

## Catalog of Lesson Plans on Soft Technical Skills

### EMPLOYABILITY SKILLS Cluster



#### Designing a Career

The purpose of this lesson is to explore and design an occupation/ career of choice. The goal is to develop an occupational skills set in exploring the world of work. This involves:

- Using career development resources.
- Researching careers in demand locally, regionally, nationally, and globally.
- Exploring strengths, abilities, and aptitudes.
- Exploring career interests.
- Identifying employment opportunities.
- Targeting entry-level knowledge and skills.
- Setting career goals.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Displaying a positive attitude toward the world of work.



#### Getting the Job

The purpose of this lesson is to secure employment. The goal is to develop an occupational skills set in getting a job. This involves:

- Compiling an occupational resume/ curriculum vitae.
- Securing job shadowing, internship, apprenticeship, or other job-based experience.
- Searching for job openings.
- Identifying employment opportunities.
- Completing job applications.
- Securing and succeeding in interviews.
- Enhancing one's employability.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Displaying a positive attitude while in the job-getting process.



### **Climbing the Career Ladder**

The purpose of this lesson is to introduce the occupational competency of holding a job and climbing the career ladder. The goal is to help newly-hired workers succeed through a trial/ probationary period(s) and advancing in the career. This involves:

- Anticipating trial/ probationary period(s).
- Preparing for periodic performance reviews.
- Changing jobs.
- Changing careers.
- Resigning do's and don'ts.
- Moving up the "career ladder."
- Balancing a career among the eight dimensions of life.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Displaying a positive attitude during job advancement.

## LEARN ON THE JOB Cluster



### Learning on the Job

The purpose of this lesson is to introduce the occupational competency of learning on the job. The goal is to develop an occupational skills set in how to learn on the job. This involves:

- Engaging in formal and informal training.
  - Using the five steps of informal learning on the job.
  - Learning from job experience.
- Developing positive work habits.
  - Seeking apprenticeship training.
  - Understanding the related body of knowledge.
  - Using pertinent terms accurately in context.
  - Appreciating the value of technical growth.

The following Key Questions are addressed in this lesson:

- A. What is **Learning on the Job**?
- B. Why is it important to know how to learn on the job?
- C. What **terms** are commonly used with learning on the job?
- D. What are some examples of technical occupations where learning on the job is important?
- E. What is **self-directed learning**? **Formal training**? **Informal training**?
- F. What are the five steps of learning on the job?
  - F1. How should you ANTICIPATE?
  - F2. What's your TARGET?
  - F3. What's your PLAN?
  - F4. How will you LEARN?
  - F5. What does it mean to KEEP CURRENT?
- G. How can you learn from your experience on the job?
- H. Isn't learning from experience just learning from your mistakes?
- I. Why do some people seem to have trouble learning from experience?
- J. What about work **habits**?
- K. What is **cross training**?
- L. What is the standard operating procedure and job aid for **apprenticeship**-type training?
- M. What is your attitude toward learning on the job?
- N. What have you learned?
- O. How should you declare your competence in learning on the job?
- P. How can you continue to learn more on the job?



## Standard Operating Procedure

The purpose of this lesson is to introduce the occupational competency of using standard operating procedures or “how-to steps.”

The goal is to develop an occupational skills set in using standard operating procedures (SOPs) on the job. This involves:

- Exploring different forms of flow charts, decision trees, and/or verbal, written, or graphic algorithms.
- Analyzing characteristics of SOPs.
- Creating SOPs.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Realizing the importance of SOPs on the job.

The following Key Questions are addressed in this lesson:

- A. What is a Standard Operating Procedure (SOP)?
- B. Why is it important to know and use SOPs?
- C. What terms are commonly used with SOPs?
- D. What are examples of technical occupations that use SOPs?
- E. What is the difference between an SOP and a flow chart? A decision tree? Other terms?
- F. What are characteristics of SOPs?
- G. When and where did SOPs get started?
- H. Are SOPs verbal, written, or graphic?
- I. How are SOPs established?
- J. Can SOPs be misused?
- K. What is a Job Aid?
- L. What is the SOP for creating and using SOPs?
- M. What is your attitude toward SOPs?
- N. What have you learned?
- O. Should you include your competence in SOPs on your resume?
- P. How can you continue to improve your competence in SOPs?



## Job Aid

The purpose of this lesson is to introduce the occupational competency of using Job Aids or “memory joggers” for doing standard operating procedures. The goal is to develop an occupational skills set in creating and using job aids on the job. This involves:

- Exploring forms such as phrases, acronyms, mnemonics, rhymes, alliterations, checklists.
- Analyzing characteristics of job aids.
- Creating personal job aids.
- Assessing application and memorability.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of aids.

The following Key Questions are addressed in this lesson:

- A. What is a Job Aid?
- B. Why is it important to know how to create and use Job Aids?
- C. What terms are commonly used with Job Aids?
- D. What are examples of technical occupations that use Job Aids?
- E. What are examples of Job Aids?
- F. What is the difference between an SOP and a Job Aid?
- G. What is a phrase?
- H. What is an acronym?
- I. What is a mnemonic?
- J. What is a rhyme?
- K. What is an alliteration?
- L. What is a checklist?
- M. What is the standard operating procedure and job aid for creating Job Aids?
- N. What is your attitude toward Job Aids?
- O. What have you learned?
- P. How should you declare your competence in Job Aids?
- Q. How can you increase your competence in Job Aids?



## Dress for the Job

The purpose of this lesson is to introduce the occupational competency dressing appropriate for the job. The goal is to develop an occupational skills set in dressing for the job. This involves:

- Complying with attire codes (military/ safety/ sports/ etc.).
  - Grooming.
  - Looking professional.
  - Selecting and maintaining personal protective equipment.
- Understanding the related body of knowledge.
  - Using pertinent terms accurately in context.
  - Valuing why wearing the right “duds” is important.

The following Key Questions are addressed in this lesson:

- A. What is **Dress for the Job**?
- B. Why is it important to dress correctly and appropriately for the job?
- C. What **terms** are commonly used with dressing for the job?
- D. What are aspects of work-related dress?
- E. What are examples of how various workers dress for their jobs?
- F. What about costumes?
- G. How do you learn how to dress for the job?
- H. Who pays for specialized clothing and equipment?
- J. How should a technician dress for an occupation/ career of interest?
- J. Of what does a dress code usually consist?
- K. What is a North Dakota space suit?
- L. What about tattoos?
- M. What is the standard operating procedure and job aid for dressing for the job?
- N. What is your attitude toward dressing for the job?
- O. What have you learned?
- P. How should you declare your competence in dressing for the job?
- Q. How can you continue to improve your competence in dressing for the job?

## TECHNICAL COMMUNICATION Cluster



### Verbal Technical Communication

The purpose of this lesson is to introduce the occupational competency of verbal technical communication. The goal is to develop an occupational skills set on the verbal or spoken-word aspects of technical communication on the job. This involves:

- Exchanging accurate verbal information with customers, clients, and workers.
- Speaking and listening effectively.
- Juxtaposing verbal with on-verbal communication.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating clear and concise verbal language.

The following Key Questions are addressed in this lesson:

- A. What is **Verbal Technical Communication**? What is **technical communication**?
- B. Why is it important to know how to communicate **technical information** verbally?
- C. What **terms** are commonly used in Verbal Technical Communication?
- D. What are examples of technical occupations that use Verbal Technical Communication?
- E. What are the seven elements of communication?
- F. How does technical communication differ from other forms of communication?
- G. What is **verbal filler**?
- H. What is **jargon** and **slang**?
- I. Why is effective listening important, and how is it done?
- J. What are the five functions of questions?
- K. What is the **International Phonetic Alphabet**?
- L. What is the **grapevine**?
- M. What's the difference between verbal and **non-verbal** communication?
- N. What is the standard operating procedure and job aid for Verbal Technical Communication?
- O. What is your attitude toward Verbal Technical Communication?
- P. What have you learned?
- Q. How should you declare your competence in Verbal Technical Communication?
- R. How can you increase your competence in Verbal Technical Communication?



## Written Technical Communication

The purpose of this lesson is to introduce the occupational competency of written technical communication. The goal is to develop an occupational skills set on written or text aspects of technical communication. This involves:

- Exchanging accurate written information with customers, clients, and workers.
- Writing effectively.
- Using written technical terms.
- Knowing “technical language.”
- Using various forms of technical international English.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating clear and concise written text.

The following Key Questions are addressed in this lesson:

- A. What is **Written Technical Communication**? What is **technical communication**?
- B. Why is it important to know how to communicate technical information in writing?
- C. What **terms** are commonly used in Written Technical Communication?
- D. What are examples of technical occupations that communicate **technical information** in writing?
- E. What are elements of the process of technical communication?
- F. What is **technical writing**?
- G. What are seven principles of technical writing?
- H. What does it mean that technical communication must be **effective** and **efficient**?
- I. What about instant electronic messaging?
- J. What language should you use?
- K. How can you write better **definitions**?
- L. What are special writing techniques for digital reading?
- M. Why is reciting text aloud a powerful tool for revision?
- N. How can you assess the quality of your technical writing?
- O. What is the standard operating procedure and job aid for technical writing?
- P. What is your attitude toward Written Technical Communication?
- Q. What have you learned?
- R. How should you declare your competence in Written Technical Communication?
- S. How can you increase your competence in Written Technical Communication?





## Graphic Technical Communication

The purpose of this lesson is to introduce the occupational competency of graphic technical communication. The goal is to develop an occupational skills set in the graphic and iconic aspects of technical communication. This involves:

- Exchanging accurate graphic information with customers, clients, and workers.
- Communicating graphically effectively.
- Using technical graphic terms.
- Sketching icons and symbols.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating clear and concise graphic symbolism.

The following Key Questions are addressed in this lesson:

- A. What is **Graphic Technical Communication**? **Technical communication**?
- B. Why is it important to know how to communicate **technical information** graphically?
- C. What **terms** are commonly used in **Graphic Technical Communication**?
- D. What are examples of technical occupations that work in Graphic Technical Communication?
- E. What are the seven elements of communication?
- F. What is a **graphic**? A **symbol**? An **icon**? Other terms?
- G. What is an **illustration**?
- H. What about **graphs** and **charts**?
- I. What are recognition technologies?
- J. What are the fundamentals of color?
- K. What is a **sketch**? How does a sketch differ from a **drawing**?
- L. What are characteristics of sketches?
- M. What are the steps in sketching?
- N. What is **ratio**, **proportion**, and **scale**?
- O. When and where did pencils get started?
- P. What is the standard operating procedure and job aid for Graphic Technical Communication?
- Q. What is your attitude toward Graphic Technical Communication?
- R. What have you learned?
- S. How should you declare your competence in Graphic Technical Communication?
- T. How can you increase your competence in Graphic Technical Communication?



### **Non-verbal Technical Communication**

The purpose of this lesson is to introduce the occupational competency non-verbal technical communication. The goal is to develop an occupational skills set in non-verbal or “body language” aspects of technical communication on the job. This involves:

- Reading non-verbal communication with customers, clients, and workers.
- Understanding the nine forms of non-verbal communication.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the pros and cons of non-verbal language.



### **Questioning/Interrogating**

The purpose of this lesson is to introduce the occupational competency of questioning and interrogating people. The goal is to develop an occupational skills set in questioning and interrogation techniques, which are vital skills for police investigators, crime-scene technicians, and others who must extract vital information from various people. This involves:

- Formulating precise questions.
- Speaking effectively.
- Listening for critical information.
- Analyzing non-verbal signals.
- Understanding the related body of knowledge.
- Using technical terms and “technical language.”
- Realizing the importance of occupational skill in interrogation.



### **Perception**

The purpose of this lesson is to introduce the occupational competency of perception. The goal is to develop an occupational skills set in using differing perspectives on the job. This involves:

- Using the six senses of sight, hearing, touch, smell, taste, and intuition in occupational settings.
- Visualizing with the mind’s eye.
- Configuring symbols in differing spatial relationships.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Anticipating the sights/ smells/ sounds/ tastes of the work place.

## THINKING ON THE JOB Cluster



### Common Sense

The purpose of this lesson is to introduce the occupational competency of using common sense. The goal is to develop an occupational skills set of using one's common sense on the job. This involves:

- Developing and using one's common sense on the job.
- Understanding the roles of common experience and common knowledge.
- Applying the "sense" of common sense, conventional wisdom, street smarts.
- Sensing when/where common sense may fail.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of common sense.

The following Key Questions are addressed in this lesson:

- A. What is Common Sense?
- B. Why is Common Sense important on the job?
- C. What terms are commonly used with Common Sense?
- D. What are examples of technical occupations that use Common Sense?
- E. How do we get Common Sense?
- F. What is the "sense" in Common Sense?
- G. Does everyone have Common Sense?
- H. What is conventional wisdom? Street smarts?
- I. What is the difference between probable and possible?
- J. Does our Common Sense get better as we get older and have more common experiences?
- K. What are things that get in the way of Common Sense?
- L. What are situations in which Common Sense could be wrong?
- M. What was Thomas Jefferson's contribution to Common Sense?
- N. What is the standard operating procedure or job aid for using your Common Sense?
- O. What is your attitude toward Common Sense?
- P. What have you learned?
- Q. How should you declare your competence in Common Sense?
- R. How can you increase your competence in Common Sense?



## Critical Thinking

The purpose of this lesson is to introduce the occupational competency methods of critical thinking. The goal is to develop an occupational skills set in thinking critically on the job. This involves:

- Knowing the characteristics of critical thinkers.
- Assessing one's thinking by using meta-cognition.
- Programming one's mind.
- Sequencing thinking based on such criteria as time frames, stages of completion, and need.
- Avoiding negative mental habits/pitfalls of critical thinking.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of rational and reasonable thinking.

The following Key Questions are addressed in this lesson:

- A. What is Critical Thinking?
- B. Why is it important to know how to think critically on the job?
- C. What terms are commonly used in Critical Thinking?
- D. What are examples of technical occupations that do Critical Thinking?
- E. What are positive mental habits of critical thinkers?
- F. What is meta-cognition?
- G. How does Critical Thinking differ from ordinary thinking?
- H. What are positive mental habits that enhance critical thinking?
- I. What are negative mental habits that impede critical thinking?
- J. How can you assess the degree of truthfulness or falseness in a statement?
- K. How can you manage your mind?
- L. Do critical thinkers think faster than others?
- M. What is the standard operating procedure and job aid for thinking critically?
- N. What is your attitude toward Critical Thinking?
- O. What have you learned?
- P. How should you declare your competence in Critical Thinking?
- Q. How can you increase your competence in Critical Thinking?



### Logic on the job

The purpose of this lesson is to introduce the occupational competency of logical thinking. The goal is to develop an occupational skills set of thinking logically on the job. This involves:

- Knowing the bases of technical logic.
  - Understanding bivariate/ fuzzy/ computer and other forms of logic.
  - Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
  - Appreciating the value of logical thinking.

The following Key Questions are addressed in this lesson:

- A. What is **logic**?
- B. Why is logical thinking important on the job?
- C. What are **terms** associated with logical thinking?
- D. What are examples of technical occupations that think logically on the job?
- E. What are different types of logic?
- F. What's the difference between facts and opinions? Between mere opinions and considered opinions?
- G. What is **inductive** and **deductive thinking**?
- H. What is **philosophy**?
- I. Who was Aristotle?
- J. What are the three different kinds of **experience**?
- K. What is the difference between **probable** and **possible**?
- L. What does it mean to **debate**? What is **formal logic**?
- M. What is a logic puzzle?
- N. What are hints to solving logic puzzles?
- O. What is the standard operating procedure and job aid for logical thinking on the job?
- P. What is your attitude toward using logical thinking on the job?
- Q. What have you learned?
- R. How should you declare your competence in logical thinking?
- S. How can you increase your competence in logical thinking?



### **Persuading**

The purpose of this lesson is to introduce the occupational competency of persuasion and negotiation. The goal is to develop an occupational skills set on persuasion, negotiation, and influencing in technical situations. This involves:

- Dealing effectively with customers, clients, and peer workers.
- Knowing the bases for negotiation.
- Using the four-step process of persuasion.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Taking responsibility for the technical persuasion.



### **Decision Making**

The purpose of this lesson is to introduce the occupational competency of decision making. The goal is to develop an occupational skills set in how to make sound decisions and extend critical judgment on the job. This involves:

- Selecting the best choice when faced with difficult alternatives on the job.
- Knowing when a decision needs to be made and the different ways to choose.
- Using the sequential steps of decision making.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the attribute of having good judgment.

## PERSONAL STRENGTHS Cluster



### Concentrating on the Job

The purpose of this lesson is to introduce the occupational competency of how to concentrate on work-related tasks. The goal is to develop an occupational skills set on how to concentrate on the job. This involves:

- Focusing one's attention on immediate job tasks.
- Applying the nature of concentration.
- Screening distractions.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Feeling the need to concentrate.



### Motivation on the Job

The purpose of this lesson is to introduce the occupational competency of motivating one's self. The goal is to develop an occupational skills set in self-motivation on the job. This involves:

- Identifying intrinsic and extrinsic forms of motivation.
- Implementing varying forms of motivation.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Realizing why MO is important.



### Shift Cycle Management

The purpose of this lesson is to introduce the occupational competency of managing shift cycles. The goal is to develop an occupational skills set on managing one's own shift cycles on the job. This involves:

- Maintaining work quality and quantity through differing work shifts.
- Understanding the tendency of the human body to become established in a routine of awake and sleep.
- Coping with the effects of working swing shifts.
- Maintaining technical accuracy while enduring jet lag.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating positive aspects of managing shift cycles.



### Stress Management

The purpose of this lesson is to introduce the occupational competency of managing job-related stress. The goal is to develop an occupational skills set on stress management. This involves:

- Recognizing stressors.
- Coping with job failures and successes.
- Knowing the symptoms of “job burnout.”
- Adapting to job distress.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Adopting a positive attitude toward stress management.



### Humor is No Laughing Matter

The purpose of this lesson is to introduce the occupational competency of laughing and finding humor. The goal is to develop an occupational skills set on finding humor in one’s self, in one’s workplace. This involves:

- ☺ Developing a personal sense of humor.
- ☺ Identifying six types of humor.
- ☺ Practicing telling humorous stories.
- ☺ Poking fun at one’s self.
- ☺ Understanding the related body of knowledge.
- ☺ Using pertinent terms accurately in context.
- ☺ Appreciating a sense of humor in others.



### Manners

The purpose of this lesson is to introduce the occupational competency of business etiquette. The goal is to develop an occupational skills set on desired manners and etiquette in work-related situations. This involves:

- Being professional and minding your Ps and Qs.
- Behaving appropriately in varying occupational venues, such as meals, job interviews, “business-after-hours” social situations, and others.
- Enacting the expected “dos” and “don’ts” in social situations.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating expected behavior in work-social situations.



## PERSONAL VALUES Cluster



### Attitude on the Job

The purpose of this lesson is to introduce the occupational competency of valuing a positive work attitude. The goal is to develop an occupational skills set in portraying a positive attitude while on the job. This involves:

- Discerning between positive and negative work attitudes.
- Citing personal benefits of having a positive work attitude.
- Exhibiting and maintaining a positive work attitude.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Taking responsibility for one's own positive "tude."

The following Key Questions are addressed in this lesson:

- A. What is **Attitude on the Job**? An **attitude**? A **work attitude**?
- B. Why is it important to have a positive work attitude?
- C. What **terms** are commonly used with Attitude on the Job?
- D. What are examples of technical occupations that need a positive work attitude?
- E. What mind set is associated with a **positive work attitude**?
- F. What mind set is associated with a **negative work attitude**?
- G. How can you tell when a worker has a positive or negative work attitude?
- H. What does it mean to be **pollyannish**?
- I. What affects your attitude on the job?
- J. Who's responsible for your attitude at work?
- K. What are timely tips to take to tame your tirade?
- L. What is an **anti-tude**?
- M. What is the standard operating procedure and job aid for displaying a positive attitude?
- N. What is your attitude toward this Soft Technical Skill?
- O. What have you learned?
- P. How should you announce your competence in Attitude on the Job?
- Q. How can you maintain your positive attitude on the job?



## Ethics on the Job

The purpose of this lesson is to introduce the occupational competency of work-based ethics. The goal is to develop an occupational skills set of valuing character, integrity, and ethical behavior on the job. This involves:

- Working with pride, honesty, and honor.
- Knowing the nature of work ethics.
- Confronting unethical work behavior in one's self and others.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Taking responsibility for one's own ethical work behavior.

The following Key Questions are addressed in this lesson:

- A. What are ethics? What are ethics on the job?
- B. What is ethical work behavior?
- C. Why is it important to be ethical on the job?
- D. What terms are commonly used in ethics on the job?
- E. What is a "sense" of ethics?
- F. How can employees be unethical on the job?
- G. What is an absolute ethic? Relative ethic? Malfeasance?
- H. What are the five principles of ethical power?
- I. What are examples of ethical dilemmas in the workplace?
- J. What is ethical salve?
- K. How can lead workers/supervisors/employers improve workers' ethical behavior on the job?
- L. What is the standard operation procedure and job aid for ethical behavior on the job?
- M. What is your attitude toward Ethics on the Job?
- N. What have you learned?
- O. How should you declare your competence in Ethics on the Job?
- P. How can you increase your competence in Ethics on the Job?



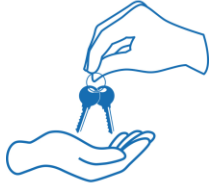
## Confidentiality

The purpose of this lesson is to introduce the occupational competency of ethical concept of confidentiality or “keeping a secret” on the job. The goal is develop an occupational skills set on confidentiality, especially of information, on the job. This involves:

- Using the procedures of confidentiality.
- Maintaining the security of information, such as data, design concepts, trade secrets, and other forms.
- Knowing how information can be inadvertently “leaked.”
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the need for “shhh” on the job.

The following Key Questions are addressed in this lesson:

- A. What is Confidentiality?
- B. Why is it important to be technically competent in Confidentiality?
- C. What terms are commonly used with Confidentiality?
- D. What are examples of technical occupations where Confidentiality is important?
- E. What is Confidentiality of Information?
- F. What is intellectual property? Trade secret? Other terms?
- G. What is a Promise of Confidentiality Pledge?
- H. What laws demand confidentiality in the work place?
- I. Are there levels of trust?
- J. How are secrets revealed; how is confidentiality violated?
- K. Why is Bletchley Park important?
- L. What is the standard operating procedure and job aid for being Confidential?
- M. What is your attitude toward Confidentiality?
- N. What have you learned?
- O. How should you declare your competence in Confidentiality?
- P. How can you improve your competence in Confidentiality?



## Responsibility on the Job

The purpose of this lesson is to introduce the occupational competency of taking responsibility. The goal is to develop an occupational skills set in taking responsibility for one's self while on the job. This involves:

- Describing what it means to be responsible.
- Citing benefits of taking/ assuming responsibility.
- Analyzing responsibilities using the 2/4 paradigm.
- Taking responsibility for one's self and for one's technical output.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Inferring/ compiling probable responsibilities for occupation(s)/career(s) of choice.

The following Key Questions are addressed in this lesson:

- A. What is **Responsibility on the Job**?
- B. Why is it important to assume responsibility on the job?
- C. What **terms** are commonly used with Responsibility on the Job?
- D. What are examples of technical occupations in which it is important to be responsible on the job?
- E. What does it mean to be responsible?
- F. What is the **to/for paradigm** of responsibility?
- G. What's the difference between being responsible and irresponsible?
- H. What are the four priorities of responsibility?
- I. What can you do if your responsibilities become too burdensome?
- J. What is **collective irresponsibility**?
- K. What is misplaced allegiance?
- L. Which laws supersede others?
- M. What are the relationships between responsibility, **authority**, and **remuneration** on the job?
- N. What is the standard operating procedure and job aid for assuming responsibility on the job?
- O. What is your attitude toward being responsible on the job?
- P. What have you learned?
- Q. How should you declare your competence in being responsible on the job?
- R. How can you continue to improve your competence in taking responsibility on the job?



## Whistle Blowing

The purpose of this lesson is to introduce the occupational competency of whistle blowing. The goal is to develop an occupational skills set on values, perils, profits, and procedures in whistle blowing on the job. This involves:

- Defining what it means to be a whistle blower.
- Realizing why is it important.
- Realizing the pros and cons of whistle blowing.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Exploring personal and legal implications.

The following Key Questions are addressed in this lesson:

- A. What is **Whistle Blowing**?
- B. Why is it important to know about Whistle Blowing?
- C. What **terms** are commonly used with Whistle Blowing?
- D. What are examples of technical occupations where Whistle Blowing may be important?
- E. What does it mean that whistle blowing may be **internal** or **external**?
- F. What is a **tattle tail**? A **snitch**? A **stool pigeon**?
- G. What's unique about workers who become Whistle Blowers?
- H. What are the personal rewards/risks of Whistle Blowing?
- I. Do "good" organizations encourage Whistle Blowing?
- J. What civil laws protect Whistle Blowers?
- K. What is TIPS?
- L. How does a person decide to blow the whistle?
- M. What are steps to successfully blowing the whistle?
- N. What if you blow the whistle and no one listens?
- O. What are trends in Whistle Blowing?
- P. Who were examples of Whistle Blowing throughout history?
- Q. What is the standard operating procedure and job aid for Whistle Blowing?
- R. What is your attitude toward Whistle Blowing?
- S. What have you learned?
- T. How should you declare your competence in Whistle Blowing?
- U. How can you continue to improve your competence?



## Initiative

The purpose of this lesson is to introduce the occupational competency of taking work initiative. The goal is to develop an occupational skills set on valuing and enacting initiative on the job. This involves:

- Anticipating what is needed and when.
  - Exerting additional effort in accomplishing occupational tasks.
  - Knowing the benefits of work initiative.
- Improving productivity.
  - “Going the extra mile.”
  - Using techniques of self motivation (see *Motivation* lesson for more information).
  - Understanding the related body of knowledge.
  - Using pertinent terms accurately in context.
  - Appreciating the value of work initiative.

## PRODUCTIVITY Cluster



### Estimating

The purpose of this lesson is to introduce the occupational competency of estimating. The goal is to develop an occupational skills set for estimating on the job. This involves:

- Using the five steps in doing an accurate estimate.
- Approximating time/ dimension/ cost/ value/ etcetera.
- Knowing how to anticipate and predict.
- Using the five step process for estimating.
- Improving speed and accuracy in making job estimates.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of making technical estimates.

The following Key Questions are addressed in this lesson:

- A. What is **Estimating**?
- B. Why is it important know how to estimate on the job?
- C. What **terms** are commonly used with Estimating?
- D. What are examples of technical occupations that do Estimating?
- E. What are the five steps in doing an estimate? What does it mean to Clarify the Situation?
- F. What does it mean to Subdivide the Task?
- G. What are **knowns** and **unknowns**?
- H. How do you Make Comparisons? What are **Ready References, Documented References,** and **Experience References**?
- I. What does it mean to Declare the Estimate?
- J. How can estimates verify calculated answers?
- K. What's the difference between an estimate and a **bid**?
- L. What is **mark up**?
- M. What's the difference between an estimate and an **appraisal**?
- N. What are dangers in the inappropriate use of estimating on the job?
- O. How is competence in estimating assessed?
- P. What is the standard operating procedure and job aid for doing Estimating?
- Q. What is your attitude toward Estimating?
- R. What have you learned?
- S. How should you declare your competence in Estimating?
- T. How can you continue to improve your competence in Estimating?



## Time Management

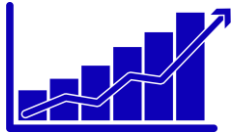
The purpose of this lesson is to introduce the occupational competency of managing work time. The goal is to develop an occupational skills set in managing one's work time. This involves:

- Realizing that "time is money."
- Identifying and avoiding time wasters.
- Implementing specific time-saving techniques.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Valuing why managing time is important.

The following Key Questions are addressed in this lesson:

- A. What is **Time Management**? What is **time**?
- B. Why is it important to manage one's time on the job?
- C. What **terms** are commonly used with Time Management?
- D. How do people relate to time?
- E. What are examples of technical occupations that must manage work time?
- F. What are the five resources of the work place?
- G. How can you manage your time?
- H. How can you become more efficient and effective?
- I. How can you overcome **procrastination**?
- J. What wastes your work time?
- K. How can you analyze how you use your time on the job?
- L. How can you change your habits?
- M. How do you know when you're managing your work time?
- N. What are misconceptions about time management?
- O. What is the standard operating procedure and job aid for managing time?
- P. What is your attitude toward Time Management?
- Q. What have you learned?
- R. How should you announce your competence in Time Management?
- S. How can you improve your competence in managing your time?





### **Productivity on the Job**

The purpose of this lesson is to introduce the occupational competency of technical productivity. The goal is to develop an occupational skills set on increasing and maintaining a worker's technical productivity on

the job. This involves:

- Increasing one's own productivity.
- Knowing the six basic components of productivity.
- Maintaining the quality and quantity of one's own job output.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Having a positive attitude toward increasing one's job output.



### **Quality Assurance**

The purpose of this lesson is to introduce the occupational competency of quality assurance. The goal is to develop an occupational skills set in quality control. This involves:

- Improving and maintaining standards of accuracy.
- Knowing the benefits of reducing error rates.
- Using the contributors of quality assurance.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Taking responsibility for controlling one's own quality.



### **Preventive Maintenance**

The purpose of this lesson is to introduce the occupational competency of preventative maintenance. The goal is to develop an occupational skills set in preventive maintenance on the job. This involves:

- Keeping equipment and facilities operating at maximum performance.
- Designing programs of preventive maintenance.
- Performing routine precautions.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Taking responsibility for scheduling maintenance.



## Diagnostics

The purpose of this lesson is to introduce the occupational competency of using diagnostics or troubleshooting. The goal is to develop an occupational skills set to perform diagnostics on differing applications.

This involves:

- Locating sources of problems.
- Targeting the causes of technical problems or malfunctions.
- Using the five sequential steps of diagnostics.
- Correcting failures in “closed” or “open” biological or physical systems.
- Listing key elements in determining corrective courses of action.
- Recognizing when solving a problem requires outside assistance.
- Identifying needed outside sources.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the technical competence of diagnostics.

## TEAMWORK Cluster



### Teamworking

The purpose of this lesson is to introduce the occupational competency of team working. The goal is to develop an occupational skills set in working as a member of a work team. This involves:

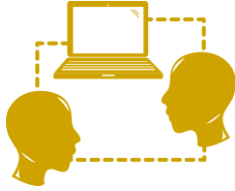
- Working effectively as a member of a group.
- Knowing what makes a good team.
- Making team decisions (see *Decision Making* lesson for more information).
- Sharing responsibility for results.
- Supporting other team members.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating effective team working in action.



### Leading

The purpose of this lesson is to introduce the occupational competency of leading. The goal is to develop an occupational skills set in providing leadership on the job. This involves skills developed in the Compass of Leadership© such as:

- Vision (Why?)
- Strategy (How?)
- Change (What needs to be different?)
- Courage (What will cause action?)
- Evaluation (How well?)
- Collaboration (Who?)
- Modeling (Who/ what's an example?)
- Drive (What will maintain momentum?)
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating qualities of effective leadership.



### **Networking**

The purpose of this lesson is to introduce the occupational competency of networking. The goal is to develop an occupational skills set in networking with other technicians on the job. This involves:

- Sharing job information with others.
- Developing and using formal and informal contacts with other technicians.
- Knowing who “knows.”
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Realizing the importance of networking to one’s self and one’s employer.



### **Resolving Conflicts**

The purpose of this lesson is to introduce the occupational competency of resolving interpersonal conflicts. The goal is to develop an occupational skills set in resolving interpersonal conflicts on the job when self-interests clash. This involves:

- Knowing the bases of most interpersonal conflicts.
- Using effective strategies of resolving conflicts.
- Exploring various approaches to creatively handling anger and conflict.
- Managing conflict resolution on the job.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the benefits of worker diversity.

## SYSTEMS Cluster



### Systems Thinking

The purpose of this lesson is to introduce the occupational competency of using various systems. The goal is to develop an occupational skills set in systems and subsystems thinking on the job. This involves:

- Differentiating between open and closed systems.
- Comparing systems of nature to systems of science.
- Thinking in systems.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of systems.



## Organizing Systems

The purpose of this lesson is to introduce the occupational competency of using organizing systems. The goal is to develop an occupational skills set in using various approaches and systems for organizing work-related materials on the job. This involves:

- Knowing alphanumeric, grid, and other systems.
- Using systems to organize, classify, and retrieve technical information, tools, materials, and merchandise.
- Using such systems on the job.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Staying up to date on new grid work systems.

The following Key Questions are addressed in this lesson:

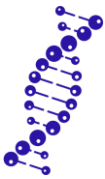
- A. What is an **Organizing System**? What is a **system**?
- B. Why is it important to know how to use organizing systems?
- C. What **terms** are commonly used with organizing systems?
- D. What are examples of technical occupations that use organizing systems?
- E. What is this "job stuff" that needs to be organized?
- F. What is the "system of systems?"
- G. What are structures by which organizing systems are organized?
- H. What are the different categories and sub-systems within each?
  - H-A. Sequence category
  - H-B. Measurement category
  - H-Г. Composition category
  - H-Δ. Position category
  - H-E. Circle category
  - H-Z. Characteristic category
- I. What is meant by the "power" of a system?
- J. Are combinations of systems ever used?
- K. Are there situations in which systems are intentionally not used?
- L. How are computer-based information systems used?
- M. Should information be entered into a system, especially a computer-based one?
- N. What is the standard operating procedure and job aid for using organizing systems?
- O. What is your attitude toward organizing systems?
- P. What have you learned?
- Q. How should you declare your competence in organizing systems?
- R. How can you continue to improve your competence in organizing systems?



### **Electro/Mechanical Systems**

The purpose of this lesson is to introduce the occupational competency of using electro/ mechanical systems. The goal is to develop an occupational skills set in working with such on the job. This involves:

- Juxtaposing electrical, mechanical, pneumatic, fluid, digital, power, and communication systems.
- Thinking in systems.
- Integrating associated subsystems, such as transmission, lubrication, cooling, heating, governor, exhaust, and others.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of such systems.



### **Biological Systems**

The purpose of this lesson is to introduce the occupational competency of using biological systems. The goal is to develop an occupational skills set in working with such systems on the job. This involves:

- Juxtaposing plants (flora), animals (fauna), and other living systems.
- Thinking in systems.
- Integrating associated subsystems, such as digestive, circulatory, respiratory, renal, flowering, and others.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of such systems.



### **Social Systems**

The purpose of this lesson is to introduce the occupational competency of use of social systems. The goal is to develop an occupational skills set in working with such systems on the job. This involves:

- Juxtaposing monetary, organizational, legal, and other social systems.
- Thinking in systems.
- Integrating associated subsystems, such as performance, familial, community, spiritual, and others.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of such systems.

## CREATIVITY Cluster



### Creating on the Job

The purpose of this lesson is to introduce the occupational competency of creativity and innovation. The goal is to develop an occupational skills set in creativity on the job. This involves:

- Using the steps of creativity and designing in job tasks.
- Knowing the benefits of job innovation.
- Improving and expanding work productivity through inventiveness, innovation, and resourcefulness.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Taking personal responsibility for initiating creativity.



### Problem Solving

The purpose of this lesson is to introduce the occupational competency of solving problems. The goal is to develop an occupational skills set in problem solving on the job. This involves:

- Identifying problems with plausible solutions.
- Knowing how problems are solved.
- Performing the sequential steps of effective problem solving.
- understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Being responsible for solving problems on the job.



### Planning

The purpose of this lesson is to introduce the occupational competency of planning. The goal is to develop an occupational skills set in anticipating and planning on the job. This involves:

- Envisioning outcomes.
- Setting goals.
- Making objectives measurable.
- Garnering consensus from all involved.
- Subdividing tasks into sequential steps.
- Reviewing progress on a timed basis.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of effective planning.





### Priority Setting

The purpose of this lesson is to introduce the occupational competency of setting work priorities. The goal is to develop an occupational skills set in priority setting on the job. This involves:

- Anticipating work needs.
- Identifying and sequencing job tasks.
- Analyzing time and energy demands.
- Setting task objectives.
- Putting 1<sup>st</sup> things 1<sup>st</sup>.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the value of priority setting on the job.



### Computer Modeling

The purpose of this lesson is to introduce the occupational competency of computer modeling. The goal is to develop an occupational skills set in computer-based modeling which helps to predict probabilities in political campaigns, hurricanes, earthquakes,

tornadoes, and other phenomenon. This involves:

- Analyzing real-world cause-&-effect.
- Predicting probabilities.
- Sequencing computer logics such as “if ... then ...” and others.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the importance of computer modeling to human health and life, injury, property loss, and other risks.

## OCCUPATIONAL SAFETY & HEALTH Cluster



### Hazard Communication

The purpose of this lesson is to introduce occupational competency safety and health on the job. The goal is develop an occupational skills set in occupational safety and health and to certify employees in “HazComm.” This involves:

- Protecting oneself from physical, chemical, and/or biological hazards in the work place.
- Knowing employee’s and employer’s rights and responsibilities as specified in federal law.
- Following standard operating procedures (see *SOP* lesson for more information).
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Having a positive attitude toward job safety.



### Personal Protective Equipment

The purpose of this lesson is to introduce the occupational competency of using personal protective equipment (PPE). The goal is to develop an occupational skills set in the use of such PPE on the job. This involves:

- Using pertinent PPE, such as safety glasses, hard hats, hard-toed shoes, respirators, welding hoods, welding shawls, fall-arrest equipment, atmosphere monitors, and others,
- Inspecting and maintaining PPE on a scheduled basis,
- Understanding the related body of knowledge,
- Using pertinent terms accurately in context,
- Having a positive attitude toward the use of PPE.



### Blood-Borne Pathogens

The purpose of this lesson is to introduce the occupational competency of protecting against Blood-borne Pathogens (BBP). The goal is to develop an occupational skills set in protecting one’s self from BBP on the job. This involves:

- Being aware of BBP on the job.
- Knowing the etiology of Hepatitis B and other BBPs.
- Using PPE and SOPs such as universal precautions (see *PPE* and *SOP* lessons for more information).
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Having a positive attitude toward job safety.



### Lock Out / Tag Out

The purpose of this lesson is to introduce the occupational competency of performing lock out/tag out (LO/TO) on the job. The goal is to develop an occupational skills set in LO/TO standard operating procedures and safety equipment. This involves:

- Enacting standard operating/industry procedures in LO/TO (see *SOP* lesson for more information).
- Recognizing the need for locking out and tagging out sources of power – electrical, pneumatic, physical, hydraulic, and/or others – when inspecting and maintaining powered equipment.
- Acquiring locks, keys, tags, and other paraphernalia.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Having a positive attitude toward job safety.



### Confined Space Entry

The purpose of this lesson is to introduce the occupational competency of entering confined spaces. The goal is to develop an occupational skills set in protecting one's self in confined spaces on the job. This involves:

- Recognizing common types of confined spaces, such as crawl spaces, attics, grain bins, man holes, and others.
- Defining confined spaces according to federal law.
- Identifying common hazards in confined spaces.
- Using appropriate PPE and SOPs for protection (see *PPE* and *SOP* lessons for more information).
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Having a positive attitude toward job safety.



### Emergency Response

The purpose of this lesson is to introduce the occupational competency of emergency response. The goal is to develop an occupational skills set on how to respond to an accident or incident on the job. This involves:

- Establishing an incident command.
- Anticipating types of emergencies.
- Anticipating PPE needed (see *PPE* lesson for more information).
- Practicing emergency SOPs (see *SOP* lesson for more information).
- Working as a team (see *Teamworking* lesson for more information).
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Having a positive attitude toward job safety.

## SELF-EMPLOYMENT Cluster



### Self-employment

The purpose of this lesson is to introduce the occupational competency of self-employment and entrepreneurship as a rewarding means of earning a living. The goal is to develop an occupational skills set in self employment. This involves:

- Exploring opportunities for “free lance” and “moonlighting.”
- Finding needs and filling them.
- Organizing entrepreneurial efforts.
- Allocating resources.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating entrepreneurial skills.



### Supervising

The purpose of this lesson is to introduce the occupational competency of supervision. The goal is to develop an occupational skills set in supervising fellow employees. This involves:

- Hiring.
- Training.
- Monitoring.
- Motivating.
- Evaluating.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating supervisory skills.



### Train the Trainer

The purpose of this lesson is to introduce the occupational competency of training other workers. The goal is to develop an occupational skills set in procedures and practices of delivering one-to-one and stand-up training for peers. This involves:

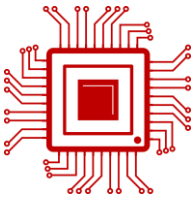
- Planning lessons.
- Instructing.
- Assessing learning.
- Understanding the related body of knowledge.
- Using the KASH acronym (knowledge, attitudes, skills, and habits).
- Using pertinent terms accurately in context.
- Appreciating the skills of training.



### **Proposal Writing**

The purpose of this lesson is to introduce the occupational competency of proposal writing. The goal is to develop an occupational skills set in writing proposals for projects and grants for funding. This involves:

- Seeking funding sources via requests for proposals, the Federal Register, and others,
- Envisioning outcomes,
- Creating consensus with clients on desired goals and objectives,
- Sequencing/ scheduling plans to accomplish intended outcomes,
- Succeeding as a fund seeker,
- Communicating grants and proposals (see *Written, Graphic, Verbal Technical, and Non-Verbal Communication* lessons for more information).
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating why grant/ proposal writing is important, especially to self-employed technicians.



### **Digital Processing**

The purpose of this lesson is to introduce occupational competency in digital processing and computer software. The goal is to develop an occupational skills set on digital processing, electronic communications, internet usage, and computer basics.. This involves:

- Selecting and using different types of software, such as word processing, spread sheet, data base, and others.
- Adapting software to specific business/ industrial needs.
- Exploring additional applications of existing software to emerging uses.
- Understanding the related body of knowledge.
- Using pertinent terms accurately in context.
- Appreciating the power of digital processing.

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