

# PROFESSIONAL DEVELOPMENT INSTITUTE – SPRING 2009

## RAMCT: A CONSTRUCTIVIST ADULT EDUCATION MODEL

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**Description:** This workshop will cover two alternative instructional designs for use within RamCT based on constructivist adult education theory. In these designs, the principles of learner-centered instruction, exploratory learning, collaborative learning, authentic learning activities, and discussion are used. Linking and embedding (with connections to outside collaborative tools), discussion, and the development of alternative designs for learning modules and the content page are included as features of these designs.

**Category:** Teaching and Learning: General Technology Issues

**Audience:** RamCT Instructors & Instructional Designers

### **Learning Management Systems**

“Milligan argues that the LMS is “a conservative technology [for] managing groups, providing tools and delivering content.” Given that formal education remains in strong demand from learners... there will continue to be a need for online systems that provide administrative functionality... and it would be an unacceptable burden on students if there were no data transfer between student record systems and online learning systems.” (Sclater, 2008, p. 7)

### **Students**

Technology undergraduate students prefer to use for learning:

- **80.2%** - running internet searches
- **44.3%** - text based conversations over e-mail, IM, text messaging
- **35.5%** - contributing to websites, blogs or wikis
- **50.8%** - through programs that they can control, such as video games or simulations  
(Salaway & Caruso, 2008, p. 12)

### **Constructivist Learning Theory**

“In constructivist theory, the learner is viewed as an active participant in the instructional experience, developing knowledge through a process of perception and meaning making. Situations, activities and social interactions are constantly challenging the learner’s understandings, which results in new meanings. Therefore, the context or the activity, which frames the knowledge, is as important to the learner as the knowledge itself. Knowledge or cognition in the constructivist view is perceived to be indexed or linked to the experiences in which it is learned which results in multiple representations and infinite juxtapositions. Rather than acquiring concepts as abstract, self-contained entities, a person acquires useful knowledge through understanding of how knowledge is used by a group of practitioners or members of a community.” (Dabbagh & Bannan-Ritland, 2005, p. 167).

#### References

- Dabbagh, N., & Bannan-Ritland, B. (2005). *Online Learning: Concepts, Strategies and Application*. Upper Saddle River, NJ: Pearson Education, Inc.
- Salaway, G., & Caruso, J. (2008, October). *The ECAR study of undergraduate students and information technology*. Retrieved October 17, 2008, from EDUCAUSE Center for Applied Research: <http://connect.educause.edu/library/ECAR/TheECARStudyofUndergrdua/47485>
- Sclater, N. (2008, June 24). Web 2.0, Personal Learning Environments, and the Future of Learning Management Systems. *ECAR Research Bulletin*, 2008 (13), pp. 1-13

## **RamCT Constructivist Adult Learning Model**

Adapted from Dabbagh, N., & Bannan-Ritland, B. (2005). *Online Learning: Concepts, Strategies and Application*. Upper Saddle River, NJ: Pearson Education, Inc.

### **Design Principles**

“In general, all the [constructivist-based pedagogical] models subscribe to the following five main instructional conditions or design principles (M. P. Driscoll, 2000):

1. Embed learning in complex, realistic, and relevant contexts.
2. Provide for social negotiation as an integral part of learning.
3. Support multiple perspectives and the use of multiple modes of representation.
4. Encourage ownership in learning.
5. Nurture self-awareness of the knowledge construction process. (p.382)”  
(Dabbagh & Bannan-Ritland, p. 183).

### **Authentic Learning Activities**

The following are the 10 attributes of authentic learning activities as presented by Dabbagh and Bannan-Ritland (2005, p. 205). Authentic activities:

1. have real-world relevance.
2. are ill defined, which requires students to define the tasks and subtasks needed to complete the activity.
3. comprise complex tasks for students to investigate during a sustained time period.
4. provide the opportunity for students to use a variety of resources to examine the task from different perspectives.
5. provide students with the opportunity to collaborate.
6. provide students with the opportunity to reflect and involve their beliefs and values.
7. can be integrated and applied across different subject areas and extend beyond domain-specific outcomes.
8. are seamlessly integrated with assessment.
9. create polished products valuable in their own right rather than as preparation for something else.
10. allow competing solutions and diversity of outcomes.

### **Instructional Strategies**

The promotion of the following instructional strategies helps in the development of instruction which supports a constructivist pedagogical model:

1. authentic learning activities
2. problem solving
3. collaboration and social negotiation
4. exploration
5. hypothesis generation
6. role-playing activities
7. articulation
8. reflection
9. multiple perspectives
10. modeling and explaining
11. coaching
12. scaffolding
13. self-directed learning  
(Dabbagh & Bannan-Ritland, p. 206)