Chapter 12

Teaching Skills

Lesson 1

Preparing to Teach

Chapter 12

Key Terms

learning objectives
learning outcomes
lesson plan
measurable
prerequisite
qualitative
quantitative
training aids

What You Will Learn to Do

- Prepare to teach

Linked Core Abilities

- Communicate using verbal, nonverbal, visual, and written techniques

Skills and Knowledge You Will Gain Along the Way

- Describe five critical elements you need to consider in preparing to teach
- Write effective learning outcomes
- Describe at least six tips for planning a lesson
- Define the key words contained in this lesson

Introduction

Being an instructor, or an assistant instructor, will be a challenging experience for you. It is for anyone—even experienced teachers. Instructing may also be a little frightening.

In this lesson, you are introduced to five critical elements that you need to consider while preparing to teach. These five critical elements are as follows:

- **Motivation**
- **Know your material**
- **Lesson objectives**
- **Training aids**
- **Lesson plan**

Motivation

To properly teach a class, you must be motivated. Motivation is a drive that comes from within you. When you get excited about doing something, you will discover that you have the necessary motivation to do that task well; however, the opposite is also true. If you do not get excited about the task, you will lack the necessary motivation and drive to perform the task successfully. In teaching, just doing an okay or a satisfactory job is not enough. When your instructors give you the opportunity to become a student instructor, consider it a challenging and exciting opportunity to give students in your class the solid education they deserve.

Know Your Material

It is essential to know your material well so that you can effectively teach it. You must research, as shown in Figure 12.1.1, and rehearse your subject just like you would a speech. Knowing your material well will make you more confident and self-assured in front of your class.

To gain that necessary level of confidence in yourself, you must organize your thoughts, prepare and review your lesson plan, make any changes as required to it, and rehearse your material (see Figure 12.1.2). When rehearsing, practice in front of a mirror, friends, parents, video camera, or with a tape recorder. Always rehearse the material in the manner you plan to present it to the class. Doing one or a combination of these methods will enable you to pace your material to ensure that you have the right amount of information and that you sufficiently cover the areas that need special emphasis.

Figure 12.1.1: This student is conducting in-depth research for the next lesson he will teach.
Courtesy of Phyllis Picardi/Stock Boston.

Three Types of Learning

According to Bloom's Taxonomy of Educational Objectives, shown in Table 12.1.1, there are three types of learning: cognitive, affective, and psychomotor. The cognitive domain or category deals with mental skills or knowledge. The affective category deals with feelings or emotions. The psychomotor category deals with manual or physical skills. Each of these three categories has been divided into subcategories or levels of learning ranging from the simplest behavior to the most complex or difficult behavior. Writing learning objectives requires an understanding of these three categories and the action verbs associated with each subcategory. Table 12.1.1 illustrates each of the main categories, subcategories, and relevant action verbs that can be used in writing learning objectives.

Figure 12.1.2: Friends can provide valuable insight into your lesson during rehearsals.
Courtesy of Mark Richards/ PhotoEdit.

Table 12.1.1: Bloom's Taxonomy of Educational Objectives

Category	Subcategory	Action Verb
Cognitive	Knowledge	state, define, write, list, identify, name, label
Cognitive	Comprehension	select, explain, illustrate, indicate, formulate, classify
Cognitive	Application	apply, demonstrate, instruct, use, employ, compute
Cognitive	Analysis	analyze, estimate, compare, contrast, interpret, determine
Cognitive	Synthesis	write, plan, produce, organize, design, summarize, discuss
Cognitive	Evaluation	evaluate, verify, test, rank, measure, defend, criticize
Affective	Awareness	describes, follows, locates, identifies, names, selects
Affective	Active Participation	answers, assists, discusses, performs, practices, reports
Affective	Valuing	explains, follows, initiates, reports, works, shares, joins
Affective	Organization	prepares, combines, defends, explains, orders, organizes
Affective	Internalizing Values	acts, influences, listens, practices, questions, serves, solves
Psychomotor	Perception	chooses, detects, identifies, isolates, describes
Psychomotor	Readiness to Act	begins, explains, moves, reacts, shows, volunteers
Psychomotor	Guided Response	copies, traces, follows, reacts, reproduces, responds
Psychomotor	Mechanism	assembles, calibrates, dismantles, displays, fixes, measures
Psychomotor	Complex Overt Response	Use adverbs with mechanism verbs that indicates quicker, better, more accurate performance
Psychomotor	Adaptation	adapts, changes, reorganizes, revises, rearranges, varies
Psychomotor	Origination	arranges, builds, combines constructs, initiates, originates

Competency and Learning Objectives

As a student instructor, one of your primary responsibilities is to understand the importance of **learning objectives** as they relate to subject matter competencies or the material your instructor has assigned you to teach. Competencies are the skills, knowledge, or abilities that a student can demonstrate after a period of instruction. They are the combination of skills, knowledge, and abilities that the student has gained from a lesson or a series of lessons that they must have to perform a certain task. Learning objectives indicate or tell the student what skills, knowledge, or attitudes the students should be able to accomplish once they finish the instruction. Learning objectives identify the skills and knowledge that the student will learn to demonstrate that the competency has been met. That is, learning objectives tell the students in clear, measurable terms what supporting skills, knowledge, and attitudes they will need to learn as they work toward achievement of the task and mastery of a competency. Learning objectives are always stated in terms of student or **learning outcomes**. They inform the student of what they are expected to demonstrate at the end of the instruction. The difference between a competency and a learning objective is that a competency usually has more than one learning objective. These learning objectives build on one another to support a competency. For example, a competency to safely load ammunition on to a transport plane will have a number of learning objectives such as knowing the safety rules for the safe handling of ammunition.

Key Note Terms

learning objectives – what an instructor determines the student should be able to gain at the end of an instruction

learning outcomes – What an instructor determines should be the objective of specific teaching.

By breaking major subjects into smaller pieces, learning objectives give students smaller goals to shoot for that are less overwhelming. They provide benchmarks by which students and instructors can measure progress toward achieving the desired outcome. From an instructor's standpoint, learning objectives lay the groundwork for the development and selection of the type of evaluation criteria the instructor should use to measure students' progress.

All learning objectives must be realistic, attainable, observable, and **measurable**. At the end of each period of instruction, you should be able to administer a test based on the criteria of the objective and on the material you presented. Likewise, students should be able to pass a test, or at least demonstrate to the best of their ability, that they have a basic understanding of the material you presented.

Key Note Term

measurable – able to be tracked or measured

Note

The process to develop learning objectives is by far more complex and detailed than presented here; however, this material should give you an appreciation for what learning objectives are and the basic developmental procedures.

Task, Condition, and Standard

Learning objectives are clear, concise, simple, and straightforward statements that consist of three parts: task, condition, and standard. Do not include any extra or confusing information in a learning objective. By combining these parts, a properly written learning objective would be similar to the following:

Given a topographic map and a coordinate scale (condition)*, write a six-digit grid coordinate* (task) *to within 100 meters* (standard)*.*

Task

The task states the action that a class, group of students, or an individual must perform. It is important to understand which category of learning is being considered in the learning objective. Each task statement should

- **Begin with an action verb that will indicate how you can measure the intended outcome—that is, what the student is able to do or demonstrate at the end of the lesson. Table 12.1.1 shows examples of measurable action verbs based on the category of learning that is expected to take place in the lesson.**
- **Describe completely the performance students are to accomplish.**
- **Be clearly relevant to the task.**
- **Be accurate and precise.**
- **Avoid overlapping with other actions. A properly written task statement contains only one action that you want students to accomplish. More than one action may cause confusion, lead to poor or incomplete performance, and be difficult to measure.**

Condition

The condition (or set of conditions) describes clearly and completely the circumstances under which the task must be performed. The condition statement should

- **Specify exactly what you will give students to assist them in accomplishing the task, such as guidance, supervision, or other forms of help.**
- **List any references or memory aids that students will need while performing the task.**
- **Specify any restrictions or limitations.**
- **Identify the tools, equipment, clothing, or other resources needed to accomplish the task.**
- **Describe the type of environment in which students must perform the task.**
- **Describe any special, physical, environmental, or safety conditions that students may encounter while performing the task.**

Standard

The standard states how well the task must be performed. The standard measures how well you expect students to perform the task by specifying the minimum acceptable level of achievement. Because instructors must be able to measure all tasks to some degree, these standards are classified in two categories: quantitative and qualitative.

Quantitative standards use numbers to measure performance. By using quantitative measurements, you can evaluate how well students performed the task. The following are five aspects of performance for which you can use quantitative standards.

Key Note Term

quantitative – measured by quantity

- **Accuracy.** If an evaluator measures performance with a measuring tool, the standard must state how close to perfection a person must perform the task—for example, "stretching across the baseline 4.5 inches."
- **Quantity.** If an evaluator measures performance in units of measure (such as the number of items, yards, pounds, dollars, miles, or rounds), the standard must indicate a quantity to the closest unit—for example, "to within 100 meters."
- **Time.** If time is an important factor in performing the task, the standard must state a specified time requirement—for example, "within 9 seconds after hearing the alarm."
- **Rate.** Rate is a quantity over a set period of time. For tasks where rates are important, the standard must specify the rate—for example, "20 units per day."
- **Completeness.** Under conditions or situations where the performance does not require a specific measurement, the standard must show a general degree of completeness. Examples of this standard include ". . . with all steps performed," "All pieces must be assembled in the correct relationship," "All key personnel must be notified."

Qualitative standards do not use numbers to measure performance unless there is some type of rating system. Otherwise, they require the evaluator to make a judgment. An example of a qualitative standard is "adjust the carburetor until the engine runs at its smoothest point." If you must use a qualitative standard, avoid vague words such as "effective," "acceptable," "proper," "correct," and "average."

Key Note Term

qualitative – measured by quality

Remember: Develop standard statements that are realistic, attainable, observable, and measurable. Learning objectives guide the instructor and the class through each lesson. Properly written learning objectives emphasize what the instructor should teach and what the class members should learn.

Training Aids

Training aids are materials that help you teach. In fact, any item that enhances the quality of your instruction and helps you to display instructional material is a training aid. Types of training aids include computers, overhead projectors, television sets with videocassette recorders, chalkboards as shown in Figure 12.1.3, handouts, bulletin boards, posters, and so on.

Key Note Term

training aids – materials such as computers, handouts, chalkboards, and so on that enhance and support teaching

To make a training aid effective, you must use it properly—that is, use it the way you would use a visual aid when giving a speech. Use a training aid as a part of your lesson; however, your entire lesson cannot rely on the use of training aids.

When you find a training aid that you like, rehearse your lesson with it. The following pointers will enable you to use training aids more effectively.

- **A training aid should adequately support the material in your lesson.**
- **Do not talk to your training aids. Keep eye contact with your class as much as possible.**
- **Make your training aids large enough for everyone to see, and if your training aids use sound, make sure its loud enough for everyone to hear.**

Figure 12.1.3: The chalkboard can be an effective training aid if used properly.
Courtesy of Gary Conner/ PhotoEdit.

Lesson Plans

Developing an effective **lesson plan** is an important part of teaching. Without a well-written lesson plan, it would be almost impossible for you to teach in an organized manner. If you are organized, it will be easier for you to teach the lesson objectives, especially for those difficult tasks.

Key Note Term

lesson plan – an organized, well-written presentation of what an instructor wants to teach and the student should learn

Eight Tips for Lesson Planning

When teaching a class, structure your presentation by following the eight tips. What is important is that you have a logical and orderly method of teaching your lesson. These eight tips will help you to capture the attention of your class, keep their attention throughout your presentation, build their respect in your ability as a teacher, and increase your self-confidence.

- **Practice the material you plan to present to the class. Pay close attention to your pace. Know how long each section of your lesson will take. Do not waste time. You may need that time to adequately discuss the main points or for questions and answers.**
- **Use an opening that will grab the attention of the class.**
- **Inform the students of the lesson's learning objectives and of your expectations. This tells them specifically what you will be teaching and how well you will expect them to know the material.**
- **Briefly review any material from previous lessons (prerequisites) that relates to the material you are teaching.**
- **Inform or advise the students of any precautions, safety requirements, or special instructions regarding the lesson.**

Key Note Term

prerequisite – required before moving to the next step, level, class, and so on

- **Present the material according to your lesson plan. Use your training aids effectively. Describe any assignments or practical exercises you plan to give and ensure the class knows how to accomplish them.**
- **Use demonstrations and/or other forms of practical exercises, when appropriate, to reinforce your instruction. Give your class examples that will help them understand and complete their assignments or practical exercises.**
- **Repeat any material discussed that your class did not fully understand, time permitting. Allow time for questions and answers. That is your measurement of how well the class understood the material you discussed; however, plan to spend additional time with certain students before or after class to ensure they understand the lesson. You may want to make a list of supplemental material students can review to help them better understand the lesson; then conclude or review the main points of your material and the lesson learning objectives.**

Conclusion

When conducting a class or assisting someone else teach, proper preparation is essential to do your best. Learn the content, create observable and measurable objectives based upon the category of learning that you expect the students to demonstrate, identify the training aids you will use, develop a lesson plan, and motivate yourself.

Classes have a set time period and your job is to effectively cover the instruction within that time. If you know and rehearse your material, you will be comfortable teaching it to others. Additionally, try to relax while teaching; that will put both you and your class at ease and make them feel more comfortable with you.

In the following lesson, you will learn how to develop and use a lesson plan. You'll see how the lesson plan is an invaluable tool.

Lesson Review

1. **What are the five critical elements you need to consider while preparing to teach?**
2. **List the three parts of a learning objective. Choose one and discuss it.**
3. **What might be the outcome if you didn't develop a well-written and organized lesson plan?**
4. **What training aid do you find to be the most effective and easiest to use as an instructor and student?**