As teachers, we devote a great deal of time and thought to the *what* and the *how* of teaching. What will we teach? How should the information be presented? How will we know that students know and can use the information?

Good teaching doesn’t just happen; it is well planned and is aligned in several ways. First, the written curriculum, the teaching strategies, and the methods of evaluation are all aligned to each other; that is, we align what we say we are going to teach (i.e., state standards, local standards, curriculum, and classroom objectives) with what we actually teach our students and what we assess them on. This alignment can be shown visually as an equilateral triangle, with all sides being equal in importance and with the student in the middle (see Figure 1.1).

Within each of these factors (curriculum, teaching, and assessment) are microalignments that help assure that all students will know and understand the information. Throughout this book, we will examine this microprocess and the components that help to make it successful.
WHY GOOD PLANNING MAKES FOR GOOD LEARNING EXPERIENCES

One of my favorite stories is Alice in Wonderland. A much-quoted passage from Alice’s adventures is the exchange between Alice and the all-knowing Cheshire cat. Alice is lost and asks the cat for directions. The Cheshire cat asks her which way she is going. Turning, she replies that she is not sure. The cat says that if she does not know where she is going, it does not matter which way she goes. That dialogue provides a perfect model for why good planning makes for good learning experiences. Without planning, it will be difficult to identify where we are going, much less the expected results. For our students’ sake, we need to know specifically where we are going with the learning, how we will get there, and what the expected results will be. Through brain research and meta-analysis research on teaching strategies, we can
provide a complete map for our students for the first time in history.

Wiggins and McTighe (1998) identify a three-step process in planning for instruction. First, we need to ask what it is that we want students to know and be able to do as a result of the learning. Second, we must examine how we will know that our students are learning and that they can perform tasks as a result of the learning. Third, we must identify which instructional practices will assure us that students learn and that they can use the information provided. Certainly, this complex process shows that teaching should not be left to a hit-or-miss approach.

When we teach using this three-step process, there are no surprises, no “gotchas,” in which students are assessed on something for which they have not been taught. Furthermore, by stating objectives up front, telling students and parents how students will be assessed on those objectives, and then teaching those objectives, we become more accountable for student learning. Our objectives, assessment instruments, and teaching strategies become a system leading to quality learning. Should something go wrong with that system, we are more likely to be able to find the problems and repair them than if we just “wing it.” By using systems thinking in our classroom plans, we model for our students ways in which they need to plan and monitor their own thinking.

As we plan lessons, a first and last step should be to check to see that we have aligned objectives with the state and local standards, that our lesson plan teaches what is important for students to know and be able to do, and that the assessments that we have planned truly measure success on the objectives. Notice that the student is in the middle of the model provided in Figure 1.1; that is no accident. The written, taught, and assessed curriculum should be student centered; that means that we teach what is best for the student, rather than what is best for politicians, communities, or other adults. What do students need to know and be able to do in order to be successful is at the heart of what we teach. Anytime decisions are
made in the classroom or school, the underlying issue should always be, “Is this better for the students?” If the financial decision, the curriculum decision, or the testing decision does not benefit the students, either directly or indirectly, then the decision should be reexamined.

In this book, we will look at the planning steps for a lesson or unit of study based on a model of backward design—beginning with the end in mind. If lesson planning were simply deciding what to tell our students, it would be an easy task; however, planning a lesson involves much more. As teachers we have an obligation to our students to teach them the essential skills, processes, and facts that will help them to be successful now and in the future. Everything that we teach should be research-based and should be taught in such a way that it facilitates meaning and self-reliance. Providing meaning helps students to put the information into long-term memory, and it builds intrinsic motivation. When we provide skills and structures to students that they can use throughout life, we give them self-reliance.

For example, by teaching students to use nonlinguistic organizers, we provide a means to help them learn in any subject and a valuable source for life-long problem solving. Because they are nonlinguistic, these organizers are great tools for English language learners and for students with limited vocabulary skills. Because they are contextual, they are great tools for students from cultures that rely heavily on contextual learning—such as the urban poor.

In *What Every Teacher Should Know About Diverse Learners* and *What Every Teacher Should Know About Student Motivation* (Tileston 2004a, 2004c), I discuss in detail the need for a positive environment and the importance of students acquiring a positive attitude toward classroom tasks. Thus I am not going to discuss these attributes of planning, although I want you to know that they are important to both planning and preplanning. Without the appropriate climate and structures in place, all the planning in the world will not make a difference.
**Preplanning Tasks**

Before planning a lesson, it is important that you know your students. A teacher can no more plan for a lesson without knowing the strengths and weaknesses of her students than a scientist can examine the effectiveness of a new product on the environment without knowing its strengths and weaknesses.

Look at your student data (i.e., state and national tests, record of attendance, health screening, socioeconomic status, and local testing for special programs). Look for both strengths and weaknesses. If you are unsure about the prerequisite skills that your students bring to your classroom, you can assess them with a pre-test, skills test, discussion questions, or questionnaire to help you plan appropriately. Data should be analyzed for both trends and for gaps. If the data shows that students in your classroom tend to do significantly better in reading than in mathematics, this would be a trend. The trend should be analyzed to find its cause: At what point did the gap occur? Are there gaps in the textbooks and other materials being used in your school? Do teachers in your school have the requisite skills and resources needed to teach mathematics?

Analyze data in regard to various subgroups. The whole group scores may be good, but if any subgroup (e.g., at-risk students, males, females, African Americans, or Hispanics) is not making the same kind of progress as the total group, there is reason to question why. Form 1.1 is a tool a teacher might use to examine data to make decisions about the prerequisite skills of the learners and any gaps in learning.

Once preplanning has been completed, you are ready to plan a lesson that will help students to learn authentically. Authentic learning takes place when students truly know the information and can perform tasks based on that information consistently. Authentic learning is not memorizing material only long enough to be tested and then promptly forgetting it: Authentic learning assures that students understand the material and that they can use it in real-world tasks.
6 Instructional Planning

Form 1.1 Matrix for Examining Evidence of Prior Learning

<table>
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<th>Objective</th>
<th>All Students % mastery</th>
<th>Special Ed. % mastery</th>
<th>Gifted Ed. % mastery</th>
<th>African Am. % mastery</th>
<th>Hispanic % mastery</th>
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WHAT IS BACKWARD DESIGN?

Wiggins and McTighe (1998) suggest a backward design model for planning that begins not with the lesson, but with our expectations for the end result.

There are three basic steps to designing a lesson using backward design:

1. Identify the desired results.
2. Determine acceptable evidence.
3. Plan learning experiences and instruction.
Before planning the lesson, ask, “What are my expectations for my students?” What do you want the end result of the lesson to be? After teaching the lesson, what do you want students to know in terms of factual knowledge, and what do you want them to be able to do in terms of processes? In other words, what do you want the results to be and how will you know that your students have accomplished what you had hoped they would? According to Wiggins and McTighe (1998),

We are not free to teach any topic we choose. Rather, we are guided by national, state, district, or institutional standards that specify what students should know and be able to do. These standards provide a framework to help us identify teaching and learning priorities and guide our design of curriculum and assessments. In addition to external standards, we also consider the needs of our students when designing learning experiences. For example, student interests, developmental levels, and previous achievements influence our designs.

Many teachers begin with textbooks, favorite stories, or proven lessons that they have used in the past and plan from that standpoint. A more effective planning strategy, and one that is more likely to get desired results, begins with the desired results. Then the teacher derives what and how she or he will teach based on those desired results and the evidence needed to prove that students understand the information. When we plan using the backward design model, we are less likely that our students will be involved in a “gotcha” when it comes to assessment time.