

# Identify Occupational Competencies

**Unit:** World of Work Skills

**Problem Area:** Demonstrate Employability Skills

**Lesson:** Identify Occupational Competencies

■ **Student Learning Objectives.** Instruction in this lesson should result in students achieving the following objectives:

- 1** Explain the following occupational terms: *task analysis, job prerequisites, and occupational competencies*.
- 2** List methods for identifying occupational competencies.
- 3** Explain the value of a human resource management system (HRMS).

■ **Resources.** The following resources may be useful in teaching this lesson:

Lawler, Edward E., and Christopher Worley, *Built to Change: How to Achieve Sustained Organizational Effectiveness*. Jossey-Bass, 2006.

“Occupational Competency Assessment Program,” *Pennsylvania State University*. Accessed May 25, 2009. <<http://voc.ed.psu.edu/projects/OCA/index.html>>.

“Task Analysis,” *University of Victoria*. Accessed May 25, 2009. <[http://web.uvic.ca/akeller/pw408/r\\_taskanal.html](http://web.uvic.ca/akeller/pw408/r_taskanal.html)>.



## ■ **Equipment, Tools, Supplies, and Facilities.**

- ✓ Overhead or PowerPoint projector
- ✓ Visual(s) from accompanying master(s)
- ✓ Copies of sample test, lab sheet(s), and/or other items designed for duplication
- ✓ Materials listed on duplicated items
- ✓ Computers with printers and Internet access
- ✓ Classroom resource and reference materials

## ■ **Key Terms.** The following terms are presented in this lesson (shown in bold italics):

- ▶ human capital
- ▶ human resource management system (HRMS)
- ▶ job prerequisites
- ▶ KSAs
- ▶ occupational competencies
- ▶ task analysis

## ■ **Interest Approach.** Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situation. A possible approach is included here.

*Ask students the following questions: “What is a phlebotomist?” and “What does a person need to do to become a phlebotomist?” Have students key the following phrase into a Google search: “5 steps to become a phlebotomist.” Students will find an article about educational requirements and the job skills expected of a phlebotomist. Have students read the article independently and make a list of educational and skill requirements for becoming a phlebotomist. (Note: The article to be used is posted on the Web site [http://degreedirectory.org/articles/Phlebotomy\\_Technician\\_Become\\_a\\_Certified\\_Phlebotomy\\_Technician\\_in\\_5\\_Steps.html](http://degreedirectory.org/articles/Phlebotomy_Technician_Become_a_Certified_Phlebotomy_Technician_in_5_Steps.html).)*

# SUMMARY OF CONTENT AND TEACHING STRATEGIES

**Objective 1:** Explain the following occupational terms: *task analysis, job prerequisites, and occupational competencies.*

**Anticipated Problems:** What do the terms *task analysis, job prerequisites, and occupational competencies* mean? How does an organization know which occupational competencies are needed by its employees?

- I. The concept of KSAs is an excellent conceptual launching point for understanding occupational competencies.

- A. **KSAs** is knowledge, skills, and abilities (qualifications and attributes) and represents what one needs for a specific job. KSAs are always related to jobs.
1. Knowledge is usually acquired from a specific source of information (e.g., a degree in computer science or an undergraduate degree in communication) and tends to be an understanding of the facts and procedures necessary for the job performance.
  2. Skill statements are more finite measures of the ability to perform manual, verbal, or mental applications of data or things. For instance:
    - a. Performing calculations using percentages
    - b. Typing 60 words per minute
  3. Ability statements are observable behaviors. For example:
    - a. The ability to communicate in writing
    - b. A skill in leading a product development team
- B. **Occupational competencies** are the specific KSAs a person needs to perform a specific job successfully. Occupational competencies help to:
1. Define workplace performance
  2. Design competency-based curriculum
  3. Define the requirements for a credential or a license
- C. **Task analysis** is a method of identifying which specific occupational competencies are needed to perform a job. Task analysis examines a job, breaks it down into small components, and describes the particular KSAs and resources needed to perform the job. A task analysis defines job prerequisites.
- D. **Job prerequisites** are the education and skills a person must possess before he or she is able to perform a job. Job prerequisites are listed in job descriptions and classified ads. Part of the hiring process includes determining if an applicant possesses the prerequisite job skills necessary to do the job successfully.

*Many techniques can be used to help students master this objective. Use VM–A to demonstrate the concepts of task analysis, job prerequisites, and occupational competencies. Have students visit the “Task Analysis” Internet resource for a more in-depth description. Help students connect the Interest Activity to the concept of job prerequisites.*

**Objective 2:** List methods for identifying occupational competencies.

**Anticipated Problem:** How are occupational competencies identified? What is an example?

- II. Occupational competencies and applications
- A. An organizational perspective
1. The employer must identify the occupational competencies necessary to do a particular job.

2. Task analysis is sometimes used by the employer to identify occupational competencies.
- B. An employee perspective
1. Employers determine to what degree applicants possess the occupational competencies necessary to complete a job.
  2. Employers often accomplish this task by testing applicants.
  3. Certification programs are another method by which applicants can prove that they possess necessary occupational competencies. Obtaining a certification implies that an applicant has completed a test to verify competency of certain occupational skills.
- C. Sample application scenario
1. A person who wishes to teach career and technical education in Pennsylvania, for example, must complete a special certification process called the “Occupational Competency Assessment” through Pennsylvania State University. Since career and technical education focuses on teaching specialized skills related, for example, to repairing cars or working with electricity, those who teach the subjects must possess the appropriate skills and competencies related to being an auto technician or an electrician.
  2. Through Penn State’s Occupational Competency Assessment program, educators who pass the test are able to prove that they possess the occupational competencies necessary for teaching career and technical education in Pennsylvania. This just an example of one state, and each state differs. So investigate the requirements for your state.

*Many techniques can be used to help students master this objective. Use VM–B to demonstrate methods of determining occupational competencies and an application example. Have students visit the “Occupational Competency Assessment Program” Internet resource for more in-depth information related to the certification process.*

**Objective 3:** Explain the value of a human resource management system (HRMS).

**Anticipated Problem:** What are the benefits of using an HRMS?

III. Human resource management system (HRMS)

- A. **Human capital** is the cumulative value of occupational competencies held by an organization; it is the power of the people’s talent used to accomplish strategies and goals in the organization. A **human resource management system (HRMS)** is a technology system used to inventory, search, and configure human capital according to the organization’s needs. The following are benefits of using an HRMS as it relates to occupational competencies:

1. Selection of project teams
  - a. Project teams continually convene and adjourn as new projects are begun and completed, especially in a large organization.
  - b. An HRMS easily selects and moves employees to new project teams based on the occupational competencies required by the project.
2. Employee profiles are maintained in an HRMS
  - a. Many employee profiles are maintained and updated by employees as an impetus for them to take ownership of developing new occupational competencies and updating their HRMS profile.
  - b. As employees attain new occupational competencies and list them in the HRMS, the HRMS creates potential new opportunities for working on different jobs, projects, and teams within the organization.
3. HRMS as a diagnostic tool
  - a. As organizations re-evaluate the success and failures of business goals and strategies, the HRMS can be used as a diagnostic tool for assessing whether the organization has the necessary occupational competencies to support new strategies.
  - b. The HRMS can also be used to help determine new business strategies and goals as a company evaluates whether its present human capital is sufficient to pursue new potential strategies. For example:
    - (1) A university wants to add a conversational French language course to the Foreign Language Department.
    - (2) As part of the decision-making process, the department would need to evaluate the level of competency of its foreign language faculty with respect to conversational French. How many of the current faculty speak and could teach a conversational French course?
    - (3) Following the evaluation of the current human capital, the department would decide one of three things: Go, no go, or hire.
      - (a) Go: The current human capital exists to teach the course.
      - (b) No go: The human capital does not currently exist to teach the course.
      - (c) Hire: In order to teach the course, additional faculty would need to be hired.

*Many techniques can be used to help students master this objective. Use VM–C to demonstrate the benefits of a human resource management system in relation to occupational competencies or examine the book by Lawler and Worley, *Built to Change: How to Achieve Sustained Organizational Effectiveness*. The book describes a blueprint for designing a modern organization “built to change,” which is referred to as “b2change.” Management of occupational competencies using human resource management systems is the theme of the book. Assign LS–A to have students conduct an observation of a professional job and create a task analysis and a set of occupational competencies.*

- **Review/Summary.** Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle. Questions at the ends of chapters in the textbook may also be used in the review/summary.
- **Application.** Use the included visual masters and lab sheet to apply the information presented in the lesson.
- **Evaluation.** Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. A sample written test is provided.

## ■ **Answers to Sample Test:**

### **Part One: Matching**

1. b
2. e
3. d
4. a
5. c
6. f

### **Part Two: Short Answer**

1. a. What skills does the job require?  
b. Which employee(s) possess the skills to perform a specific job?
2. A human resource management system (HRMS) is a technology system used to:
  - a. Inventory human capital
  - b. Search human capital
  - c. Configure human capital

### **Part Three: True/False**

1. T
2. F
3. T

# Identify Occupational Competencies

## ► Part One: Matching

**Instructions:** Match the term with the correct definition.

- a. human resource management system (HRMS)
- b. task analysis
- c. job prerequisites
- d. KSAs
- e. human capital
- f. occupational competencies

- \_\_\_\_\_ 1. A method of identifying which specific occupational competencies are needed to perform a job
- \_\_\_\_\_ 2. The cumulative value of occupational competencies held by an organization
- \_\_\_\_\_ 3. Knowledge, skills, and abilities necessary for a specific job
- \_\_\_\_\_ 4. A technology system used to inventory, to search, and to configure human capital according to the organization's needs
- \_\_\_\_\_ 5. Education and skills a person must possess before they are able to perform a job
- \_\_\_\_\_ 6. Particular knowledge, skills, and abilities a person needs to perform a specific job successfully

## ► Part Two: Short Answer

**Instructions:** Answer the following.

- 1. List two questions an organization must answer when considering assigning an employee to a particular job?



2. List three tasks performed by a human resource management system (HRMS).

► **Part Three: True/False**

**Instructions: Write *T* for true or *F* for false.**

- \_\_\_\_\_ 1. Human resource management systems can be used to help match employees with job openings in an organization by matching up the skills the employee possesses with the skills the job requires.
- \_\_\_\_\_ 2. Getting a certification does not “prove” anything about the occupational competencies a person possesses.
- \_\_\_\_\_ 3. Job prerequisites are used to make decisions about hiring people.



# KEY TERMS

## KSAs—

- ◆ Knowledge, skills and abilities (qualifications and attributes) one needs for a specific job.
- ◆ KSAs are always job-related. Skills are usually performance-based and Abilities are usually observable.
  - **K**—Possess a degree in information processing.  
Possess a degree in marketing
  - **S**—Perform calculations using percentages; type 60 words per minute
  - **A**—Ability to communicate in writing; lead a product development team



## **Occupational competencies—**

- ◆ Specific knowledge, skills, and abilities a person needs to perform a specific job successfully.
- ◆ Competencies help to:
  - Define workplace performance
  - Design competency-based curriculum
  - Define the requirements for a credential or license

## **Task analysis—**

- ◆ A method to identify the specific occupational competencies needed to perform a job.
- ◆ Examines a job, breaks it down into small pieces, and describes the particular KSAs and resources needed to perform the job
- ◆ Defines job prerequisites

## **Job prerequisites—**

- ◆ The education and skills a person must possess to perform a job
- ◆ Listed in job descriptions and want ads
- ◆ Part of the hiring process: Does the applicant possess the necessary job skills?

# HOW ARE OCCUPATIONAL COMPETENCIES IDENTIFIED?

## ◆ An organizational perspective—

- The employer must identify the occupational competencies necessary to do a particular job.
- This is sometimes accomplished through Task Analysis.

## ◆ An employee perspective—

- To what degree does an applicant possess the necessary occupational competencies?
- Employers often accomplish this task by testing applicants.
- Certification programs help “prove” an applicant possesses the occupational competencies (often involves testing).

## ◆ Sample application scenario: In order to Teach CTE in Pennsylvania:

- Pre-service teachers must complete a special certification test (KSAs) called the “Occupational Competency Assessment” through Pennsylvania State University:  
<http://voc.ed.psu.edu/projects/OCA/index.html>.
- Mastery of the test helps “prove” that they possess the occupational competencies necessary for teaching career and technical education in Pennsylvania.

# KEY TERMS: HUMAN RESOURCE MANAGEMENT SYSTEM (HRMS)

## Human capital

- ◆ Cumulative value of occupational competencies held by an organization
- ◆ Power of the employees' talent to accomplish strategies and goals in the organization

## Human Resource Management System (HRMS)

- ◆ Technology system used to inventory, to search, and to configure human capital according to the organization's needs



## Relationship with Occupational Competencies

1. Project teams continually convene and adjourn, especially in large organizations. The HRMS is used to fit employees easily into new project teams based on the occupational competencies required by the project.
2. Employee profiles are maintained in an HRMS. An employee profile is often updated by the employee, and employees are motivated to take ownership of developing new competencies and updating their HRMS profile. As employees attain new competencies and list them in the HRMS, new opportunities for working on different projects and jobs within the organization become available.
3. The HRMS can be used to make decisions about new business strategies and goals as a company evaluates its human capital and whether that capital is sufficient to pursue new potential strategies.
4. Managers use the HRMS to search for employees with the appropriate occupational competencies to fill job openings within the organization.

# Task Analysis and Skills List

## Purpose

The purpose of this activity is to develop a task analysis and skills list for a professional job.

## Objectives

1. Observe an athlete, musician, teacher, or other professional doing their job.
2. Complete a task analysis.
3. Develop a list of necessary skills for the job observed.

## Materials

- ◆ lab sheet
- ◆ paper and writing utensil or computer with word processing software

## Procedure

1. Select an athlete, musician, teacher, or other professional to observe. (The observation may be conducted in person or via media sources. For example, if you wish to observe Tiger Woods playing golf, you may need to do this via a televised event.)
2. Review the Task Analysis Internet resource at [http://web.uvic.ca/akeller/pw408/r\\_taskanal.html](http://web.uvic.ca/akeller/pw408/r_taskanal.html) with an emphasis on understanding the sections titled:
  - a. What You Want to Discover in a Task Analysis
  - b. How to Do a Task Analysis
3. Conduct the observation of your chosen professional and take notes. An average observation time would be one hour. Include the steps involved in completing the task. (Note: If you are watching Tiger Woods in a golf tournament, you may wish to focus on a snapshot of the task. For example, putting, driving, and so on. If you are observing a



teacher, the snapshot may be the first five minutes of a class and “How to start a class” or “How to conduct a lecture using technology.”)

4. Write the Task Analysis. Include a minimum of 7 (and up to 10) main steps in sequence.

Step 1.

Step 2.

Step 3.

Step 4.

Step 5.

Step 6.

Step 7.

Step 8.

Step 9.

Step 10.

5. Write a list of skills, or occupational competencies, that the professional you observed possesses that enabled him or her to complete the task successfully. Be creative when articulating occupational competencies. For this lab, there is no predetermined set of occupational competencies from which to choose. Think about how you want to articulate occupational competencies. Be creative and use your own way of expressing the competency. For example, four potential occupational competencies for playing a trumpet might be:

- a. Reads music
- b. Easily moves fingers (or has manual dexterity)
- c. Maintains a beat
- d. Has excellent lung capacity

Occupational Competencies for \_\_\_\_\_

Professional Observed: \_\_\_\_\_

6. Share and summarize your Task Analysis and list of Occupational Competencies in class.
7. Turn your Task Analysis and Occupational Competencies in to your instructor.