Human Resources Training and Individual Development

Needs Assessment
January 26, 2004

Plan for the Day

- The Instructional Design System and needs assessment
- Performance objectives
- What is needs assessment?
- Organizational analysis
- Person analysis
- Task analysis
- Competency modeling

Instructional Design

- What is the role of needs assessment in the ISD model?
- How do criteria and objectives related to needs assessment?

Performance Objectives

- Instructional design technology involves correction and revision of instruction based on empirical testing
- Task Analysis → task performance objectives
- The desired outcomes of the instruction should be clearly stated
  - Behavioral objectives
  - Learning objectives
  - Performance objectives

Performance Objectives

- A performance objective is defined as a precise statement of a capability that, if possessed by the learner, can be observed as performance
- Five-Component Objective
  - Situation
  - Learned capability verb
  - Object
  - Action verb
  - Tools, constraints or special conditions

Capability verbs

- Discriminates
- Identifies
- Classifies
- Demonstrates
- Generates
- Adopts
- States
- Executes
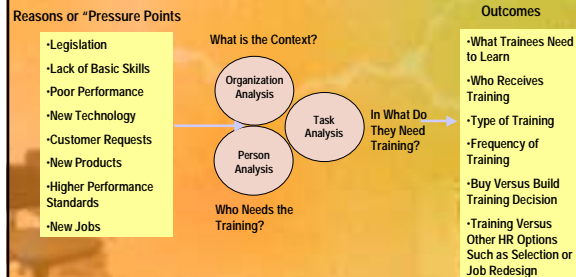- Chooses

Five-Component Objective: Examples
(from Gagne et al., 1992)

- <u>Discrimination</u>: [Situation] Given and illustration of the letter *b* and instructions to select other illustrations that look the same from a set containing *d, p, b, and q* [LCV] **discriminates** [object] *b* [action] by circling it
- <u>Concrete concept</u>: [Situation] Given a set of 10 radiographic negatives of the abdomen, [LCV] **identifies** [the gall bladder on the negatives [action] by circling it with a wax pencil
- <u>Rule</u>: Demonstrates
- <u>Problem solving</u>: Generates
- <u>Cognitive strategy</u>: Adopts
- <u>Verbal information</u>: States
- <u>Motor skills</u>: Executes
- <u>Attitude</u>: Chooses

Needs Assessment

- Refers to the process used to determine if training is necessary.
- What is the importance of needs assessment within the ISD model (how critical is the needs assessment phase)?

The Needs Assessment Process

Reasons or "Pressure Points"
- Legislation
- Lack of Basic Skills
- Poor Performance
- New Technology
- Customer Requests
- New Products
- Higher Performance Standards
- New Jobs

What is the Context?

Organization Analysis

Person Analysis

Task Analysis

In What Do They Need Training?

Who Needs the Training?

Outcomes
- What Trainees Need to Learn
- Who Receives Training
- Type of Training
- Frequency of Training
- Buy Versus Build Training Decision
- Training Versus Other HR Options Such as Selection or Job Redesign

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Needs Assessment: What to do when time and resources are scarce?

- Problems with "textbook" needs assessment in practice
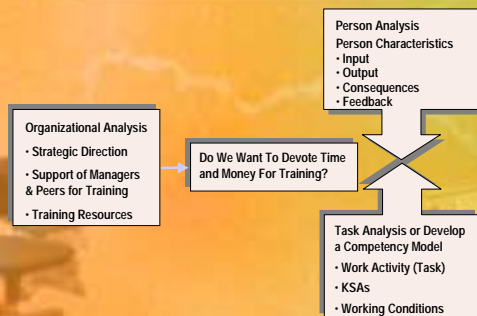- Suggestions from Zemke (1998):
  - 1.
  - 2.
  - 3.
  - 4.

Needs Assessment Components

- **Organizational Analysis**
- **Task Analysis**
- **Person Analysis**

Needs Assessment Techniques

- **Observation**
- **Questionnaires**
- **Technical manuals**
- **Interview subject matter experts**

The Needs Analysis Process

Person Analysis
Person Characteristics
• Input
• Output
• Consequences
• Feedback

Organizational Analysis
• Strategic Direction
• Support of Managers & Peers for Training
• Training Resources

Do We Want To Devote Time and Money For Training?

Task Analysis or Develop a Competency Model
• Work Activity (Task)
• KSAs
• Working Conditions

Person Analysis: Readiness for Training

- Employees have the personal characteristics necessary to learn program content and apply it on the job.
- The work environment will facilitate learning and not interfere with performance.

Factors Influencing Performance

- **Personal Characteristics**
  - Ability and skill
  - Attitudes and motivation
- **Input**
  - Understand need to perform
  - Necessary resources (equipment, etc.)
  - Interference from other job demands
  - Opportunity to perform

Factors Influencing Performance

- **Output**
  - Standard to judge successful performers
- **Consequences**
  - Positive consequences/incentives to perform
  - Few negative consequences to perform
- **Feedback**
  - Frequent and specific feedback about how the job is performed

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Factors Influencing Performance

- **Self-efficacy** is the employee's belief that she can successfully perform her job or learn the content of the training program.
  - The job environment can be threatening to many employees who may not have been successful in the past.
  - The training environment can also be threatening to people.
- Increasing self-efficacy

Work Environment Influences

- Facilitating performance
- Enhancing motivation to learn

Is Training the Answer?

- Assess whether:
  - The performance problem is important and has the potential to cost the company a significant amount of money from lost productivity or customers.
  - Employees do not know how to perform effectively.
    - Perhaps they received little or no previous training or the training was ineffective.
    - This problem is a characteristic of the person

Is Training the Answer?

- Assess whether:
  - Employees cannot demonstrate the correct knowledge or behavior.
    - Employees were trained but they infrequently or never used the training content on the job. (This is an input problem.)
  - Performance expectations are clear (input) and there are no obstacles to performance such as faulty tools or equipment.

Is Training the Answer?

- Assess whether:
  - There are positive consequences for good performance, while poor performance is not rewarded.
  - Employees receive timely, relevant, accurate, constructive, and specific feedback about their performance (a feedback issue).
  - Other solutions such as job redesign or transferring employees to other jobs are too expensive or unrealistic.

Is training the best solution?

- If employees lack the knowledge and skill to perform and the other factors are satisfactory, training is needed.
- If employees have the knowledge and skill to perform but input, output, consequences, or feedback are inadequate, training may not be the best solution.

Task Analysis

- **Task analysis** results in a description of work activities, including tasks performed by the employee and the knowledge, skills, and abilities required to complete the tasks.

Steps in a Task Analysis

- Select the job(s) to be analyzed.
- Develop a preliminary list of tasks performed by the job.
- Validate or confirm the preliminary list of tasks.
- Identify the knowledge, skills, or abilities necessary to successfully perform each task.

Competency Models

- A **competency** refers to areas of personal capability that enable employees to successfully perform their jobs by achieving outcomes or successfully performing tasks.
  - A competency can be knowledge, skills, attitudes, values, or personal characteristics.
- A **competency model** identifies the competencies necessary for each job as well as the knowledge, skills, behavior, and personality characteristics underlying each competency.

Competency Models

- Team project idea: develop a competency model for a specific job
  - Additional reading:
    - Mirabile, R. J. (1997). Everything you always wanted to know about competency modeling. *Training and Development, 51,* 73-77.
- Compare competency modeling with job analysis (what is job analysis?)
- Strategic job analysis

Wednesday

- Learning and motivation
- Instructions for Self-Directed Learning Report
- Read: Noe, Chapter 4