Planning the Instructional Experience

Writing Performance Objectives
Competencies

Objectives

- List the components of a performance objective
- Explain why performance objectives are important in planning instructional presentations.
- Write performance objectives for lessons.
- Explain the difference between a performance objective and a competency.

Why Learn this?

- Performance objectives form the basis of all lesson instruction and testing.
- They guide the selection of methods of instruction.
- So you need them BEFORE you write your lesson plan!
Performance Objective

- This is the “objective” of our instructional effort to try to assist our learners to perform.

What is a performance objective?

- They are terminal behaviors
- that identify what the student or learner must be able to do
- at the end of instruction.

Where do Performance Objectives come from?

- From the instructor?
- From the text book?
- From the government?
- From the job?
- From an analysis of the job?
Derived from Analysis of Work

- In the Instructional Systems Development Model the first of five phases is the Analysis Phase.
- In the analysis phase there is a Job Analysis and a Task Analysis.
- The Task Analysis is a detailed list of the tasks a person does on the job and the steps to perform each task.

Task Analysis

Task Listing
Service Station Attendant
1. Clean or replace spark plugs.
2. Adjust and bleed brakes.
3. Replace wheel cylinders.
4. Inspect and flush radiators.
5. Test antifreeze.
6. Repair tube or tubeless tires.
7. Rotate tires.
8. Lubricate vehicles.
10. Replace or clean filters.
11. Clean or replace gas filters.
12. Wash and wax autos.

Task Detail
Clean or replace spark plugs
1. Note the plug location relative to the cylinder.
2. Remove all spark plugs.
3. Identify the type of plugs.
4. Decide whether to adjust or replace plugs.
5. Clean plugs, if necessary.
6. Replace spark plugs in engine.
7. Connect ignition wires to appropriate plug.
8. Check for performance.
9. Clean tools and equipment.

We can write a performance objective using the information from the Task Analysis

- Task:
  - Sometimes called the behavior
- Condition under which the task is performed
  - Sometimes called the givens
- Standard that must be met to do the task right.
  - Sometimes called the criteria
If we are planning to train a person to be a Service Station Attendant

- We acquire a task analysis or task list for that job.
- We then write a performance objective for each task.
- We prepare a lesson plan for each task.
- We present instruction for each lesson plan.
- At the end of training, they should be able to perform the job.

From our Task List our first task is:

- "Clean or replace spark plugs."

A performance objective might be:

- Task: Clean or replace spark plugs.
- Condition: Given spark plugs, spark plug socket and a ratchet, the car's repair manual, and spark plug gapping tool.
- Standard: When the engine is started, it runs smoothly.

Our lesson for this Performance objective tells us:

- What we have to train the student to do.
  - Clean or replace spark plugs

- What we give the student to do this task.
  - Spark plugs, spark plug socket and a ratchet, the car's repair manual, and spark plug gapping tool.

- What the student must do to prove that he or she can do the task successfully.
  - Start the engine and see if it runs smoothly.
If we have a good, complete task analysis . . .

- We will have a “Task Detail”
  - This includes the steps that need to be performed to do the task successfully.
  - This would be our “content” for the lesson . . . what we would teach the student to do.

<table>
<thead>
<tr>
<th>Task Detail</th>
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So . . . Where does the Performance objective come from?

- Indirectly - - - from the Job via the Task Analysis.

Why is the performance objective important to instruction?

- It indicates to the instructor
  - what behavior the learner must do
  - what tools, information, or other things the learner must have to do the behavior
  - how well we must teach the student or learner to do the behavior.

All he or she has now is to find out how to do the task using the tools, information, or other things and then prepare the lesson plan.
The performance objective also gives the instructor hints . . .

- How to teach the task.
- How to test the student to find out if he or she has learned the task.

If we know that the learner is going to have to clean and change spark plugs, we know that this is a hands-on skill that would best involve a demonstration and then practice.

We also know that a skill is best tested by having the learner perform the task to prove he or she can meet the standard.

Another IMPORTANT thing you must remember about performance objectives . . .

- They describe the terminal behavior that the learner must be able to do . . .

After instruction!

They are not written to describe what the learner does DURING instruction!

However, they do hint about what the instructor must do during the instruction to help the student learn the task to meet the standard.

Let’s review . . .

- POs are written for who?
- POs include three components . . . What are they?
- POs derive from a ___________ Which indirectly is based on the JOB.

- They describe a __________ behavior, which happens __________ instruction.
Writing POs

• One way . . .

Task: Bake a cake
Condition: Given a box of Betty Crocker cake mix, eggs, water, mixing bowl and spoons, measuring cup, baking pans, toothpick, and a fully equipped kitchen
Standard: According to the instructions on the back of the cake mix box.

Writing POs

• A second way . . .

Given a box of Betty Crocker cake mix, eggs, water, mixing bowl and spoons, measuring cup, baking pans, toothpick, and a fully equipped kitchen, bake a cake, according to the instructions on the back of the cake mix box.

Writing POs --First, start with the Task.

• If you have a Task List, select the task from it.
• A task statement ALWAYS starts with an observable Active Verb. (cook, describe, list, assemble, paint, sew, design, drive, park, etc.)
• After the verb list the behavior. (a cake, a car, a dress, etc.)
• Remember, the task should describe a task that is performed on the job.
Writing POs -- Second, write the Condition statement (the given).

- Usually, not always begins with the word “Given”.
- The conditions component describes circumstances under which a task must be performed, such as:
  - environment
  - materials, tools, instruments, etc.
  - formulas supplied.

Writing POs -- Third, write the Standard statement.

- Remember, this must be a standard expected on the job.
- The standards component describes the minimum level of acceptable performance in terms of
  - time allowed
  - accuracy
  - specific rules or procedures that must be followed.

Competencies
**Competencies**

- Based on the objectives.
- They differ in two ways:
  - Usually taught as a combination of skills, knowledge, abilities, and attitudes.
  - They are observed in the workplace.

To be considered competent, a learner must be carried out in a workplace environment AND be completed several times.

**Competencies**

- Choosing the right competencies allows employers to:
  - Plan how they will organize and develop their workforce.
  - Determine which job classes best fit their business needs.
  - Recruit and select the best employees.
  - Manage and train employees effectively.
  - Develop staff to fill future vacancies.

**Competency Types**

- Knowledge Competencies -- practical or theoretical understanding of subjects.
- Skill and Ability Competencies -- natural or learned capacities to perform acts.
- Behavioral Competencies -- patterns of action or conduct.
Using Competencies

- In Job Descriptions
  - Explain the duties, working conditions, and other aspects of a job, including the competencies needed to perform the job's essential functions.
  - Position-specific competencies are determined through the process of job analysis, and are documented in the Position Description form.
  - These competencies form a basis for recruiting, hiring, training, developing, and managing the performance of employees.

Using Competencies

- In Recruitment, Assessment, and Selection
  - Describing desired competencies in recruitment announcements gives job seekers a clearer picture of what jobs entail.
  - Competencies also provide the foundation for assessment and selection techniques, including exams, interviews, and reference checks.

Examples of Competency Based Questions in a job interview

- Leadership Competency: Leadership Interview Questions
  - How open-minded are you to other member’s ideas?
  - Do you consult members? How do you take decisions in general?
  - Give an example of risk that you had to take? Why did you decided to take the risk?
  - How do you keep each member of the team involved and motivated?
  - Give examples of steps taken to make each team members feel important.
Using Competencies

- In Employee Performance Management
  - Competencies allow supervisors to more fully describe to employees their performance expectations.
  - Competency descriptions show employees what level of knowledge and skill mastery is required to successfully perform job duties, and what behavioral standards must be consistently demonstrated.

Using Competencies

- In Career and Workforce Planning
  - Knowing which competencies the future workforce must possess to achieve business goals and deliverables helps organizations plan and design:
    - Organizational structure.
    - Recruitment strategies.
    - Training budgets and development plans.
    - Job assignments and individual performance plans.

Using Competencies

- Employees can also use competencies to plan a career path.
  - Knowing which competencies are critical for certain promotions allows employees to request training and development opportunities and seek out specific feedback and coaching.
Using Competencies

- In Training and Development
  - Allow supervisors to choose and prioritize training courses and other learning opportunities for employees.
  - Training courses and OJT often describe the competencies students should be able to demonstrate by the end of the class.
  - Knowing how class content and developmental activities build mastery helps supervisors to ‘map’ each position to a specific training and development plan that fosters growth in required competencies.

Strictly speaking, in training competencies . . .

- Are not classroom based.
- However, that is not the way it is usually done. What is done is that the instruction is sometimes done in the classroom with the testing based on job- or work-level conditions and standards.
- Also, the training should be carried over into the workplace through some form of follow-up or practice.

‘Mastery Levels’

- What are they and how do I determine them?
- Mastery levels are one way to further describe and evaluate competencies.
  - They are not required, but may be helpful when the same knowledge or skill is needed for related jobs, but at different levels of depth, scope, or application.
Knowledge and skill mastery levels are often determined by:
- the level of independence
- the complexity of issues addressed
- the political sensitivity of key stakeholders
- the potential impacts of failure related to a job.

The Commonwealth of Virginia core competencies
- Include expectations for success among all jobs in state government. They are:
  - Technical and Functional Expertise
  - Understanding of the Business
  - Results Focus
  - Customer Service
  - Teamwork
  - Interpersonal Communication
  - Leadership
  - Personal Effectiveness

Virginia first lists and then defines the competencies. Then a list of competency indicators are provided:
- Competency: Results Focus
  - Definition: Attaining goals and objectives.
  - Team Member Indicators:
    - Pursues work with energy, drive, and a need for completion
    - Applies innovative ideas
    - Adapts to varying work situations and is flexible in your approach to resolving challenges
    - Takes initiative with a clear business purpose in mind
    - Continually seeks to improve business processes
Competency-Based Education

- This is the foundation of the Career and Technical Education curriculum

Pay attention teaching majors!

Competency-Based Education

- Is an instructional method that requires specific student performance on identified role-relevant tasks.
  - Based on research
  - Task oriented
  - Covers all domains of learning

Virginia’s Four Standards for Competency-Based Education

- Industry-validated competencies are identified and stated (written)
- Competencies are stated to students prior to instruction
- Criterion-referenced measures are used to evaluate achievement or competencies.
- A system exists for rating and documenting the competency performance of each student.
Steps in the CBE Development Process

- Needs assessment
- Occupational Analysis
- Development
- Implementation
- Evaluation

Industry Validation

- Industry representatives review, develop, modify, and confirm a list of tasks required by entry-level workers in their field of expertise.
- Occupational analysis is the means through which industry validation occurs.

All Aspects of the Industry

- The Federal Government’s Carl Perkins legislation requires that the following be examined in all CTE courses:
  - Planning
  - Management
  - Finance
  - Technical and Production Skills
  - Underlying Principles of Technology
  - Labor Issues
  - Community Issues
  - Health, Safety, and Environmental Issues
Next Week

- Read Chapters 8, 9, and 10

- We will talk about lesson planning, measuring learning, and getting instruction to work.

Bye!