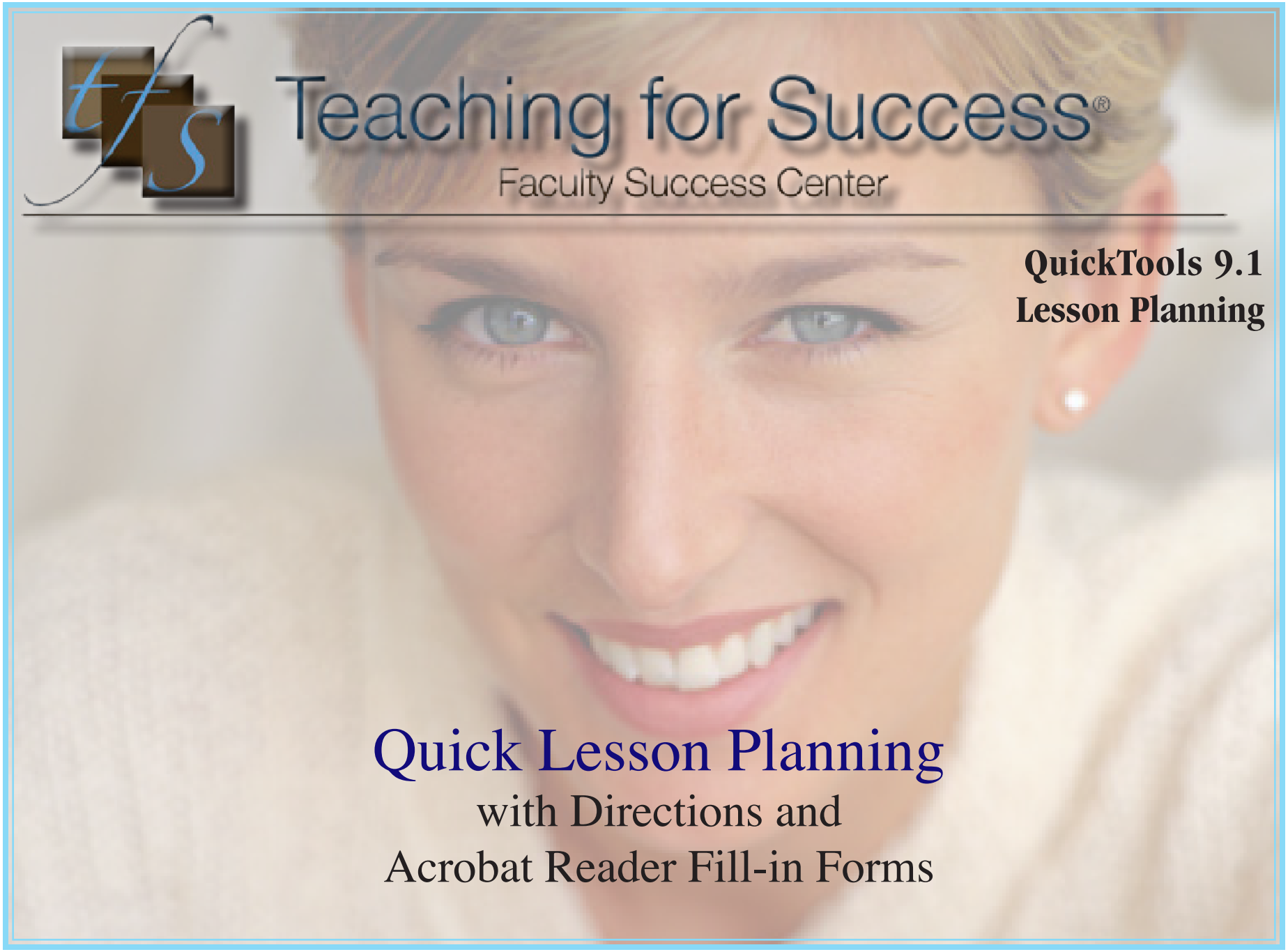


Teaching for Success®

Faculty Success Center

QuickTools 9.1
Lesson Planning

Quick Lesson Planning

with Directions and Acrobat Reader Fill-in Forms

Step 1. Review Bloom's Taxonomy of Behavioral Learning Objectives. The six levels listed here are the original categories. Some instructors prefer the revised list. But TFS believes the original list is easier to use and to understand the instructional application.

What are Learning Outcomes or Objectives?

Lesson plans are your map of how you teach each class session. They are created from an organized set of specific learning objectives. What are learning objectives or learning outcomes? They are a statement, frequently in your own words, of how your students will demonstrate they have mastered the material. In other words, it's a statement of what students will be able to do now that they have learned new knowledge. The main challenge to writing a good learning outcome is to remember that to be a valid learning outcome it must be measurable or testable. The goal is to make it easier for you create learning objectives at the higher levels of thinking skills.

This QuickTool starts from the point that you already have an outline or chapter list of the content of your course. Or, hopefully, at very least, you have been given a statement of the ending learning outcomes for your course. If the later situation is the case, take a yellow pad and write the ending course learning goals or outcomes at the top. Now start asking, "what do students have to learn to arrive at the final learning point or level. Write the answer and repeat the process working your way from the ending goal to the most elementary or introductory level of knowledge that you are expected to teach.

Now that you have a complete list of the specific topics and have organized them into a logical progression from beginning to end, you can use Bloom's taxonomy of cognitive skills to make sure that your learning goals span the range of thinking skills. Without this check you may by default teach only at the lowest levels of this hierarchy. This means students will not be challenged to think creatively and analytically and they will not get as much out of your class as they could.

This QuickTool will help you create a set of learning objectives for teaching a module of your choice spanning all six levels of learning. Now, admittedly, the human brain does not precisely support a breakdown of thinking skills into these six levels, but this system will help you plan lessons that contain more challenging learning. Putting effort into this planning task means your course will have more learning value for your students.

The Six Levels of Thinking Skills of Bloom's Classic Taxonomy

Using the example of an automotive technology class fuel system module, here is an example of a possible learning goal for each level.

Knowledge—given an instrument panel comprising several gauges and indicators, the student correctly locates and labels the fuel gauge.

Comprehension—given a fuel gauge reading three-quarters full, the student predicts whether the vehicle's engine will start and run.

Application—given the miles a vehicle is driven and the fuel gauge reading at the start and end of the trip, the student will calculate the fuel efficiency of the vehicle in miles-per-gallon.

Analysis—given the vehicle's repair manual, the student can identify the wiring and parts of the fuel gauge system.

Synthesis—given the voltage readings at various points of the fuel gauge system, the student identifies the defective part.

Evaluation—given the design specification for a new vehicle, the student describes the most cost-effective fuel gauge system design and the design trade-offs among accuracy, reliability, maintainability, and installation cost.

Step 2. Using Bloom's Taxonomy to Create Learning Objectives at each of the six levels of thinking skills.

Borrowing from an educational class example, the sample table found on the next page illustrates how to use Bloom's taxonomy of thinking skills to create learning objectives for a typical class.

First, browse through the "TFS Lesson Planning Form 1" found on page 4. The learning outcome examples for each thinking level are in red. Note how simple and concise learning objectives can be even though the goal is to create them at the higher levels in order to ensure students are challenged with a full range of thinking skills.

Space is provided at the top of the form to write a general learning or, if you like, performance objective for a single class session or unit of instruction. Second, subordinate objectives can be created using as many specific thinking skill levels as is appropriate to the content, as demonstrated in this example. A blank copy of this form on page 5 is provided for you to fill-in, save and print according to your needs.

If our form is not to your liking, take a few minutes and create a form that better supports the way you think and work. The important point here is to stress the advantages of working with learning objectives and guard against any tendency to go overboard with too much complexity.

The bottom line, use Bloom's taxonomy to create learning objectives that ensure students learn and practice at the highest levels of thinking skills possible in each topic.

Next, look at the example planning form shown on page 4 and the practice form on page 5. The practice forms provided all have active text fields that allow you to enter text right from Acrobat Reader. You can also save and print these forms, so your work is not lost when you close the QuickTool. Then, continue on to page 6 where you will learn how to turn your objectives into actual lesson plans. Finally, additional blank work forms are provided on pages 12-14. If you need more information on this subject try the full TFS QuickCourse on Lesson Planning.

Have a plan. Follow the plan, and you'll be surprised how successful you can be. Most people don't have a plan.

~Paul Bryant

TFS Lesson Planning Form 1: Create Thinking-Level Learning Goals (Objectives) **EXAMPLE**

Lesson Number: **1.1**	Class Date: **1/18/11**	Lesson or Chapter Title: **Teaching for Success—Introduction**

Write the General Lesson Objective (Goal or Outcome)— Example: The student will build a fundamental understanding of teaching and learning in higher education. The principle of critical success factors will be introduced and the student will be challenged to apply the concept to the learner's role.

Thinking level	What students do	Describe exactly what students will do to demonstrate mastery at the thinking skill level indicated.
Knowledge	Name, describe, select, define, match, state, etc.	Define "Teaching" and "Learning." Define "Success."
Comprehension	Summarize, explain, provide examples, predict, estimate.	Provide an example of teaching for success.
Application	Solve problems, construct charts, demonstrate usage.	Construct a chart of critical success factors applicable to college teaching.
Analysis	Divide, distinguish categorize, infer, separate.	Distinguish between teaching and learning.
Synthesis	Combine, revise, organize, create new perspective.	Create a new perspective by combining critical success factors of teaching with accelerated learning principles.
Evaluation	Judge, prioritize, value, evaluate, conclude, design approach	Judge the value of using critical success factors as components of good teaching.

TFS Lesson Planning Form 1: Creating Thinking-Level Learning Goals (Objectives)

Lesson Number:	Class Date:	Lesson or Chapter Title:

Write the General Lesson Objective (Goal or Outcome)— Enter a brief description of what the student is expected to do as a minimum level of mastery at the end of the lesson. State what the student does and at what level of mastery is acceptable.

Thinking levels:	What students typically do:	Describe exactly what students will do to demonstrate mastery at the thinking skill level indicated:
Knowledge	Name, describe, select, define, match, state, etc.	
Comprehension	Summarize, explain, provide examples, predict, estimate.	
Application	Solve problems, construct chart, demonstrate usage.	
Analysis	Divide, distinguish categories, infer, separate.	
Synthesis	Combine, revise, organize, create new perspectives	
Evaluation	Judge, prioritize, value, evaluate, conclude, design approaches	

Next, Use the TFS Class Meeting Planning Form. It will help you plan all the details of a lesson created according the suggested PIE-R3 six-step sequence.

Sometimes thinking within the box is helpful when you are learning the basics of a new concept. That said, it's time to explain each of the steps in the PIE-R3 accelerated lesson format in detail. Again, these lesson steps are discussed in the sequence as they would be presented to students. This sequence of instruction is based on the work done by Colin Rose.

An easy way to remember the steps in this lesson model is to remember the formula for the area of a circle, $A=\Pi r^2$. Changing that common formula slightly to the mnemonic PIE-R^3 will help you remember the sequence of instructional events. This system is built on the learners' needs. It endeavors to provide in sequence the learning activities that make the most instructional sense:

- **P**repare.
- **I**nput.
- **E**xplore.
- **R**etain.
- **R**econfirm.
- **R**eflect.

Now, let's look at the details of each of the **PIE-R³** lesson-plan steps. A good rule of thumb in lesson planning is to use Albert Einstein's planning principal, "Everything should be made as simple as possible, but not simpler."

Two good evaluative questions are: Can these steps be accomplished in any order? And, can a step be deleted or skipped? Ideally you should go through each step in the lesson sequence in order. However, there are always special teaching circumstances that call for innovation and change. But, unless there is a good reason for deviation, you should strive to include each of the following steps in your lessons:

- **Prepare**—Begin lesson planning with the end in mind. Devote a minute or two to helping your students settle in and focus their minds on the learning tasks ahead. It could be a deep breath, an advance organizer, a quote or key question. Time devoted to learning preparation will pay off in time saved in the other learning steps.
- **Input**—Present the new knowledge in visual, auditory, and hands-on learning experiences. Expert instructors know how to reduce the complex to a simple yet accurate expression of the same knowledge—for example, $E=mc^2$. Be sure students have an opportunity to formulate questions they are interested in answering.
- **Explore**—Your students learn the most in the least time when they are encouraged to explore the material using ***their*** preferred and active learning styles, intelligence sets, and modes of expression.
- **Recall**—Learning retention is significantly increased when students personalize, emotionalize and apply the material.
- **Retain**—Teach self-testing—the best students know the value of reviewing early and often and self-testing their knowledge and skill acquisitions.
- **Reflect**—Both instructor and learner must constantly gather learning performance observations and measurements as information on which to base future improvements.

TFS® Class Meeting Activity Planning Form

Course	*Lesson Number*	*Date/Day*	*Time*	*Text Chapter/Sections*

Instructional Resources

- ❑ *Handouts*
- ❑ *Equipment*
- ❑ *Guests invited*
- ❑ *Tests/Quizzes*
- ❑ *Supplements*
- ❑ *References*

Course Management Tasks

Institutional announcements.

Homework assignments.

Others (list.)

Learning Objectives or Outcomes:

***Section I. Prepare**—5-10% of total class time (i.e. 2.5 to 5 min. of a 50-minute class meeting)*

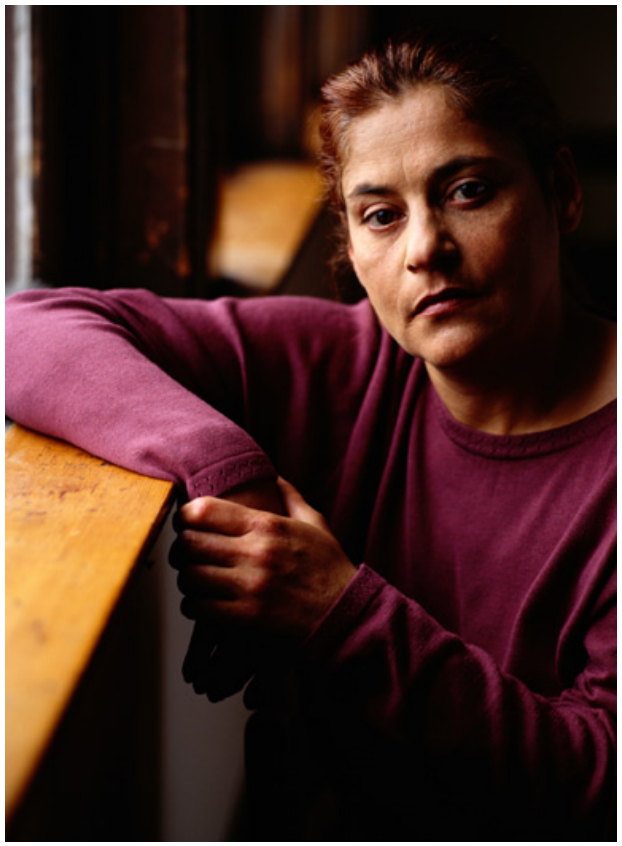
Goals:	*Strategy—What method will you use to accomplish goal?*	*Learning Activities—What will students do?*
Gain attention.		
Learning mindset preparation.		
Connections to previous learning (brief review)..		
Attendance/paper return/quiz.		

Section II. Input New Material

Goals:	***Strategy—What method will you use to accomplish goal?***	***Learning Activities—What will students do?***
Present Topic 1.		
Present Topic 2.		
Present Topic 3.		
Section III. Explore	***Strategy—What method will you use to accomplish goal?***	***Learning Activities—What will students do?***
Explore Topic 1.		
Explore Topic 2.		
Explore Topic 3.		

Section VI. Retain	***Strategy—What method will you use to accomplish goal?***	***Learning Activities—What will students do?***
Retain Topic 1.		
Retain Topic 2.		
Retain Topic 3.		
Section V. Recall	***Strategy—What method will you use to accomplish goal?***	***Learning Activities—What will students do?***
Recall of Topic 1.		
Recall of Topic 2.		
Recall of Topic 3.		
Section VI. Reflect	***Strategy—What method will you use to accomplish goal?***	***Learning Activities—What will students do?***
Reflect on learning session (all topics).		
Section VI. The Cliff Hanger Exit	***Strategy—What will you use to inspire and motivate students to return to the next class meeting prepared to learn?***	
Teaser topic to boost attendance and interest in next session.		

Extra TFS Lesson Planning Forms on Pages 11-13



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