

Technology and Training

February 23, 2004

Overview

- New technologies and training
- Multimedia training
- Computer based training
- Web and e-learning
- Intelligent tutoring systems
- Distance learning
- Support technologies
- Exam review

Technologies and Training

- Influence on
 - Delivery costs
 - Effectiveness
 - Link to business goals
- New technologies
 - Multimedia
 - Distance learning
 - Expert systems
 - Electronic support systems
 - Training software applications

Multimedia Training

- *Multimedia training* combines audiovisual training methods with computer-based training.
- These programs integrate text, graphics, animation, audio, and video.
- Because this training is computer-based, the trainee can interact with the content.
- Can be delivered using the Internet or intranets.

Computer-Based Training

- *Computer-based training (CBT)*
 - How does CBT work?
 - How does the info flow?
 - How is the learning stimuli provided?
 - Feedback?
 - Examples

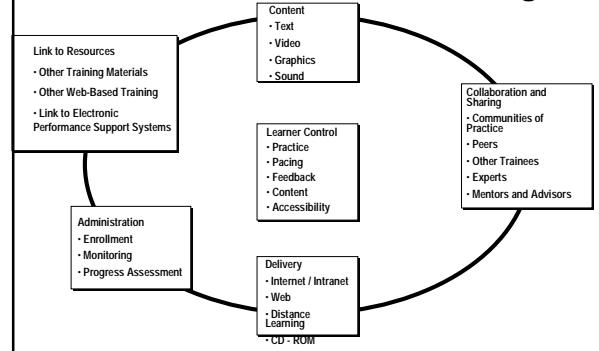
Web-Based Training and E-learning

- *Internet-based training*
- *Intranet-based training*

E-learning

- What is *E-learning* (online learning)?
- **Examples:**
 - Task-based support
 - Simulation-based training
 - Distance learning
 - Learning portals

Characteristics of E-learning:



Virtual Reality

- What is *virtual reality*?
- Examples

Intelligent Tutoring Systems (ITS)

- Instructional systems using artificial intelligence.
- **Types of ITS:**
 - Tutoring
 - Coaching
 - Empowering environments

Distance Learning

- Why use distance learning?
- How is distance learning different from, lectures delivered via cable or video?
- Involves two types of technology:
 - Teleconferencing
 - Personal computer-based training

Training Support: Expert Systems

- *Expert systems* refer to technology that organizes and applies the knowledge of human experts to specific problems.
- Expert systems are used as a support tool that employees refer to when they have problems or decisions they feel exceed their current knowledge and skills.

Expert Systems

- **Expert systems have three elements:**
 - A knowledge base that contains facts, figures, and rules about a specific subject.
 - A decision making capability that draws conclusions from those facts and figures to solve problems and answer questions.
 - A user interface that gathers and gives information to the person using the system.

Training Support: Groupware

- Software that enables multiple users to track, share, and organize information, and to work on the same document simultaneously.
- Why use groupware?
- Examples

Training Support: EPSS

- **Electronic performance support system (EPSS) is an electronic infrastructure that:**
 - Captures, stores, and distributes individual and corporate knowledge assets throughout an organization, to
 - Enable individuals to achieve required levels of performance in the fastest possible time and with a minimum of support from other people.

Choosing New Tech Methods

- Effectiveness
- Learning and transfer
- Development costs
- Table 8-6

Traditional vs. High-Tech Training

- Traditional training methods including lecture, participation, group work, etc., best facilitate learning
- Traditional training methods are obsolete and E-learning is 'the way of the future'

Next Time

- **MIDTERM EXAM 1**