ORPS GUI
Train-the-Trainer

Table of Contents

Introduction

Purpose of the Course

In this course, you will receive instruction on how to effectively teach ORPS users to work with the ORPS Graphical User Interface (GUI). To provide you with tools for your teaching efforts, you will learn how to access and download electronic copies of both the ORPS GUI Training Manual and the ORPS GUI Lesson Plans. For your actual teaching, you will receive information about various teaching and learning principles, such as how an effective instructor can enhance the learning process by recognizing the characteristics of adult learners, grasping and applying the steps of the teaching and learning process, identifying the appropriate teaching method for a given situation, communicating effectively, and identifying learning styles to understand the different ways in which adults learn.

Objectives

Upon completion of this class, you will be able to perform the following activities:

▸   Access and download the ORPS GUI student workbooks and lesson plans

▸   Identify and discuss effective teaching and learning principles

▸   Discuss the learning process, including how adults learn and elements that affect learning

▸   Identify how to improve communication skills

▸   Outline the qualities of an effective instructor

▸   Discuss the six main steps of the teaching process

Overview

Teaching is typically defined in terms of those things a teacher does—lecturing, controlling group discussion, relating facts and so on. The focus is often on the instructor. Teaching is, however, more accurately defined in terms of its purpose rather than in terms of its actions and techniques. For the purposes of this course, teaching is defined as *the active process of helping students learn*. The focus is on the student rather than the teacher.

As teachers, we know that just having the requisite knowledge of a subject is not always sufficient to teach that subject. For students to really learn they must understand both *what* you present and *how* to apply it to their jobs. As the instructor, you have a limited amount of time to bring them to this understanding. In order to effectively use limited teaching time, you will want to apply the time-tested leadership and teaching methods outlined in this training guide.

Accessing and Downloading ORPS GUI Teaching Tools

ORPS GUI instructional materials can be accessed from the **DEPARTMENT OF ENERGY OCCURRENCE REPORTING PROGRAM** home page (See **Figure 1**). Both the **ORPS GUI Training Manual** and **ORPS GUI Lesson Plans** for this workshop are available in WordPerfect version 6.1 for Windows format and in PDF format. For your convenience, the WordPerfect documents can be downloaded, saved, and edited to include site specific information or examples.

WARNING

You should be aware that the appearance of the WordPerfect documents will vary from person to person, depending upon your printer driver. This is important because there could be differences in fonts, pagination, table of contents generation, etc. If you are planning to use the workbooks without adding site-specific information or examples, you can merely download the PDF format of the workbooks to avoid any printer driver differences.

SAFETY MANAGEMENT THROUGH ANALYSIS

Department of Energy Occurrence Reporting Program

The Department of Energy's Occurrence Reporting Program provides timely notification to the DOE complex of events that could adversely affect: public or DOE worker health and safety, the environment, national security, DOE's safeguards and security interests, functioning of DOE facilities, or the Department's reputation. DOE analyzes aggregate occurrence information for generic implications and operational improvements. The Program and its data system, the Occurrence Reporting and Processing System (ORPS) are described in DOE Order 232.1A and its associated Manual, DOE Manual 232.1-1A. See also the DOE Root Cause Analysis Guidance Document, DOE-NE-STD-1004-92 (757K PDF file) and other DOE Technical Standards.

▷ **ORPS Data Base Access**
Requires prior registration. Contact Eugenia Boyle at eugenia.boyle@eh.doe.gov for further information.

▷ **ORPS Bulletins/Publications**
Timely information and back issues

▷ **Occurrence Reporting Special Interest Group (OR SIG)**
Supports improvement of DOE event reporting and use of occurrence report data.

▷ **Systems and Data for ES&H Analysis**
Links to other DOE data, products, and systems

▷ **ORPS Re-engineering Page**
News and plans. **Currently under development.**

▷ **Site Implementation Procedures**
Links to site-specific reporting procedures. **Currently under development.**

▷ **Interpretations Associated with DOE M 232.1-1A Requirements**
Guidance and examples to illustrate the intent of the Manual requirements.
- DOE Approved Interpretations
- OR SIG Proposed Interpretations

▷ **Occurrence Reporting Quality**
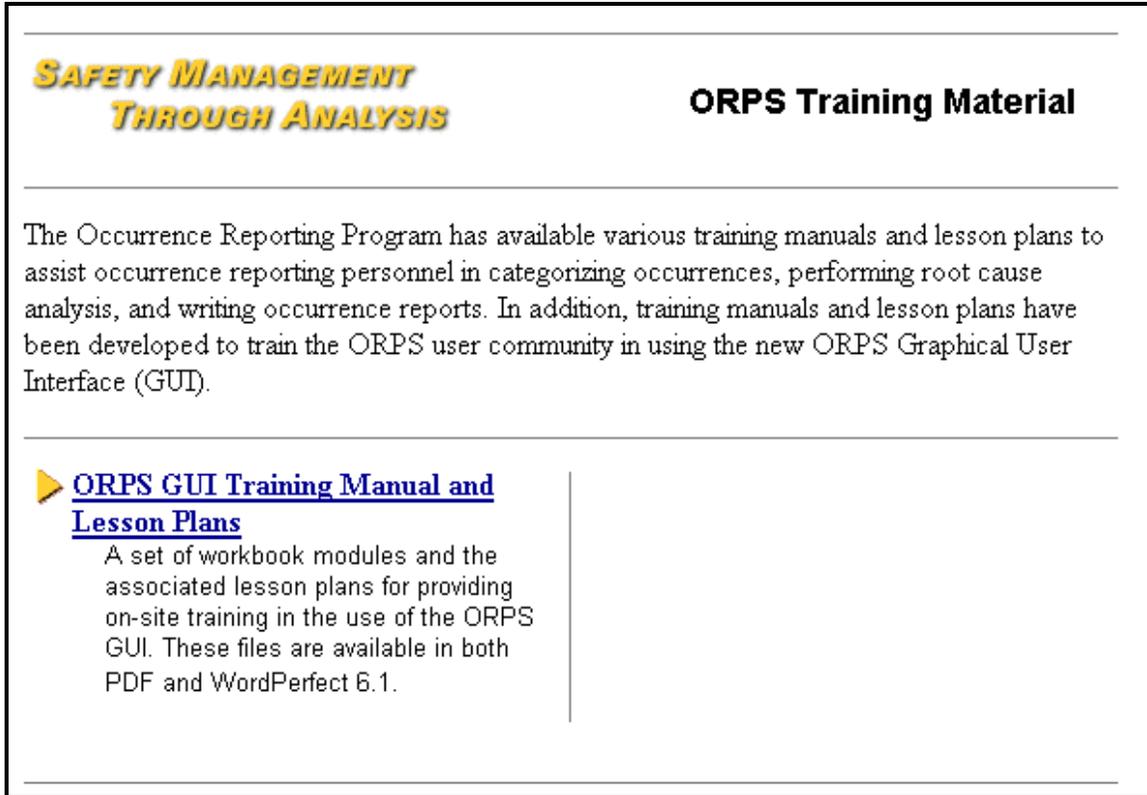Keeping the data clean; Helping write better reports

▷ **ORPS Training Material**
Occurrence reporting training material including the ORPS GUI Workbooks and Lesson Plans.

▷ **Upcoming Occurrence Reporting Workshops/Meetings**
Information on occurrence reporting workshops/meetings, including ORPS Users' Workshops, OR SIG Meetings, and TRADE.

Figure 1 – The **DEPARTMENT OF ENERGY OCCURRENCE REPORTING PROGRAM** home page.

To access these teaching tools, do the following. From the **DEPARTMENT OF ENERGY OCCURRENCE REPORTING PROGRAM** home page at URL **http://tis.eh.doe.gov/web/oeaf/orps/orps.html**, select the **ORPS Training Material** hyperlink. This will take you to the **ORPS TRAINING MATERIAL** page (see **Figure 2**).

Figure 2 – The **ORPS TRAINING MATERIAL** page.

Link to **ORPS GUI TRAINING MANUAL AND LESSON PLANS**. This will take you to the **ORPS GUI TRAINING MANUAL AND LESSON PLANS** page (see **Figure 3).**

SAFETY MANAGEMENT THROUGH ANALYSIS

ORPS GUI Training Manual and Lesson Plans

Below are the complete ORPS GUI Training Manual and individual Workbooks for self study or training aids, as well as the respective Lesson Plans for classroom instructors. The files are available in WordPerfect 6.1 or Adobe PDF. For the WordPerfect version only, you may need to re-generate the Index and page numbers due to variations in printers. See the readme file for important instructions for using the WordPerfect versions. The complete manual and lesson plans are self-extracting Zip files including all of the components, which are also provided individually.

ORPS GUI Workbooks
PDF (8700kb)   **WP** (2500kb)

Download the complete Manual (which includes all of the Workbook files below) as a self-extracting zip file. Download either executable file and follow the prompts to extract the files. To download the workbook files individually use the hyperlinks below.

Preface
PDF (220kb)   **WP** (104kb)

ORPS Overview
PDF (732kb)   **WP** (839kb)

Overview of the ORPS GUI
PDF (1917kb)   **WP** (1149kb)

Help Features and Authority Options
PDF (1300kb)   **WP** (1100kb)

Basic Search Techniques
PDF (1068kb)   **WP** (1158kb)

Basic Report Techniques
PDF (1889kb)   **WP** (1788kb)

Advanced Search and Reports Techniques
PDF(590kb)   **WP** (787kb)

Analytical Tools for ORPS Data
PDF (680kb)   **WP** (1393kb)

Configuring and Working with a Browser
PDF (1223kb)   **WP**(1170kb)

Train-the-Trainer
PDF (500kb)   **WP**(330kb)

Index Concordance File (15kb)
WP
This file contains the index for regenerating the Workbook files to accommodate your printer.

ORPS GUI Lesson Plans
PDF (634kb)   **WP** (88kb)

Download all of the Lesson Plan files as a self-extracting zip file. Download either executable file and follow the prompts to extract the files. To download the files individually use the hyperlinks below.

ORPS Overview
PDF (124kb)   **WP** (30kb)

Overview of the ORPS GUI
PDF (108kb)   **WP** (28kb)

Help Features and Authority Options
PDF (133kb)   **WP** (31kb)

Basic Search Techniques
PDF (122kb)   **WP** (34kb)

Basic Report Techniques
PDF (117kb)   **WP** (31kb)

Advanced Search and Reports Techniques
PDF (141kb)   **WP** (34kb)

Analytical Tools for ORPS Data
PDF (115kb)   **WP** (28kb)

Configuring and Working with a Browser
PDF (128kb)   **WP** (32kb)

ORPS GUI Workbooks   **ORPS GUI Lesson Plans**

Figure 3 – The **ORPS GUI TRAINING MANUAL AND LESSON PLANS** page.

When you link to the **ORPS GUI MANUAL AND LESSON PLANS** page, the complete ORPS GUI Training Manual, the complete set of Lesson Plans, along with the individual sections of the Training Manual, and the individual lesson plans will be listed (see **Figure 3**). You can link to and download the complete Training Manual and Lesson Plans in self-extracting Zip files with all of their components or link to and download the individual ORPS GUI Workbooks and Lesson Plan files.

You can download the self-extracting Zip files or individual modules using either the PDF link for PDF format or the WP link for WordPerfect 6.1 format. To use the self-extracting Zip files, download the executable file and follow the prompts to extract the files. The PDF files can be read using the Adobe Acrobat Reader (Version 2.1 or better), which is available at no cost at http://www.adobe.com. To format the WordPerfect 6.1 files for your system you will also need to download a concordance file (used in generating the index) and a readme file with directions for correcting the page number references (i.e., table of contents, index).

NOTE

If you are using Netscape as your browser and you choose to link to a WordPerfect or PDF file, a couple of things may happen, depending upon how Netscape is configured.

1. If Netscape *is configured to automatically start WordPerfect or Adobe Acrobat Reader when a .wpd or .pdf file is encountered*, clicking on the specified course name will cause WordPerfect or Adobe Acrobat Reader to automatically launch. The file for the course you selected (either the Workbook or the Lesson Plan) will be downloaded and displayed.

2. If Netscape *is **not** configured to automatically start WordPerfect or Adobe Acrobat Reader when a .wpd or .pdf is encountered,* you will see the **UNKNOWN FILE TYPE** dialog box (see **Figure 4**).
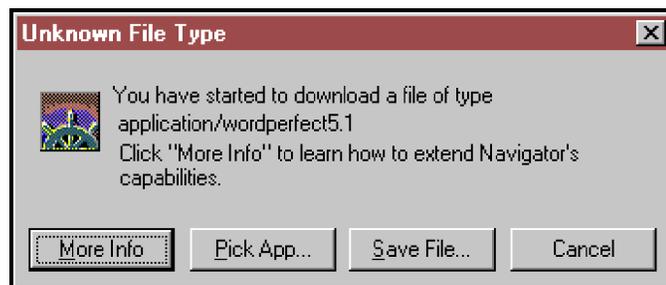
Figure 4 - UNKNOWN FILE TYPE dialog box.

Click the **SAVE FILE** command button. You will then see a **SAVE AS** dialog box (see **Figure 5**).
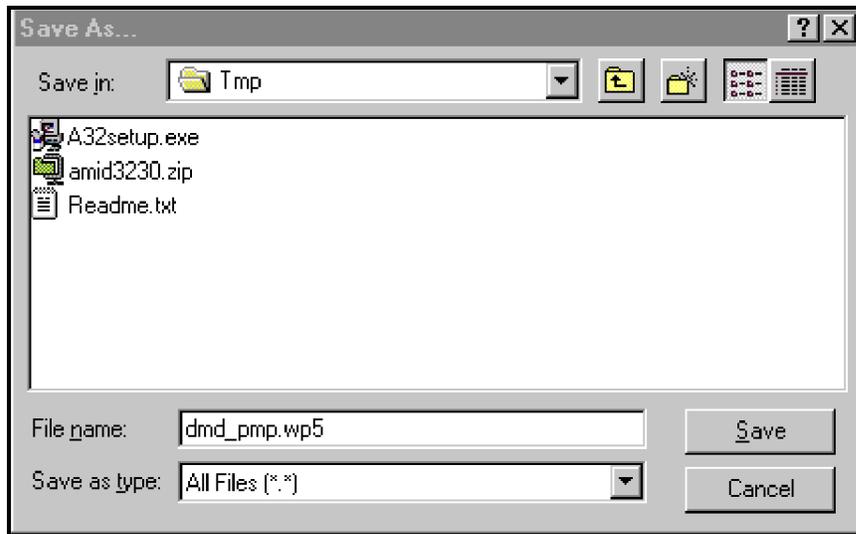
Figure 5 - The **SAVE AS** dialog box.

Change to the desired directory (use the **SAVE IN** selection box to do this) and type a file name in the **FILE NAME** edit box (or leave it at the default). Also, check the **SAVE AS TYPE** selection box. **All Files (*.*)** should be selected. Finally, click the **SAVE** command button.

Your WordPerfect or Adobe Acrobat Reader document will be saved in the specified directory with the specified file name. You may then start WordPerfect or Adobe Acrobat Reader and open the file.

Effective Teaching/Learning Principles

Effective teaching and learning is based on a set of principles as follows:

▸ **Humanistic** - Training is student-centered rather than instructor-centered. A student-centered process brings the instructor and student together in a collaborative manner, with the instructor joining the student in learning that which is appropriate for the student. The instructor acts as a guide and facilitator, working with the student to create a learning environment that is sensitive to the student's unique and individual needs and ensuring positive outcomes for the student.

▸ **Outcome-Based** - Efforts are directed toward accomplishing defined outcomes. Outcome-based education is both a philosophy and a method for designing the instructional process. Its key philosophical tenants are 1) all students can learn and succeed, 2) success breeds success, and 3) instructors contribute to the degree of success. As a method for designing lessons, the outcome-based principle requires starting with the student's desired outcome and building back through the instructional objectives that will enable you to achieve that outcome.

▸ **Experientially-Based** - This principle recognizes that experience is essential in developing skills. Structured exercises are the experiences that facilitate the desired learning. These experiences help create new levels of awareness and clarity of understanding.

▸ **Partnership-Driven** - The instructor and student work together to build a learning partnership. The instructor seeks to create a partnership with the student by reading and assessing the student's behavior and then applying the appropriate educational principles enabling the student to succeed. This involves a process of ongoing feedback, checking for understanding, and adjusting to meet the student's needs.

▸ **Guided by a Teaching Model** - The teaching model focuses on two key areas of teaching and learning: instructor behavior and student behavior. The goal is to ensure that the teaching process results in actual learning (i.e., changed behavior) rather than a one-sided "teaching exercise" (see **Figure 6**).
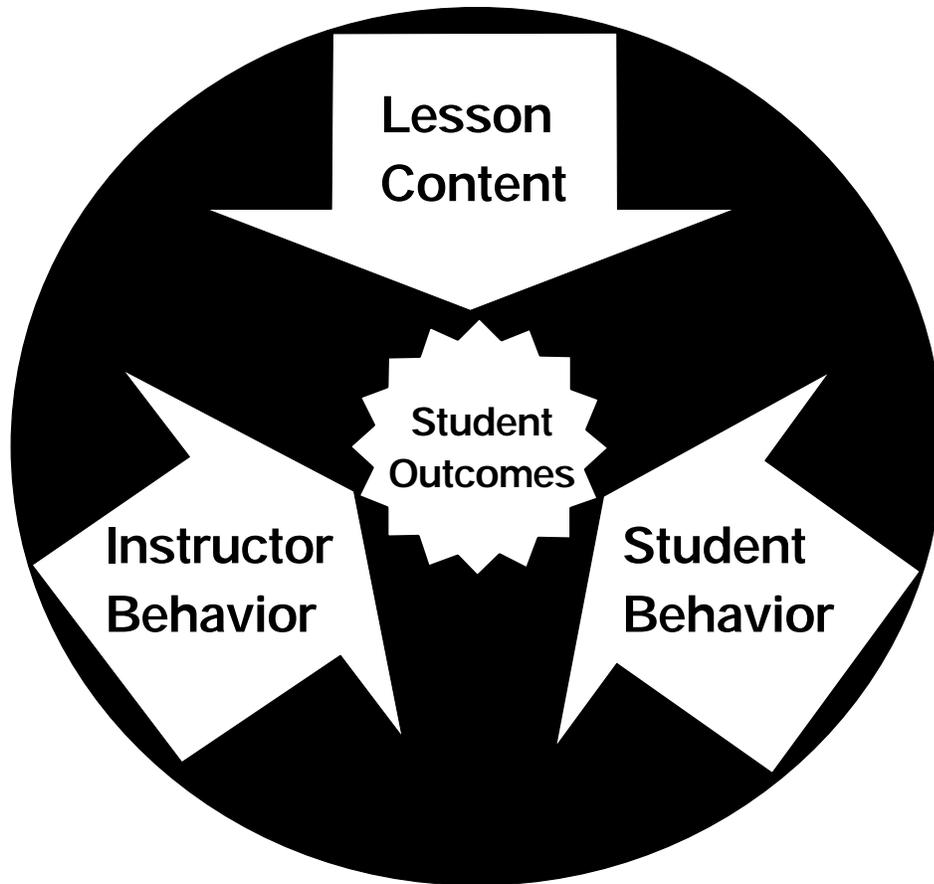
The Teaching Model

Figure 6 - The Teaching Model.

The Learning Process

Learning is the process through which individuals acquire new knowledge (gain new ideas or facts) and skills (gain new physical or mental abilities) and change attitudes (gain new interests, likes, dislikes, values, or ideas) as a result of study or experience. Learning is a complex job. You cannot simply tell a person—even an experienced one—a new way to do something and expect that learning has taken place. The student must be motivated, must understand what is said, must have the ability to apply what is learned, and must recognize the payoff of doing something in a new way.

How Adults Learn

Most experts in industry, government and education agree on six basic observations about the adult learning process:

1. **Learning requires motivation**. Adults learn best what they *want* to learn. To be positively motivated, students should be aware of the purpose of what they are learning and understand the significance of the experience and how it applies to their jobs. The basic principle of motivation is that *people are motivated to fulfill their needs*. If you understand what your students' needs are and you are able to help them fulfill those needs, you possess the key to their motivation.

2. **Learning requires repetition**. Repeating something a number of times solidifies the concept, idea, or skill. Even though students may intellectually understand how to do something, without practice and repetition they will most likely be unable to apply the new knowledge on the job. As an example, let's say you decide you want to be a professional golfer, so you read a book about golf. Is simply reading the book sufficient? No! You must practice and apply the information imparted in the book before you will master the requisite skills. The more often a skill is repeated, through the use of hands-on experience, the more quickly that skill becomes a habit.

3. **Learning occurs through association**. Adults learn most easily when new material builds on some information, experience, or skill that is already known.

4. **Learning occurs through use of the senses**. The more senses involved in the learning process, the more readily learning takes places. The five senses are seeing, hearing, tasting, touching, and smelling.

5. **Individuals vary in how they learn information or skills.** An individual's learning style may change depending upon the setting, the instructor, and the subject.

6. **Learning styles are visual, auditory, and kinesthetic.** The instructor must always focus on the style that will most enhance the learning experience for the student. If in doubt, always present the information more than one way.

▸ Visual - Visual learners learn by *seeing*. They think in pictures and have vivid imaginations. They have greater recall of concepts that are presented visually.

▸ Auditory - Auditory learners learn best by *hearing* oral instructions and information. Auditory learners talk about what to do when they learn. They enjoy listening, but cannot wait to have a chance to talk themselves. These students respond well to lecture and discussion.

▸ Kinesthetic - Kinesthetic learners learn best by *touching and doing* ("hands-on" experience). The tactile experience is the easiest way for the student to learn. Kinesthetic learners are the ones who try things out, touch, feel, and manipulate. Kinesthetic learners express their feelings physically. They gesture when speaking, are poor listeners, and lose interest in long speeches. These students learn best by doing. They need direct involvement in what they are learning. More than 30% of students may have a kinesthetic preference for learning.

See *Appendix A* for information on how to determine your preferred learning style.

> **I hear . . . and I forget**
> **I see . . . and I remember**
> **I do . . .   and I understand.**

In addition to these six observations, adult learners usually possess other characteristics, which a good instructor is aware of and takes advantage of:

- ▸ Adults are realistic.
- ▸ Adults want to know in advance what is expected.
- ▸ Adults want to know how they are doing through prompt and accurate feedback.
- ▸ Adults respond well to recognition and respect.
- ▸ Adults like to feel successful.
- ▸ Adults want to use what they learn right away.
- ▸ Adults respond to first impressions.
  (This means that your first training session and the first activity of each training session are the most important in establishing a positive impression in the minds of the students. Create a relaxed and positive learning environment early on.)
- ▸ Adults remember and learn best from a vivid or dramatic learning experience.
  (This means that training sessions should be exciting, realistic, visual, graphic, humorous, and, most of all, fun. An important aspect of teaching peers is to be entertaining.)
- ▸ Adults have a wide range of experience and want to share it. This range of experience becomes a resource for learning.
- ▸ Adults respond to internal motivation for learning. The most potent motivators for adults are intrinsic—the need for self-esteem, self-fulfillment, creative expression, wider responsibilities, etc.
- ▸ Adults are concerned with the use of time.
- ▸ Adults may be rigid in their thinking.
- ▸ Adults may not easily accept criticism.
- ▸ Adults participate in learning activities with mixed motives.
- ▸ Adults are willing to challenge the instructor.
- ▸ Adults want to know *why* something should be learned and how it will benefit them personally. They want to understand the worth of the subject or skill.

Elements That Affect Learning

- ▸ **The Environment**. Learning is affected both by the physical environment of the instructional setting and the relationship established between the instructor and students. A supportive environment must recognize the value of what the student brings to the class as well as the value of what the student is learning. Training should always take place in an environment free from interference. Attention span and listening ability vary from person to person; however, some environmental factors affect everyone in both positive and negative ways. These include time of day, size of training group, setting (e.g., lighting, acoustics, temperature, weather, and clutter), and any interruptions or distractions such as noise or the movement of people or objects.

- ▸ **The Student**. To create the optimal learning situation, the trainer must realize that each student varies in individual characteristics and life experience. The clever trainer uses these differences to create a supportive environment and to enhance the learning process.

- ▸ **The Instructor**. The instructor has a responsibility to do everything possible to enhance learning. In general, an instructor must posses a positive attitude, good personal skills, expert knowledge of the subject matter, and effective presentation/ teaching methods. In addition, an instructor should take the time to get to know each student individually and find out what his or her motivation and goals are relative to the training. Instructors must keep these individual motivations and goals in mind throughout the course.

Enhancing the Learning Process

- ▸ **Create a Supportive Atmosphere**. Students may be inhibited about learning if they are concerned about their lack of knowledge or skills. When a supportive and positive atmosphere exists, students become more creative and confident, and they accept feedback more easily from other students and instructors.

  To some extent, almost everyone is fearful of change, and, consequently, all learning situations create a certain element of anxiety. People will often attempt to get rid of anxiety by holding onto familiar ways of thinking and acting. It is the instructor's responsibility to guide the learning process in a way that will alleviate the students' anxiety.

- ▸ **Assure Students That Mistakes Are OK!** Making mistakes is an important part of learning. Most learning is essentially trial and error, and few people perform new skills right the first time. Instructors must create an atmosphere where students are not fearful of, or overly embarrassed by, making mistakes. The instructor's attitude in responding to mistakes is important. Tolerance, flexibility, warmth, and support are essential to the learning process.

Effective Communication

Communication is the process of transferring an idea from one person to another. Effective communication occurs when the student interprets the instructor's message precisely as intended.

The Three Dimensions of Communication

▸ **Sender, Receiver, and Message**. Communication consists of sending and receiving messages. Although many instructors are skilled in sending a message, most everyone can benefit from learning to listen more effectively. Listening skills are crucial in order to truly hear and understand what is being said.

▸ **Verbal and Nonverbal Messages**. Nonverbal messages are as important as verbal messages (if not more so!). Facial expression, tone, gestures, and posture all dramatically affect the verbal message you are sending. Experts agree that 70% of communication is nonverbal.

▸ **Content and Emotion**. All communication is composed of two parts: content and emotion. Content refers to the *substance* of the message and is usually expressed verbally, while emotion refers to how you feel about the message and is usually expressed nonverbally.

Reasons for Ineffective Communication

The reasons for ineffective communication between the instructor and the student include the following:

▸ The content of what you want to communicate may be wrong for the situation.
▸ The message is misinterpreted because you lack the verbal or nonverbal skills to express yourself clearly.
▸ The student does not receive the message because he or she is not paying attention.
▸ The student misinterprets the content of the message or fails to understand it because he or she lacks the necessary listening or nonverbal skills.
▸ The student understands the content but misinterprets the intent of the message.
▸ The messages sent are inconsistent over time, leaving the student confused about what is meant.

Ineffective communication is not always the fault of the instructor; the problem may lie with the student or with both the instructor and the student. Effective communication skills can go a long way in helping you avoid this situation.

Improving Communication Skills

The six basic steps to improve communication skills are as follows:

1. **Develop Credibility When You Communicate**. Your credibility as an instructor is measured by your students' perceptions about the trustworthiness and accuracy of what you say. You can build credibility by doing the following:

   ▸ Be knowledgeable and skilled in the subject you are teaching.
   ▸ Be reliable, fair, and consistent in dealing with your students.
   ▸ Freely express warmth, friendliness, acceptance, and empathy.
   ▸ Be dynamic, spontaneous, open, and positive.

2. **Communicate With a Positive Approach**. A positive approach emphasizes praise and rewards to strengthen desirable behaviors, whereas the negative approach uses punishment and criticism to eliminate undesirable behaviors. You cannot and should not, however, overlook mistakes if a student is to learn a skill correctly. One way of dealing with mistakes in a positive way is to sandwich the criticism between positive reinforcement of what the student is doing correctly. Receiving praise not only softens the blow of the criticism, but also reinforces desirable behaviors or skills.

3. **Send Messages High in Information**. It is not enough to point out to a student that they have done something wrong; they need specific information on how to do it right. It is crucial to provide necessary and sufficient information when it is clear that a student does not know what is correct or incorrect.

4. **Communicate With Consistency**. When students receive mixed messages, they become confused. Make sure you know your subject matter well enough that you can explain it succinctly, correctly, and clearly.

5. **Improve Your Listening Skills**. The most important thing you can do to improve your listening skills is to recognize the need to listen! Other steps are listed below:

   ▸ Concentrate on listening. Give your undivided attention to what is being said.
   ▸ When listening, search for the overall meaning of the message rather than focusing on the individual details.
   ▸ Avoid interrupting the student.
   ▸ Respect the students' rights to share their views with you.
   ▸ Repress the tendency to respond emotionally to what is said.
   ▸ Ask questions when you do not understand.
   ▸ Use active listening techniques when clarity is essential. Active listening involves interacting with the speaker by demonstrating that you understand what is being said.

6. **Improve Your Nonverbal Communication**. Nonverbal communication falls into five categories:

   ▸ **Body motion**, which includes movement of the hands, head, feet, and entire body. A tilted head, clenched fists, wrinkled forehead, or shift of the eyes can communicate a great deal.
   ▸ **Physical characteristics**, which include physique, attractiveness, height, weight, body odor, etc.
   ▸ **Touching behavior**, which includes pats on the back, shaking hands, etc.
   ▸ **Voice characteristics**, which include voice quality, pitch, rhythm, inflections, etc. It is often not *what* we say, but *how* we say it that conveys the real message.
   ▸ **Body position**, which refers to the personal space between you and others and the position of your body in relation to theirs.

   Nonverbal communication skills are acquired through daily living. To improve your nonverbal communication skills, become more aware of the messages you send and receive. Be sensitive and receptive to the feedback you receive when you communicate.

Qualities and Responsibilities of the Effective Instructor

Good trainers possess various qualities and skills that make them memorable. A few of the fundamental qualities and skills are outlined below:

Important Instructor Qualities

- ▸ **Leadership**. A trainer is by definition a leader and, consequently, a role model for students. Demonstrating a professional attitude about your teaching responsibilities will go far to enhance your leadership role.

- ▸ **Positive, Caring Attitude**. Good instructors demonstrate a positive attitude when dealing with both the successes and mistakes of students. The tools of a caring attitude are empathy, understanding, and being easy to approach. A positive attitude is essential if you are to help your students learn and succeed.

- ▸ **Confidence, Enthusiasm, and Patience**. Demonstrating confidence in yourself inspires your students to have confidence in you. If students trust your abilities and judgement, they will be more likely to attempt something that makes them fearful or anxious. When you are openly enthusiastic and imaginative about your subject matter, your students will often follow suit and will remain interested and eager to learn. Patience is essential! Some students are slow to grasp concepts and skills and may make the same mistakes over and over again. How you respond to your students' difficulties in learning will make the difference between a positive experience and a negative experience.

- ▸ **Knowledge of the Subject**. Although you don't have to know *everything* about what you are teaching, it is important for your credibility, your own confidence, and the confidence of your students that you have thorough knowledge of the skills and information you are teaching. You must have a solid foundation in the subject matter in order to guide others, answer questions, or know where to find the answers to questions you do not know.

- ▸ **Good Communication Skills**. A critical component of effective teaching is effective communication. Understanding that all communication is two-way and knowing the importance of nonverbal messages will help you be more effective. (See the section titled *Improving Communication Skills* on **Page 16**.)

▸ **Ability to Demonstrate**. A good demonstration gives students a solid mental picture of what they must remember and be able to perform. It is important to remember that most learning of skills occurs through imitation. Whenever possible, demonstrate—very thoroughly and *slowly*—to give the student a clear picture of the skill to be mastered.

▸ **Ability to Help Students Change Their Performance**. The ability to analyze a skill and offer suggestions for improvement often spells the difference between a superior and a mediocre instructor. In order to accurately analyze a skill, you must have a thorough knowledge of the skill, plus a photographic eye (the ability to remember your students' performance long enough to analyze it and correct any errors). When suggesting changes in performance, give clear and specific instructions on how to do it correctly.

▸ **Organizational and Teaching Skills**. An organized and skilled instructor will present material in a logical progression that moves from simple to complex and will make the best possible use of the time and materials available for training. In addition, the instructor will vary teaching methods and styles to best suit the subject and the students.

Class Management and Organizational Skills

In addition to your teaching responsibilities, you may have the responsibility of arranging the physical set-up of the learning area, arranging equipment, and time management. The physical arrangement of the learning area affects the ways students learn. Always take time beforehand to ensure that everything is in order. Consider the following:

▸ Make sure you are close enough that your students can hear you and you can hear them. Proximity to students is also important to ensure that you can make good eye contact.

▸ Ensure that equipment and teaching aids are ready to go.

▸ Ensure that you have allowed adequate time for the students to practice.

▸ Ensure that you have allotted enough time so that all students may have the opportunity to be checked for skill improvement.

Handling Problem Situations

All trainers, even the most skilled and experienced ones, occasionally run into problem situations. Problem situations are those in which *learning is inhibited due to the behavior of one or more of the learners.* As stated previously, learning is most likely to take place when the learners are actively involved and participating in the training process. Frequently, the **level** of participation by individual learners will result in problem situations. It is only natural that the amount of participation by learners will vary due to variations in their personalities and learning styles. A problem situation occurs, however, when learners participate too much or too little. If a learner is too vocal, other learners may be inhibited and therefore reluctant to fully participate in the training. Also, there might not be enough time to complete all planned training activities. On the other hand, if a learner is too silent, valuable input is lost. In addition, it is difficult to assess whether a silent learner is actually learning.

A good instructor must be sensitive to the possibility that the group may include cultures other than her own, and a perceived disruptive behavior may, in fact, be a cultural difference. The instructor must also be sensitive to personality/behavior disorders as well as learning disabilities which may, in turn, result in disruptive behavior.

The instructor must constantly be mindful that there are many reasons why adult learners may tend to disrupt or inhibit the learning process; i.e., the attitude of the learner (is he being forced to be in the class?), personal distractions (worried about marriage problems, children, aging parents, health problems), lack of self-esteem, struggle for power, etc.

The trainer is responsible for handling problem situations that negatively impact the learning and, therefore, must take action to eliminate any barriers to learning or achieving the learning objectives. There are three important considerations when handling problem situations:

- ▸ **Eliminate or minimize the problem behavior.** Resolve the problem to the extent necessary for learning to resume unhindered.

- ▸ **Maintain the self-esteem of the student.** Take care of the problem in a way that doesn't reduce the self-esteem of the student exhibiting the problem behavior. This enables the student to remain a part of the group and continue to learn. The instructor could make the problem worse if the student's self-esteem is damaged.

- ▸ **Avoid further disruption to learning.** Preserve a climate that is relaxed, comfortable, and conducive to learning. Consider that the other students in the group may become uncomfortable with the way the disruptive person is dealt with by the instructor, or they may become irritated with the disruptive person.

Techniques To Resolve Problem Situations

▸ **Remain Emotionally Neutral.** When confronted with a problem situation, it is important to remain as emotionally neutral as possible in order to identify the best strategy for handling the situation. If you become too emotionally involved, you may lose your perspective or objectivity regarding the problem and, therefore, not select the best strategy to resolve the issue.

▸ **Focusing.** Be sure you have the attention of everyone in the group before you start the class. Don't attempt to teach over the people who are not paying attention. Experienced instructors sometimes use silence very effectively. They will punctuate their waiting by extending the silence 5 to 10 seconds after the group is completely quiet. Then they begin the class using a quieter voice than normal. A soft-spoken instructor often has a calmer, quieter group than one with a stronger voice. Students tend to be quiet in order to hear what is being said.

▸ **Direct Instruction.** Uncertainty increases the level of excitement in a class. The technique of direct instruction is to begin each session by telling the group exactly what will be happening by outlining what they will be doing.

▸ **Circulate.** Get up and move around the room, making eye contact with each individual when talking. While students are working, move around and check on their progress.

▸ **Modeling.** There is a saying that, "Values are caught, not taught." Instructors who are courteous, prompt, enthusiastic, in control, patient, and organized provide examples for the students through their own behavior. The "Do as I say, not as I do" instructors send mixed messages that confuse students and invite negative behavior and feedback.

▸ **Low-Profile Intervention.** An effective instructor will make sure that the student is not rewarded for negative behavior by becoming the focus of attention. The approach should be inconspicuous so that others are not distracted and the disruptive student is not embarrassed. Even though confronting negative behavior during class is tempting, it seldom proves to be successful. A more effective approach is to request the student's time after class (or during a break). In a private setting, point out your expectations of the student's behavior and request a change. Allow the student to respond with suggestions to improve the class. However, it may be likely that the student will not be able to identify the reason for the behavior.

- **Assertive Discipline.** This is traditional limit-setting authoritarianism (one of the most widely known and practiced forms). When executed properly, it should include a good mix of praise. However, when executed improperly, the instructor becomes the boss and no student has the right to interfere, which may result in a hostile situation. The instructor is more effective as a coach or facilitator, not an authority figure. Remember to focus on the students; set aside your ego. The purpose of training is to change behavior, not to make the presenter look good.

- **Assertive I-Messages .** I-Messages are statements that an instructor uses when confronting a disruptive person. They are intended to be clear descriptions of what the student is supposed to do. You must focus the student's attention on the desired behavior, not on the misbehavior. "I want you to ..." or "I need you to ..." or "I expect you to ..."

  The inexperienced instructor may incorrectly try: "I want you to stop ..." only to discover that this usually triggers confrontation, defensiveness, and denial. The focus is on the misbehavior (not on the desired behavior), and the student is quick to retort: "I wasn't doing anything!" or "It wasn't my fault ..." or "Since when is there a law against ..."

- **Humanistic I-Messages .** These I-Messages are expressions of our feelings. These should be structured in three parts. First, a description of the person's behavior: "When you talk while I talk ..." Second, the effect this behavior has on the instructor: "... I have to stop talking ..." And third, the feeling that it generates in the instructor: "... which frustrates me."

- **Positive Discipline.** Use expectations instead of rules. Let people know what is positively expected, rather than what is negatively unacceptable. Make ample use of praise. Acknowledge good behavior. This can be done verbally, of course, but it doesn't have to be. A nod, a smile, or a "thumbs up" will reinforce the behavior.

The Teaching Process

The guidelines in this section are intended to help instructors develop lesson plans by focusing on six steps:

1. **Setting the Stage**. Creating the motivation to learn is a valuable teaching technique. A "set" (or setting the stage) is an introduction to a lesson that helps the student focus on and prepare for the new material. A set is most effective when it causes the student to do something, recall a personal experience, become curious, or appreciate the value of what is about to be learned.

2. **Objectives**. It is widely agreed that people learn best and learn more when they know what is expected of them at the outset. Expectations raise the students' level of concern and attentiveness. Objectives must be appropriate in difficulty, essential to the discipline, and measurable and observable. Objectives should be stated up front to help both the students and the instructor plan for what is ahead.

3. **Methods: Guiding the Learning**. A teaching method is a way of organizing and presenting material in a training program. The methods you select should allow you to guide and manage the learning activities to reach a desired outcome. Instructors should select methods that achieve objectives by involving all students, and the diversity of students' needs and learning styles must be considered when matching methods with objectives.

    The selection of a method or combination of methods is determined primarily by the nature of the material to be taught; however, other factors should also be considered:

    ▸   *Factual and subjective information* are best communicated by lecture and group discussion.
    ▸   *Physical skills* are best taught by demonstration and guided practice.

    Teaching methods commonly used are outlined below:

    a)   **Demonstration**. A demonstration is a practical step-by-step performance by the instructor of a process, procedure, or other activity with a detailed explanation of each step. Demonstrations are essential when teaching physical skills and should include a brief explanation of what is being shown, how it is being done, and why it is done a certain way. Following the demonstration, students must practice the skills while the instructor provides feedback that corrects or reinforces their performance.

b) **Role Playing**. Role playing involves acting out a situation based on real life. Selected students play chosen roles and act out an attitude or situation relevant to his/her job (e.g., the worker unconcerned with safety, the bossy supervisor, the enthusiastic secretary). The action is spontaneous; there is no script or set dialogue. Students react to a specific clear-cut problem or situation (provided by the instructor) and to one another as the role playing progresses. Role playing is an effective way for students to learn because they act out a situation physically and experience the emotions and intellectual decisions involved.

c) **Group Discussion**. Group discussion is an effective method to use when there is more than one correct answer for a given situation and is especially useful for solving problems. Group discussion provides two-way communication, which makes both the instructor and the students responsible for learning. The purpose of a good discussion is to probe concepts or issues and give them depth. Group discussion stimulates thinking, helps students recognize what they already know, permits pooling of ideas, develops understanding, and focuses on important points to help students remember them.

d) **Simulation**. Simulation is similar to role playing; however, there are no specific role assignments. Students break into small groups and pretend they are responsible for solving a crisis, planning an important project, or performing a skill. Simulation allows the students to react as if they were in a position to make the decisions required to do the job. Simulation focuses a group's energies on a particular task or concept.

e) **Team Teaching**. In team teaching, two or more individuals with different or similar abilities and skills cooperate and share the responsibilities for planning, teaching, and evaluating a training program. Team teachers share and learn from each other, complementing each other's styles. This sharing of responsibilities lightens each trainer's load and exposes the students to two or more sets of skills and levels of expertise in the subject matter.

f) **Case Studies**. Case studies are typically used to allow students to test their conception, procedures, and practices against a real-life situation. They help increase the students' powers of observation, abilities to analyze, and problem-solving skills. They cause the students to translate vague principles and practices into practical what-to-do's and how-to-do's. The case study should be a written description of a real or imaginary situation. It may describe a labor or personnel problem, operating problem, or incident appropriate to training that can be analyzed and discussed by the students. The statement of the case study problem or situation should be brief and simply worded and include definite instructions about what needs to be resolved. It can be made believable by including statements from individuals involved in the problem. The case study should

involve decisions and actions and should not, necessarily, have an obvious solution. After the students have had time to work the problem and arrive at a solution, a discussion should be conducted.

g) **Lecture**. A lecture is a talk or presentation a trainer gives on a particular subject. A lecture does not involve immediate feedback to either the instructor or the students and is a passive experience, which is why lectures do not always teach even though the students may be listening. If you must lecture, organize your material and present it briefly; otherwise, you will risk losing the interest of your audience. Ten- to fifteen-minute lectures are most effective.

Another important teaching method is the proper use of **questions and answers**. Used effectively, an instructor's questions can increase students' interest and knowledge. A clever instructor will use both correct and incorrect answers as an indication of how the students are learning. Questions also serve as a method of getting the students' attention and keeping them actively involved. When asking questions, keep the following in mind:

- ▸ Ask questions that have a specific purpose (i.e., generate discussion, emphasize a particular point, stimulate thinking, seek information).
- ▸ Ask questions that are clear and concise.
- ▸ Ask questions that require participants to draw on their own experience.
- ▸ Ask questions that emphasize one point only.
- ▸ Ask questions that require definite answers.
- ▸ Ask questions that are phrased to discourage guessing.
- ▸ Ask questions that are related to the how and why of the subject.
- ▸ Ask open-ended questions that require more than one level of learning to be demonstrated. Begin with "what," "why," or "how."
- ▸ Do not use a student's name at the beginning of the questions. This allows the other students to temporarily tune out.
- ▸ Pause after asking each question to allow the students to think.
- ▸ Build on answers or guide partially incorrect responses to the correct answer.

4. **Practice and Feedback**. Planning is crucial in determining practice content and schedule. As the instructor, you must determine beforehand what will be practiced and how long. To assure greater retention, encourage students to do more than the minimal amount. Return to and practice previously learned material at intervals and encourage students to practice on their own as time permits. It is important for you to observe and give feedback to students as they practice new skills. Students need two kinds of feedback: (1) what they did wrong and specific clarification and further assistance on how to do it correctly, and (2) what they did right and how "doing it right" pays off for them personally.

5. **Summary**. The summary portion of the six steps in the teaching process provides the opportunity for the students to remember and link together the skills and knowledge that have been learned. The summary should restate the objectives and actively involve the students. A summary does not have to be used only at the end of the lesson. It can be used whenever you have covered sufficient ground or there is a need to pause, organize the material, and reflect on it a little. If you are teaching new, technical, or difficult skills, you may want to summarize more frequently.

6. **Evaluating/Testing Performance**. The purpose of evaluating is to achieve a performance-based training environment. Evaluation should check several levels of learning: information, comprehension, and application. After evaluation, allow ample time to review the students' mistakes and provide information on how to correct them. Immediate feedback is critical in order for the student to really learn. Appropriate evaluation/testing methods include demonstration, written, oral, and interview. Also, remember that evaluation should be an ongoing process during the training session.

    Note that if a student's need for testing understanding is not satisfied, the student may be frustrated because she isn't sure she truly understands. In some cases, a student may think she understands when she doesn't. This will be apparent when the student attempts to practice a new concept or skill and doesn't get the desired results. If this happens, and you don't catch it, the student may conclude that the idea or skill has no value, and no true learning will take place.

Appendix - Assessing Your Learning Style:
Auditory, Visual, or Kinesthetic

These statements will assist you in evaluating your preferred learning style. If you agree with the statement, mark the check box. If you do not agree with the statement, leave the box empty.

Note: This instrument is adapted from ***Puzzled About Educating Special Needs Students*** by the Wisconsin Center on Education and Work (1980).

List A

❏   People say you have terrible handwriting.
❏   You don't like silent filmstrips, pantomimes, or charades.
❏   You would rather perform (or listen to) music than do (or view) art, and you would rather listen to a tape than look at a filmstrip.
❏   You sometimes leave out words when writing, or sometimes you get words or letters backwards.
❏   You can spell out loud better than when you have to write it down.
❏   You remember things that you talked about in class much better than things that you have read.
❏   You dislike copying materials from the blackboard or bulletin board.
❏   You like jokes or riddles better than cartoons or crossword puzzles.
❏   You like games with lots of action or noises better than checkers or most other board games.
❏   You understand better when you read aloud.
❏   Sometimes you make math mistakes because you don't notice the sign or because you read the numbers or directions wrong.
❏   It seems like you are the last one to notice something new, e.g., that the classroom was painted or that there is a new bulletin board display.
❏   Map activities are just not your thing.
❏   You must struggle to keep neat notes and records.
❏   You must use your fingers as a pointer when you read.
❏   You hum frequently or whistle to yourself when you are working.
❏   Sometimes your eyes bother you, but your eye test was normal, or, you have glasses, which your eye doctor says are the right prescription for you.
❏   You hate to read from the computer, especially when the backgrounds are busy.
❏   Matching test questions are a problem to sort out (over and above not knowing some of the answers).
❏   Sometimes when you read you mix up words that look similar (pill-pull, bale-hale).

List B

❑ It seems like you always have to ask somebody to repeat what s/he just said.
❑ Sometimes you may find yourself tuned out, staring out the window (maybe when you were really trying to pay attention to something).
❑ Often you know what you want to say, but you just can't think of the words. Sometimes you may even be accused of talking with your hands or calling something a "thing-a-ma-jig" or a "what-ya-call-it."
❑ You have been in speech therapy some time previously (or currently).
❑ You may have trouble understanding a person who is talking to you when you are unable to watch the person's face while s/he is speaking.
❑ You would rather receive directions in a demonstration format than in spoken form.
❑ When you watch TV or listen to the radio, someone is always asking you to turn it down.
❑ Your family says that you say "Huh?" too much.
❑ You would rather demonstrate how to do something than make a speech.
❑ Spoken words that sound similar (bell-bill, pin-pen, Mary-marry) give you trouble. Sometimes you can't tell them apart.
❑ You have trouble remembering things unless you write them down.
❑ You like board games such as checkers better than listening games.
❑ Sometimes you make mistakes when speaking (like saying "He got expended from school.").
❑ You like art work better than music.
❑ You have to go over most of the alphabet in order to remember whether "M" comes before "R."
❑ You like it better when someone shows you what to do rather than just telling you.
❑ You usually answer questions with a "yes" or "no" rather than with complete sentences.
❑ You can do a lot of things that are hard to explain with words (like fixing machines or doing macrame).
❑ Often you forget to give verbally received messages (such as telephone messages) to people unless you write them down.
❑ You are always drawing little pictures on the edges of your papers, or doodling on scratch paper.

Evaluation

If List A is much higher than List B, you generally prefer the auditory style of learning. If List B is much higher than List A, you generally prefer the visual style of learning. If *both* Lists are high, you generally prefer the kinesthetic (touching and doing) style of learning.

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