Welcome Back!

Orientation

• Instructor – Dave Netherton
  • Senior Lecturer
  • Occupational and Technical Studies
  • Program Leader for:
    • Fashion,
    • Marketing Education
    • Training Specialist Programs
Qualifications to teach this course:

- Experience
  - in government
  - in Career and Technical Education
  - in private industry

- Taught graduate and undergraduate curriculum development and training development courses for 24 years

Course Purpose:

- Prepares students to plan, design and develop education and training courses and programs.

- It is a professional development course for career and technical teacher education students.
  - They learn to plan, design, and develop instruction using a variety of strategies.

OTED 400/500, Course Description

- Learn how to design and develop instructional materials including educational and training curricula and programs.
• Non-Teaching majors
  – learn to develop instructional materials using the instructional systems design process.

• Career and Technical Teacher Education students
  – learn to plan and implementation competency-based education and to modify and use the Virginia career and technical education curriculum guides.

Course Assignments

Undergrads

- Lesson Plan Project 20%
- Exams 40%
- Pre-Submission Eval 10%
- Term Project 30%

Course Assignments

-- Grads

- Lesson Plan Project 20%
- Exams 40%
- Pre-Submission Eval 10%
- ISD or CBE Project 30%
Accommodating Students with Special Needs

- Students with learning or physical disabilities will be expected to do the same level of work at the same proficiency as students without disabilities.
- Where necessary, accommodations may be made for those who make their learning or physical condition known in advance.

Textbooks:

- Readings are on the web.
- Some are in .pdf format and you will need

Class Policies
Attendance:

- Experience shows that those who do not attend class are less successful than those who do attend. **Students are expected to attend class.**
- If you miss a class, you are responsible for the material missed. **No make-ups will be given for tests unless official documentation is received.**
  - Folks, having to work on a test date is no excuse!

Punctuality:

- Every student is expected to practice professional time management skills and report to class on time.
- **Arriving late** -- take a seat nearest to the door and quietly sit down without disturbing the class.

Disruptive Behavior

- Learning environments require the attention and positive contribution of both student and teacher.
- Sidebar or loud conversations, jokes, laughter, pranks, etc., while class is in session are disruptive to the learning environment.
- Students disrupting the learning environment are subject to University sanctions regarding disruptive behavior.
Professional Language/Respect:

- Professional language, conduct, and respect for peers, the instructor, and the learning process are a basic requirement. (on-line as well as in class).

Food and Beverage:

- No food or beverage is allowed during class
- They are OK during breaks . . .

Electronic Devices

- All cell phones and pagers are to be turned off prior to entering the class.
- Habitual failure to follow the rule regarding cell phones or pagers may result in a student being asked to leave class.
**Make-up Work**

- Make-up tests are not routinely available. **No make-ups will be given for tests unless an official excuse document is received.**

- Emergencies do occur. In the event of an illness, family responsibilities, or death in the immediate family, documentation of the situation should be presented at the earliest possible date.

**Assignments**

- Assignments are expected to be turned in **on the date due**. Don’t assume you may turn it in late, **ask first**!

- If an assignment is delivered late, expect that a penalty of up to **one letter grade per day** late, including weekends, may be assessed.

  Folks, you will have plenty of time to do the assignments. **Don’t wait to the last minute!**

**The ODU Honor Code is in effect throughout the course**

- Any work submitted is expected to be yours. Any referenced work must include the citation showing credit to the author of the cited material.

- Dishonesty (cheating) in any form will not be tolerated and will be handled following the honor code violation policy.

- All tests will be monitored.
All other student conduct policies are in full effect as explained in the *Old Dominion University Student Handbook*.

### Office Hours

- Office hours are posted on the office door. Instructor will be available 1 1/2 hours prior the scheduled class.

- Office -- ED 228 (OTS Office suite).

### Getting in touch...

- 757-683-5323 My Office
- 757-683-4305 OTS -- Dept.
- 757-683-5227 Fax
- dnethert@odu.edu Email
- www.lions.odu.edu/~dnethert Web Site
OTED 400 Web Site

www.lions.odu.edu/~dnethert/Courses/oted400.htm

www.lions.odu.edu/~dnethert
then . . . Click on "Courses"

Questions?

• Purpose?
• Requirements?
• Information?

The Web Site
Your primary tool for the course . . .
Let's Get Started!

An Overview of Training
Question:

- Why is knowing how to plan and conduct training/instruction important for you in your future?
  - Training Specialists
  - Industrial Technology
  - Fashion

Move into your group.
- Select a leader
- Select a recorder
- Select a spokesperson

Begin to prepare a report for the class:
- Why is training/instruction important for your profession?
- Who needs to know how to plan instruction in your profession?
- Who needs to present instruction in your profession?
- Who is responsible for planning and conducting training/instruction in your profession?
- What advantages will you have in your profession if you have developed competence in planning and presenting instruction?
• OK . . . What did you find out?

Good and Bad Learning Experiences!

At its worst . . .

• Training and education can be an isolated program of activities
  – put together with no understanding of the needs of the business or the trainees and
  – no attempt to determine the value of training
At its best...

- Training (and education) is a set of processes
  - aimed at continuously improving employees and organizational systems,
  - including the training process itself.

What can we do to maximizing effectiveness of training?

- Provide supportive environment
- Design training that motivates learners
- Work with others to remove barriers to using new knowledge and skills

The ASTD definition...

- Identifying, assessing and -- through planned learning --
- help develop the key competencies
- which enable individuals to perform current or future jobs.

ASTD = American Society for Training and Development
Learning

- Definition varies...
  - A relatively permanent change in cognition (i.e., understanding and thinking)
  - results from experience
  - directly influences behavior.

We speak of learning “KSA”s

K = Knowledge
S = Skills
A = Attitudes

Knowledge
3 Kinds...

- Declarative Knowledge
  - store factual information
- Procedural Knowledge
  - understanding when and how to apply it
- Strategic Knowledge
  - using facts and procedures to plan, monitor, and revise a goal-directed activity
Skills

- Capacities needed to perform a set of tasks
  - Compiling Stage
    - When one is learning or has just learned a skill
  - Automatic Stage
    - Mastery of the skill -- can be performed without thinking

Attitudes

- Reflections of a person’s beliefs and opinions that support or inhibit behavior
- In training and career and technical education, we worry about attitudes related to job performance.
- They are important because they affect a worker’s motivation.

Training in the Organization

- Often “training” is “housed” in the Human Resource Development (HRD) department.
- The focus of training is on improving the organization’s effectiveness through training employees to do their job better.
- It includes training or educational programs that meet the personal needs of the employees
- Reaching a balance between personal and organizational training is the key to truly effective HRD operations
Instruction Development

- A set of 5 processes
  - Analysis Phase
  - Design Phase
  - Development Phase
  - Implementation Phase
  - Evaluation Phase

“ADDIE”

This course focuses on

- Instruction Development
  - You will each develop instruction using the Instructional Systems Development process

Next . . .

- What is Learning?
- What Affects Learning?
- What are the components of the Learning System?
What is learning?

Learning is a personal act.

- We each place our own personal stamp on
  - how we learn,
  - what we learn and
  - when we learn.
- We in effect have our own learning style.

The act of learning is paradoxical in nature.

- It can at times appear to be a very simple act.
  - So simple, that as we go about our daily activities, we are unaware that we are learning.
- Yet, when we encounter difficulties in learning something, we no longer take the learning process for granted.
Learning is taken for granted as a natural process.

- As simple as it may seem, the root of understanding how we learn is not straightforward.
- The existence of numerous definitions and theories of learning attest to the complexity of this process.

What is “Learning”?

- In *Educational Psychology: An Introduction*, for example, the authors write,
  - “Learning implies a change in the individual as a result of some intervention. It may be viewed as an outcome or as a process.”

Another definition of “Learning”

- A change in individuals, due to the interaction of individuals and their environment, which fills a need and makes them more capable of dealing adequately with their environment.
- Key Words:
  - change . . . fills a need . . . makes them more capable
A definition of “Learning” in the workplace

- The acquisition of knowledge by individuals who are willing to apply that knowledge in their jobs in making decisions and accomplishing tasks for the company.

Learning from the Brain’s Perspective...

- The process by which we
  - receive and process sensory data
  - encode such data as memories within the neural structures of our brain
  - retrieve those memories for subsequent use.

  The variety of information stored within such memories is enormous.

What Affects Learning?
Factors Affecting Learning

- Motivation
- Organization
- Participation
- Confirmation
- Repetition
- Application
- Emotion

Factors Affecting Learning

**Motivation**

- Generally . . . The greater the want or need to learn, the more learning will take place
  - Stating a goal for the learner will strengthen motivation -- We call this the “objective”
  - The learner must clearly understand the objective or goal of the lesson

Motivation

- **Knowledge of progress** enhances motivation to learn more
- The **imminence of use** will encourage motivation

How am I doing?
Am I going to need this soon?
Factors Affecting Learning

Organization

- There is a tendency to see and organize patterns or relationships, BUT unaided, this tendency may not always result as it should.
- The more meaningful the material is to the learner, the better he will organize and learn it.
  - Demonstrate (Show it)
  - Explain how it will help him/her do the job better, faster, safer, etc.

Factors Affecting Learning

Participation

- People learn only through their own mental and physical activity
- Learning is enhanced through participation
  - Show them -- step by step
  - Have them visualize it and verbalize it
  - Have them actually practice it

Factors Affecting Learning

Confirmation

- If learning is assured, it must be confirmed in the mind of the learner.
  - Needs to know if the response was right or wrong
  - Must know why it was right or wrong
Factors Affecting Learning

**Repetition**

- Mere repetition has little, if any, strengthening effect on learning.
- It must be accompanied by favorable “conditions”:
  - proper motivation
  - meaningful organization
  - continuous participation
  - confirmation

**More Repetition**

- “Overlearning” is very important.
  - Practice over time
  - Use “Whole-Part-Whole” process
  - Learning is favored when practice is spaced over intervals of time
  - Minimum of delay is the key to efficient learning

**Application**

- The application or transfer of new knowledge to a new problem or situation cannot be assumed
  - There must be specific training for transfer.
Factors Affecting Learning

**Emotion**

- The feeling a learner brings to the class.
- Can enhance or be a barrier to learning depending on the orientation the individual learner brings to the class.

  - Example: given two adults in a classroom where an exercise is about to begin, one individual may interpret the exercise in such a way that leads to a feeling of ‘excitement’, while the other person interprets the exercise in such a way that leads to the feeling of ‘embarrassment’.

- When labels such as ‘excitement’ or ‘challenge’ are used, the learner is led to take actions that focus on the task.

**Training For Transfer of Learning**

- Calls for realistic situation
- Must be taught generalizing and application of new knowledge in similar situations

  • Generalizing means helping them use the new skills and knowledge in different situations and environments.

Factors Affecting Learning

**Individual Differences**

- Learner’s individual differences are as important as all other factors combined.
  - Intelligence
  - Education or experience level
  - Specific aptitudes (spatial, mechanical, verbal, perceptual speed, . . .)
  - Physical abilities
  - Attitudes and interests
  - Preferences in teaching methods/techniques
Learning Process for Instruction

- Learners need to know **WHY** they should learn
  - What is expected
  - Statement of quality or level of performance expected
  - Statement of conditions under which the learner must perform

- **Learners need meaningful training content**
  - Learning is most meaningful if linked to job experiences and needs

- **Learners need opportunities to practice**
  - The mental or physical rehearsal of the task, knowledge, or skill

- **Practice involves experience**
  - This means doing it (hands-on, role play)
• **Massed vs. Spaced Practice**
  – Massed -- practice continuously
  – Spaced -- given rest or breaks between practice sessions (best method)

• **Learners need to commit content to memory**
  – Storing important information
  – Develop concept maps, use multiple forms to review info, teach key words, cues)

• **Learners need feedback**
  – How well they are meeting learning objectives

• **They learn through observation, experience, and interacting with others**
  – Show them, have them practice, work with others doing it (teams)

• **Learners need the program to be properly planned and arranged**
  – Communicating courses/programs to students/employees
  – Advising them properly
  – Enrolling them
  – Preparing and processing pre-training materials
  – Preparing materials used in instruction
What are the components of the Learning System?

Components of a Learning System

- The Learners
- The Instructor
- The Instructional Materials
- The Learning Environment

- Arranging the training facility or room
- Testing equipment before starting
- Having backup equipment
- Provide support during instruction
- Distributing evaluation materials
- Facilitating communications during and after training
- Recording course completion in records
A Review
What did we do?

- Differentiated among knowledge, skills, and attitudes
- Identified the five phases of the Instructional Systems Development Model
- Defined Learning
- Looked at the Factors that Affect Learning
- And discussed the Components of a Learning System

Followup

- Check Web Site for study questions for this lecture (Lecture 1).
  - Quiz over them and those for Lecture 2 and 3 on Sep 27.

Next Time

- Readings for next week:
  - Learning Principles
  - Instructional Systems Development Process
  - For Teachers: Competency Based Education
- Read Assignment 1 on the web site.
Bye

Bye

See you
next week