to those who are interested in the scientific approaches to education and not the behavioral approaches.

Article #3 - How to create a Learning Environment on the Internet, Based on Constructivism and Socialocultural Approaches?

Citation:

Hernes, M. & Staupe, A. (2000). How to create a Learning Environment on the Internet, Based on Constructivism and Socialocultural Approaches?. *Society for Information Technology and Teacher Education International Conference*, 1(3) 819-825

Summary:

This paper discusses using the internet to design learning environments from a constructivist/situated learning point of view. The concept of Constructivism/Situated learning suggests the notion that learners actively construct knowledge by integrating new information and experiences into what they have previously come to understand. Teachers facilitate learning by encouraging active inquiry and guiding learners to question their assumption and coach them in the construction process.

It starts out examining the main principles of learning theory integrating internet services for structured virtual learning. It addresses five areas:

1. Presentation/lecture area, including text files,
2. Knowledge area, including help service,
3. Communication area, including computer networks, e-mail, and groupware
4. Working area, including software tools, groupware, and workbook

5. Private area, including private files, workbook, and personal work/study plan.

Tools are proposed for developing entirely internet (net-based) learning environments where the resources in the network work together to support the learning process. The article takes a close look at some models for integrating internet (network-based) learning environments.

Review:

This article does a very good job of describing how traditional teacher based models conflict with the emerging network-based learning models because of our reliance on how we were taught when we were younger. It identifies the influences of our background and culture by referencing the Russian researcher Leont'evt in the 1970's. The "Sociocultural approach" in the title is not directly addressed and you are left to assume it is a reference to the "Situated" learning side of Constructivism.

The model presented for developing an electronic learning environment is based on the Constructivism/Situational model and addresses the 5 areas of overlapping influence mentioned in the summary section above. The article is a little weak and provided very little detail on the Working and Private areas. The tools mentioned are at generic level and the model recommended in the conclusion is also at a very high level.

I would recommend people read this article if they are designing a WEB site for educational purposes. It is not the only way but certainly has a basic road map for the WEB site content.