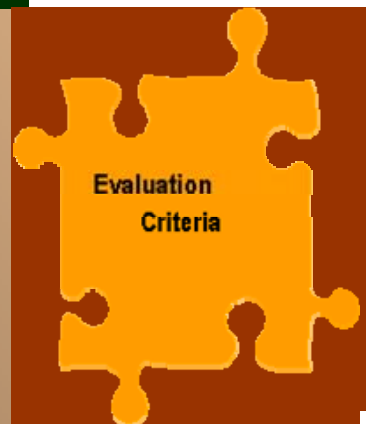
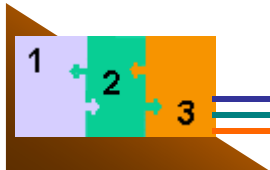


How to Identify Well-written Performance objectives



Solving the puzzle – how to tell students what you expect them to learn in your class.



Does This Sound Familiar?

Today is Mid-Term Exam Day for the four courses you are teaching this term. Three of these classes are taught on campus in a traditional face to face method. The other class is taught completely online using the college's Blackboard software. The majority of the students in your on campus classes are doing average or above average work. However, your online class is another story. Half of these students are failing even though this class is identical to one you are teaching on campus. Your computer beeps that "you have mail".

You glance at the subject and sender information and with a heavy sigh you move this incoming message to an email folder overflowing with correspondence from worried parents and frustrated students concerned with the lack of progress in your online class. Before you can even read this new message, there is a knock on your office door.

A student stands before you asking for an appointment to discuss his work in several of your classes, the online one in particular. He is worried that his failing grade in that class is really going to hurt his overall GPA and he wants to know why he is having so much trouble in this particular course. As your student is leaving, the phone rings.



Your department head wants to meet first thing tomorrow morning with you and all other instructors who are teaching online courses in order to brainstorm possible solutions to improve student performance in online classes.

In preparation for tomorrow morning's meeting, you review all the parent and student complaints, and reflect on all the discussions you have had with students. You then realize there is a recurring theme in all the correspondence. Your students are mostly expressing concern and confusion about **exactly what they are expected to be doing in your online class.**

This is puzzling to you because you are using the same syllabus, text, exercises, quizzes and tests in both your on campus and online classes. Why are your online students having problems with assignments that your on campus students understand? At the start of each week, you discuss the course and lesson goals and objectives with your on campus class and together work out all the inconsistencies and ambiguities. However, it is not possible to have these discussions online. You and your students have to resort to emails and phone calls to clarify assignments.

Maybe you should take a look at how your class objectives are written...





Welcome to “Identifying Well-written Performance Objectives”

Target Audience: This training module has been created for Tallahassee Community College Faculty who have some experience using the college’s Blackboard delivery system to teach online courses in a variety of subject areas and who wish to improve their online courses, thereby improving their student’s success with the material.

Objectives: By the time you reach the end of this short 30-minute lesson, you will be able to recognize a correctly written instructional or performance objective.

Prerequisite Training: Writing objectives is really quite simple once you have mastered the three main parts. You do not need any prior formal or even informal training on how to write an objective in order to be successful in this class. You probably have some experience already with course descriptions, syllabus and lesson objectives. You certainly have a lot of experience in your own subject area and the fact that you are teaching at a very good community college in Florida’s capital city is an accomplishment. You have all the tools needed to be successful in this module!

Why Should I Take This Class? (what’s in it for me): Having clearly defined objectives will help you and your students communicate more effectively, especially via email and discussion board postings used in online classes. You will spend a lot less time explaining to your students what they should learn and what they should be able to do as they progress through your classes. This extra time can then be spent actually *teaching* your course instead of working on administrative tasks!



How This Class is Organized: This lesson will cover the material in a “real world – how to” format. References are provided if you are interested in learning more about certain topics. There are 3 parts to a correctly written objective. Each part will be covered in order. The terms will be defined and examples will be provided. You will then have an opportunity to practice your understanding of the concept just covered. Feedback on your practice will be provided immediately after the exercises. A short final test will enable you to put all the pieces together, demonstrating your command of the new skill – identifying and writing clear instructional objectives.



OK, Let's Get Started...



A Brief Introduction to Performance Objectives

Performance objectives, also called *instructional objectives*, are important because they form the basis for your instructional and assessment planning. Performance objectives are brief, clear, **specific** statements that describe what your students will be able to do after they have completed your class. Objectives are always stated in terms of student behavior, not teacher performance, and usually are composed of three major parts. These are:

A description of

- ◆ The **behavior or product** the student will accomplish
- ◆ Any **conditions** relevant to performing the objective task
- ◆ Any **criteria** used to evaluate the performance of the task

Let's take a closer look at each of the three parts of a well-written performance objective.



An observable, measurable product or behavior is the first piece of the Performance Objective Puzzle

An observable, measurable product or behavior, wow, what a mouthful! What exactly does this mean? It means describing exactly what your students will be able to do after taking your class. How do I do that? Let's start by first looking at some definitions.

Definition: learning domain –

A learning domain describes the general type of learning that is desired. There are three main types of learning: cognitive, affective, and psychomotor.

Definition: cognitive learning –

Cognitive learning refers to the type of learning that is the goal of most traditional classroom instruction in subjects such as math, history, economics, literature and science to name a few. Some examples of cognitive learning are: memorization and recall of facts, application of rules to solve problems, and summarization of written passages.

Want to know more? There are actually 6 levels of Cognitive learning as defined by Bloom's Taxonomy. The lowest is verbal or memorization. The highest level is evaluation. This course does not discuss Bloom's Taxonomy but if you would like more information on this topic, please check out these links:

<http://www.coun.uvic.ca/learn/program/hndouts/bloom.html>

<http://www.kcmetro.cc.mo.us/longview/ctac/blooms.htm>

<http://chiron.valdosta.edu/whuitt/col/cogsys/bloom.html>

More Definitions...

Definition: affective learning –

Affective learning refers to the type of learning that is the goal of most motivational or self-help instruction in areas such as alcohol and drug abuse, smoking, weight reduction, and financial responsibility to name a few. The goals of affective learning deal with emotions and feelings and changing one's life or habits. Some examples of affective learning are: stopping smoking, deciding to lose weight, joining a volunteer organization, and attending class.

Want to know more? Visit this web site:

<http://www.nwlink.com/~donclark/hrd/bloom.html> (also good info on psychomotor learning)

Definition: psychomotor learning –

Psychomotor learning refers to the type of learning that is the goal of most vocational, performance or “how to” workshops in areas such as automobile repair, dance, sports, and home repair to name a few. The goals of psychomotor learning deal with physical actions. Some examples of psychomotor learning are: changing spark plugs, dancing a ballet, playing the piano, throwing a ball and fixing a leaking faucet.

Want to know more? Visit this web site:

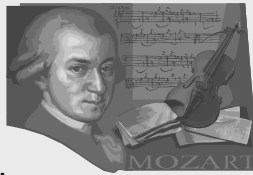
http://education.massey.ac.nz/wellington_online/introcer/chunk1/demon/dm1b.htm

OK, so now you know all about learning domains. What do they have to do with writing performance objectives? Well, actually the identification of the **type** of learning you expect your students to accomplish is very important because it helps to determine what the observable, measurable product or behavior will be.

Let's look at some examples.

(The observable, measurable product or behavior is in bold)

If you were a music history teacher, you might want your students to be able to **identify the composer** of or the **name** of **different pieces of music** or to **name several composers** of a certain music period.



This is cognitive learning.

If you were a music orchestra or band teacher, you would want your students to actually be able to **play different pieces** of music or **play different instruments**.



This is psychomotor learning.

As a teacher in either area, you might want your students to demonstrate an appreciation of different types of music by **voluntarily attending concerts** or **buying different types of music**.



This is affective learning.

Now we will briefly discuss verbs. Recall from your high school English classes that a verb is the part of speech used to show that an action is taking place or to indicate the existence of a state or condition. What this means for our purpose of writing goals and objectives, is that there are two kinds of verbs, internal and external.

Definition: internal verb -

An internal verb is one that describes a state or condition that **cannot** be easily observed or measured by anyone other than the target person. Some examples of internal verbs are: know, understand, appreciate, learn and be aware.

Definition: external action verb -

An external action verb is one that describes an action that **can be** observed or measured by someone other than the target person. Some examples of external action verbs are: repair, sing, play, write, list, name, and describe.

Each of the three learning domains (cognitive, affective and psychomotor) use different external action verbs, although some of these verbs can apply to more than one domain:

Cognitive learning domain external action verbs:

List, define, describe, match, summarize, solve, write, and explain

Affective learning domain external action verbs:

Join, agree, support, and encourage

Psychomotor learning domain external action verbs:

Jump, run, play (an instrument), cut, sing, lift and carry



It is important to remember when describing an observable, measurable product or behavior; you **must** use an external action verb. Do **not** use verbs such as know, learn, understand, and appreciate. How do you “know” your student “understands”?

Practice Quiz # 1

OK, let's put all of these terms and definitions together and practice identifying, in the following examples, the learning domain, external action verb and the observable, measurable product or behavior.

1. Which learning domain is represented by the following example?

Given a diagram, the student will correctly identify the parts of the insect.

- a) Psychomotor
- b) Cognitive
- c) Affective

2. Which learning domain is represented by the following example?

The student will volunteer to assist with the voter registration drive.

- a) Psychomotor
- b) Cognitive
- c) Affective

3. Which one of the following is an example of an external action verb?

- a) Know
- b) Learn
- c) List
- d) Appreciate

4. In the example below, what is the observable, measurable product?

Given a map of the United States, the student will name two Native American Indian tribe commonly found in the area indicated on the map.

- a) The student
- b) The name of two appropriate American Indian tribes
- c) The map of the United States

5. In the example below, what is the observable, measurable product?

The student will translate sample sentences from Spanish into English.

- a) The original sample sentences
- b) The student
- c) Sentences translated from Spanish into English

Practice Quiz #1 - Feedback

How did you do on these practices examples? Compare your results to the answers below. Did you get all of these correct? If so, **great work!** Continue with the next section of the lesson. If you missed a couple, take a few minutes to review those areas that gave you trouble before continuing with the next section.

1. Which learning domain is represented by the following example?

Given a diagram, the student will correctly identify the parts of the insect.

- a) Psychomotor
- ✓ **b) Cognitive**
- c) Affective

2. Which learning domain is represented by the following example?

The student will volunteer to assist with the voter registration drive.

- a) Psychomotor
- b) Cognitive
- ✓ **c) Affective**

3. Which one of the following is an example of an external action verb?

- a) Know
- b) Learn
- ✓ **c) List**
- d) Appreciate

4. In the example below, what is the observable, measurable product?

Given a map of the United States, the student will name two Native American Indian tribe commonly found in the area indicated on the map.

- a) The student
- ✓ **b) The name of two appropriate American Indian tribes**
- c) The map of the United States

5. In the example below, what is the observable, measurable product?

The student will translate sample sentences from Spanish into English.

- a) The original sample sentences
- b) The student
- ✓ **c) Sentences translated from Spanish into English**



A condition for performance is the second piece of the Performance Objective Puzzle

What is a *condition for performance* and why is a condition needed in performance objectives? These are good questions. Let's look at some definitions and examples of conditions.

Definition: condition for performance –

The condition states what information or materials, if any, students will be given when they are asked to perform the task stated in the objective.

Conditions are often referred to as *givens* because you will often find them written in an objective as follows: "Given (something), the student will (do something)".



Conditions fall into two categories: the first is a cue and the second is a resource.

Definition: cue –

A cue is most frequently used to ensure that your learners can associate a term with a definition and vice versa (memorization). An example of a cue is: "Given the term, the student will write a short definition".

Definition: resource –

A resource is any thing that is needed in order to perform the action or produce the product described in the objective. Some examples of a resource are: illustrations, charts, maps, web sites, tools and reference books to name a few.



Conditions are not always required in a well-constructed objective. You must carefully consider the intent of your instruction when deciding if conditions are necessary in your objectives. Consider the following example:

Students will name four composers from the Baroque period.

If your intention is to have the students memorize and recall the names of composers, then this objective does not need further clarification. However, if your intention is to have the student identify composers based on a music sample, you will have to provide more information in your objective as illustrated in the rewritten example found below:

Given a 10 second sample playing of 5 pieces of music the student will name the composer of each piece.

Some common mistakes in stating conditions are:



- ✗ Stating obvious conditions such as “given paper and pencil...”
- ✗ Stating instructional *activities* or events rather than materials or information such as “given a lesson on...”
- ✗ Stating the type of test as a condition such as “given a multiple choice test, match...”

Practice Quiz # 2

OK, let's put all of these terms and definitions together and practice identifying, in the following examples, the condition for performance – what the student will use while performing the objective task.

1. In the example below, what is the condition for performance?

Given a completed balance sheet, the student will find and correct all errors.

- a) Corrected errors
- b) The student
- c) The completed balance sheet

2. In the example below, what is the condition for performance?

Students will write a short definition of the term *Cold War*.

- a) The term *Cold War*
- b) A short definition
- c) The student

3. Does the following example contain a condition for performance?

Given an essay question, the student will describe the process of osmosis.

- a) YES – the essay question is the condition
- b) NO – the type of question (essay question) is not a condition

Practice Quiz # 2 - Feedback

How did you do on these practices examples? Compare your results to the answers below. Did you get all of these correct? If so, **great work!** Continue with the next section of the lesson. If you missed a couple, take a few minutes to review those areas that gave you trouble before continuing with the next section.

1. In the example below, what is the condition for performance?

Given a completed balance sheet, the student will find and correct all errors.

- a) Corrected errors
- b) The student
- ✓ c) **The completed balance sheet**

2. In the example below, what is the condition for performance?

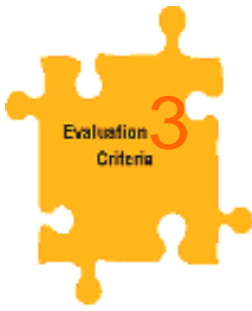
Students will write a short definition of the term *Cold War*.

- ✓ a) **The term *Cold War***
- b) A short definition
- c) The student

3. Does the following example contain a condition for performance?

Given an essay question, the student will describe the process of osmosis.

- a) YES – the essay question is the condition
- ✓ b) **NO – the type of question (essay question) is not a condition**



An evaluation or measurement criterion is the final piece of the Performance Objective puzzle.

■ An objective should describe how well a student must perform the stated task, especially if the task is complex or could have more than one specifically correct answer. When you are writing your objectives, think about how you will test your student's performance. If you will have to explain your assessment process, you probably need measurement criteria in your objective statement.

For example:

If your objective were for your student to “sum two numbers”, you would not have to specify, “**Correctly** sum two numbers”. Because there is only one possible correct answer, it is assumed the sum would have to be correct.

On the other hand:

If your objective were for your student to “write an original short story”, you would probably need to include evaluation criteria such as number of pages or required topics or a reference to a grading rubric or matrix.

■ Criteria are often stated in terms of the limits or ranges of an acceptable answer such as “within one degree” or “at least 500 words”. It can also be complex and specified in various categories such as: form, physical structure, function, aesthetics, and social acceptability.

Let's look at a few examples of measurement criteria.

State the time shown on a clock to the **nearest minute**.

Estimate the distance between two cities to **within 5 miles**.

Write an **original 4-line** poem whose **ending words on lines 1 and 4 rhyme** with each other.

Some common mistakes in stating measurement criteria are:



- ✘ Stating *universal criteria* such as “9 out of 10 times” or “80% correct” as this indicates a level of mastery not evaluation criteria
- ✘ Avoid listing expert judgment as the criterion – “to the satisfaction of the instructor”

Practice Quiz # 3

OK, let's put all of these terms and definitions together and practice identifying, in the following examples, the evaluation criteria for performance – how the student will be evaluated while or after performing the objective task.

1. In the example below, what is the evaluation or measurement criterion?

Given long division problems, without using a calculator, the student will calculate the correct answer to within two decimal places.

- a) The long division problems
- b) The calculator
- c) Two decimal places

2. In the example below, what is the evaluation or measurement criterion?

Given a blank IRS tax form 1040EZ, the student will correctly fill in every line on the form.

- a) Every line on the form
- b) The student
- c) The blank IRS form 1040EZ

3. Does the following example contain evaluation criteria?

The student will score at least 80% on the mid-term exam.

- a) YES – scoring 80% on the mid-term exam
- b) NO – an overall test score is not an evaluation criterion

Practice Quiz # 3 - Feedback

How did you do on these practices examples? Compare your results to the answers below. Did you get all of these correct? If so, **great work!** Continue with the final review of this module. If you missed a couple, take a few minutes to review those areas that gave you trouble before continuing with the final review.

1. In the example below, what is the evaluation or measurement criterion?

Given long division problems, without using a calculator, the student will calculate the correct answer to within two decimal places.

- a) The long division problems
- b) The calculator
- ✓ c) **Two decimal places**

2. In the example below, what is the evaluation or measurement criterion?

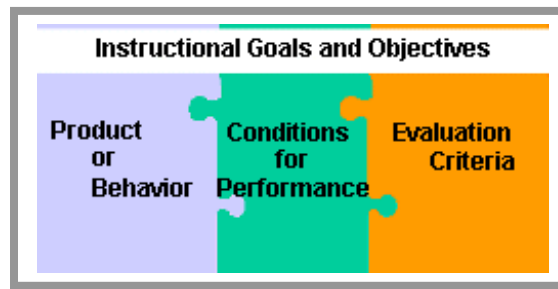
Given a blank IRS tax form 1040EZ, the student will correctly fill in every line on the form.

- ✓ a) **Every line on the form**
- b) The student
- c) The blank IRS form 1040EZ

3. Does the following example contain evaluation criteria?

The student will score at least 80% on the mid-term exam.

- a) YES – scoring 80% on the mid-term exam
- ✓ b) **NO – an overall test score is not an evaluation criterion**

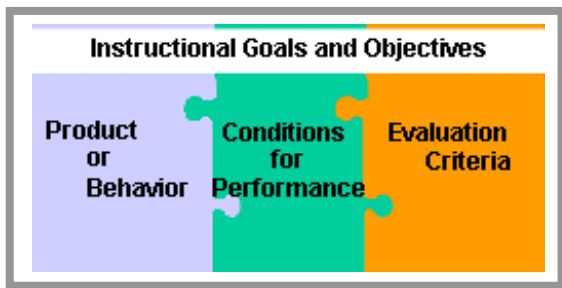


Now for a Quick Review...

We have covered all of the three parts of a well-written performance objective so let's put everything together. The following steps will serve as a quick guide to writing objectives.

Note, these steps can actually be performed in any order but all steps must be addressed before the objective can be completely written.

1. Identify the learning domain for the tasks in your objective. Remember, there are three learning domains: cognitive, affective and psychomotor. Most of your objectives will fall into the cognitive learning domain. Some may fit better in the affective learning domain but they will be more difficult to evaluate.
2. Choose an appropriate external action verb to indicate a measurable or observable product or behavior that your student will produce. Some examples of external action verbs are: list, write, play, repair, join, define and select. Do **not** use verbs such as: know, understand, and appreciate.
3. Specify a measurable or observable product or behavior consistent with your chosen verb / learning domain. Some examples are: name 3 presidents, write a paper, play an instrument, repair a faucet, join an organization, define a term, and select the correct answer.
4. Decide what, if any conditions are needed by the student to perform the stated task in the objective. Conditions can be either cues to jog the student's recall of information such as the name of a term to define or they can be resources such as reference books, charts, diagrams, tools, or physical materials.
5. Decide what, if any evaluation or measurement criteria should be stated in the objective. Criteria can be written in the form of a range of acceptable answers such as "within five miles" or it can describe physical or aesthetic requirements such as "to hold 500 pounds" or "coordinated with shades of purple".



Let's look at a few final examples, then you will have an opportunity for some final practice.

1. Given a **sample balance sheet** from a fictional company, the student will **find and correct all errors** on the balance sheet.

Observable product or performance: Identification and correction of errors

Conditions: A sample balance sheet

Evaluation criteria: All errors must be found and corrected

2. Given **photographic samples of Navaho Indian rugs**, the student will **identify which clan or area produces each type of weaving**.

Observable product or performance: Identification of the origin of a rug

Conditions: Photographic samples of each type of rug

Evaluation criteria: Every rug sample must be identified

3. The student will **describe 3 differences between a desert climate and a rainforest climate**.

Observable product or performance: description of differences between a desert climate and a rainforest climate

Conditions: none required, the task is performed from memory

Evaluation criteria: 3 differences must be given

4. Given **3 sample sentences**, the student will **identify every word in each sentence** as to its **correct part of speech**.

Observable product or performance: identification of parts of speech

Conditions: 3 sample sentences

Evaluation criteria: every word in every sentence

5. The student will **list** each of the **3 learning domains** and will **give 2 examples** of each domain.

Observable product or performance: identification of learning domains and examples

Conditions: none required, the task is performed from memory

Evaluation criteria: 3 learning domains and 2 examples

Final Practice - Identifying well-written performance objectives

Instructions for Final Practice Examples

Read each of the performance objectives listed below and judge whether each includes behaviors, conditions and criterion. If any part is missing choose the part (s) omitted.

Note: This exercise is adapted from Dick, Carey & Carey's The Systematic Design of Instruction 6th edition, chap. 6, p. 140

1. Given class discussions on the many uses of the buffalo in American Indian culture, the student will appreciate how important this animal was to all tribes. The following is / are missing from this objective:

- a. Observable behavior
- b. Conditions
- c. Evaluation criterion
- d. Nothing

2. Given a numbered diagram of the human skeletal system and a list of 50 bones, match at least 40 of the listed bones with the correct number on the diagram. What is missing from this objective?

- a. Observable behavior
- b. Conditions
- c. Evaluation criterion
- d. Nothing

3. Students will be able to operate the computers in the technology lab. What is missing from this objective?

- a. Observable behavior
- b. Conditions
- c. Evaluation criterion
- d. Nothing

Feedback for Final Practice – How did you do?

1. Given class discussions on the many uses of the buffalo in American Indian culture, the student will appreciate how important this animal was to all tribes. The following is / are missing from this objective:

- ✓ a. Observable behavior – is missing: “will appreciate” is not observable
- ✓ b. Conditions – are missing: “class discussions” are activities, not conditions
- ✓ c. Evaluation criterion – is missing: you cannot evaluate something un-measurable
- d. Nothing

2. Given a numbered diagram of the human skeletal system and a list of 50 bones, match at least 40 of the listed bones with the correct number on the diagram. What is missing from this objective?

- a. Observable behavior – match list of bones to diagram
- b. Conditions – numbered diagram and list of bones
- c. Evaluation criterion – at least 40 bones matched correctly
- ✓ d. **Nothing is missing**

3. Students will be able to operate the computers in the technology lab. What is missing from this objective?

- a. Observable behavior
- b. Conditions
- ✓ c. Evaluation criterion – is missing: what does “operate” include?
- d. Nothing

Lesson Conclusion



Congratulations! You have successfully completed the Introduction to Identifying Well-written Performance Objectives training module.

You are now ready to review your own lesson objectives with an eye to making immediate improvements to some that may not be clearly written. You will also be able to compose new goals and objectives that very clearly convey to your students what they need to learn in your classes.

Good luck with this endeavor and with your future studies!

****** Please take a few minutes to complete the Final Quiz and the Module Attitude Survey.

Additional Resources

In addition to the web sites listed on pages 8 and 9 of this module, here are a few more resources you may find interesting and useful for further study or future reference.

The Systematic Design of Instruction by Walter Dick, Lou Carey and James O. Carey – the “bible” for instructional designers. This is a very easy to read, step-by-step guide to designing instruction. Chapter 6 deals specifically with writing performance objectives and chapter 7 discusses writing performance assessments (a close relation to part 3 of a learning objective). ISBN # 0-205-41274-2

Teaching for Competence by Howard Sullivan and Norman Higgins – is an older book (1983) but the principal ideas are still very relevant. A very easy to read, short 80 pages, this book has many examples, practice exercises and a self-check quiz. Chapter 2 focuses on learning objectives. ISBN # 0-8077-2725-3

Faculty Development:

http://captain.park.edu/facultydevelopment/writing_learning_objectives.htm

This web site, from Park University, faculty development, contains a brief discussion of the purpose of learning objectives, guidelines for writing effective learning objectives and tips for improving learning objectives

What to Teach:

<http://www.indstate.edu/ctl/vlessons/goals1.html>

This web site, from Indiana State University contains a discussion on how teachers make decisions on what to teach in a course given that resources are limited