

Chapter 2

Clarifying Goals, Constructing Assignments

THE WAY TO SAVE TIME, make every moment count, and integrate grading, learning, and motivation is to plan your grading from the moment you begin planning the course. To do otherwise—to regard grading as an after-thought—is to create wasted time, dead-end efforts, and post hoc rationalizations as students question their grades.

Beginning with this chapter, we follow a course planning process, referred to as assignment centered or learner centered, that has long been recommended by experts familiar with research on learning and teaching (Fink, 2003; Weimer, 2002). In a review of the research on critical thinking, Kurfiss (1988) recommended that rather than begin with, “I must cover . . .,” the instructor begins with, “I want my students to learn to. . . .” Students will still be expected to master facts, concepts, and procedures, but in course planning, the faculty member keeps her eye on the ball: What do I want my students to learn, and how will I structure the course so as to maximize their learning? This chapter leads you through the first steps of the assignment-centered approach to course planning.

Establish Learning Goals

Effective grading practices begin when the teacher says to herself, *By the end of the course, I want my students to be able to. . .* Concrete verbs such as *define*, *argue*, *solve*, and *create* are more helpful for course planning than vague verbs such as *know* or *understand* or passive verbs such as *be exposed to*. If you write, “I want students to think like economists,” elaborate on what that means. How does an economist think? Which aspects of that thinking do you want to cultivate in students? We refer to these statements as *learning goals*, but other possible terms are *learning objectives* or *learning outcomes*.

It may be helpful to think of goals in categories, as in these examples:

Identifying or Describing Content, Vocabulary, and Concepts

- Identify key economic terms.
- Describe important concepts, principles, and theories of psychology.
- Be able to state physics concepts in students' own words, and discuss what the students do not know.

Conduct Research or Solve Problems in the Discipline

- Analyze the feasibility of marketing a consumer item in a foreign country.
- Synthesize information from various sources to arrive at intervention tactics for a client.

Make Ethical Choices

- Follow the ethical practices of the discipline in human and animal research, use of sources, and collaboration.
- Identify ethical issues, and use ethical reasoning to address them.

Expand Worldview; Consider Big Questions

- Exit with a sense of wonder [for a physics course].
- Clarify the student's own values and convictions.
- Develop creativity by making unusual connections, looking at something in a fresh way, noticing unusual relationships or aspects of the topic, pushing beyond surface observations, challenging what others take for granted, or taking a risk with a rhetorical technique, an unpopular idea, or a difficult topic.

Develop Qualities and Habits of Mind

- Form habits of lifelong reading in the field.
- Habitually question statistical data for their reliability and validity.
- Develop appreciation for unfamiliar works of art.
- Appreciate the pig. (Really! This one appeared in a swine management course in the agriculture college of a large state university.)

You may not be able to measure or grade everything that you care about, but at this early planning stage, we urge you to include your most precious goals. The Internet is a wonderful place to find goals: search "learning goals" or "student learning outcomes." Also helpful is Bloom's *Taxonomy of Education Objectives* (1956) and a revision of Bloom's categories in L. Anderson and others (2001).

Construct Major Assignments and Tests

Because grading is perhaps one of the most labor-intensive things faculty do, why spend the time grading student work that doesn't address your most important goals? Try to ensure that any assignments, tests, and exams that you give and grade will facilitate the acquisition of the knowledge, skills, and attitudes that you most want students to learn and retain. Resource 2.1 offers further help on assignments and test construction (see References for full bibliographic information).

Resource 2.1. Sources About Assignment and Test Construction

Achacoso and Svinicki (2004). Provocative essays on how traditional testing methods may be adapted to new emphases on active learning, problem solving, student engagement, new technologies, and students' collaborative work.

Adelman (1989). Oriented to natural science and technology.

Anderson, Bauer, and Speck (2002). Assessment for online classes.

Anderson and Speck (1998). Assessment for learning-centered paradigms.

Bloom, Hastings, and Madaus (1971). On assessing the learning outcomes defined in Bloom (1956).

Boud, Dunn, and Hegarty-Hazel (1986). On laboratory skills.

Carey (1994). General textbook on measurement and evaluation with sections on designing and using multiple-choice, essay, and other types of assessment.

Cashin (1987). Short summary on improving essay tests.

Clegg and Cashin (1986). Short summary on improving multiple-choice tests.

Comeaux (2005). New modes and new technologies for assessing online learning.

Facione (1990). Assessing and teaching critical thinking.

Feinberg (1990). Strengths and weaknesses of multiple-choice tests.

Fenwick and Parsons (2000). Basics of evaluation and test design.

Haladyna (1994). On developing and validating multiple-choice tests.

Huba and Freed (2000). Learner-centered assessment.

Jacobs and Chase (1992). Handbook for faculty on test construction, validity, and reliability; advice for various types of tests. Includes a section on computer-assisted testing.

Linn (1993). Standard reference. Covers theories and principles; construction, administration, and scoring; and applications.

Lowman (1996, 2000). General overview of testing and assignment making, with special attention to motivation.

Mezeske and Mezeske (2007). Creative ideas for unusual kinds of assessment.

Nilson (2003). Pages 191–206 overview basics of constructing assignments and tests.

Rock (1991). How to test higher-order cognitive skills.

Tobias (1994, 1996). Based on previous studies of science departments, science teaching, and science students, recommends new practices for in-class exams in college-level science.

Wiggins (1998). Argues for authentic assessment; critiques traditional testing methods.

Yelon and Duley (1978). Assessing students' field experiences.

Zubizarreta (2009). Using portfolios for learning and assessment.

Construct Assignments That Fit Your Learning Goals

Research indicates that faculty may not achieve a good fit between the learning they say they want and the tests and assignments they actually give:

Faculty often state that they are seeking to develop students' abilities to analyze, synthesize, and think critically. However, research indicates that faculty do not follow their good intentions when they develop their courses. A formal review and analysis of course syllabi and exams revealed that college faculty do not in reality focus on these advanced skills but instead are far more concerned with students' abilities to acquire knowledge, comprehend basic concepts or ideas and terms, and apply this basic knowledge [National Center for Education Statistics, 1995, p. 167].

A combination of careful forethought, knowledge of your students, and analysis of your students' work are the keys here. For example, a mathematician realized his existing testing and grading system was putting too much emphasis on merely getting the right answers. Instead, he wanted his students to solve problems and explain the process, so he added a requirement to some of his assignments and exams: students had to draw a vertical line down the center of a page, dividing it into two columns. In one column they solved the problem. In the opposite column, they wrote in sentences, for each step, what they did and why they did it.

A psychologist with whom we worked wanted students to think critically. She was very proud of herself for giving essay tests—not just multiple-choice tests—in an introductory psychology course with a class of ninety and no teaching assistants. But when, in a workshop, she looked carefully at her grading processes and criteria, she saw that she was primarily grading on mastery of facts, vocabulary, and basic concepts. She promptly instituted a multiple-choice test for that elementary knowledge and refocused her valuable grading and responding time on a take-home essay that elicited synthesis and evaluation from the learners.

Pay attention to what you name your assignments and tests and what those names mean to your students. A sociologist was asking for a “term paper” from his students and getting encyclopedia-based reports that did not meet his goals for the assignment. In a workshop, when asked to define what he really wanted, he realized he wanted a review of the literature, so he began to call it that. Two positive results ensued. First, students no longer imported notions of the term paper as an encyclopedia-based pastiche of paraphrased material on a topic; they had never written a review of the literature before, so they knew they had to listen very carefully to his instructions about the assignment. Second, he was forced to clarify for

them and for himself what he meant and to teach them how to write a review of the literature.

Pay attention also to how polished or finished an assignment must be in order to fulfill your goals. A political scientist has his students construct a set of questions for a major term paper, compile an annotated bibliography, and then write the introduction—but he does not have students complete the whole paper because by the time they have done the annotated bibliography and the introduction, they have learned what he most wanted them to learn.

Make Assignments Interesting to Students

The kinds of assignments and tests you give will influence students' motivation (Svinicki, 2004, 2005). Consider creative kinds of assignments without being carried away by something cute that does not meet your needs. For example, an American historian asked students to write diary entries for a hypothetical Nebraska farm woman in the 1890s. He liked this assignment because it required that students know about economics, social class, transportation, gender roles, technology, family relations, religion, diet, and so on, and it also gave them a chance to use their imaginations. He found that when he was explicit about his desire for them to use the diary to display the breadth of their historical knowledge, the assignment achieved his learning goals in a way that the students enjoyed.

Consider Peer Collaboration

Do not automatically think that every test or assignment must be completed by the individual student in isolation. Consider activities, tests, and assignments that students complete in groups. Cooperation among students is listed by Chickering and Gamson (1987) as one of their classic, research-based "Seven Principles of Good Practice for Undergraduate Education," a finding reaffirmed by recent research (Kuh and others, 2007; Pascarella and Terenzini, 2005). As Astin (1996) puts it, summarizing his comprehensive study of factors that influence college students' learning, "The strongest single source of influence on cognitive and affective development [in college] is the student's peer group. . . . The study strongly suggests that the peer group is powerful because it has the capacity to involve the student more intensely in the educational experience" (p. 126).

Assignments that get students involved with one another and with their teacher may draw on this powerful force. Resource 2.2 contains helpful resources on designing and managing student cooperation and collaboration.

Resource 2.2. Collaborative and Cooperative Learning

Barkley, Cross, and Major (2005). Clear and helpful.

Michaelsen, Knight, and Fink (2004). Creative ideas about how to use student teams in transformative ways.

Millis (2002). Short online summary of ideas for collaborative learning, from a well-known expert.

Millis and Cottell (1998). A standard resource with many good ideas.

Nilson (2003). A fine, clear book on teaching, with a helpful ten-page treatment of student learning in groups.

Speck (2002). Explores issues and recommendations for students' collaborative writing, including both short in-class collaborations and longer projects.

Stein and Hurd (2000). Thoughtful and practical treatment of using student groups.

Weimer (2008). A one-page list of design problems that contribute to students' frustration with group assignments.

The literature suggests these principles for designing assignments that students will complete with peers:

- *Design a task that groups can do better than individuals.* There has to be a compelling reason that the people in the group need one another; otherwise, some of them will rightly think, *I could do this better by myself.* For example, a professor of international marketing designed, for his senior students, a research project in which they had to interview a number of people, consult multiple sources, and develop a number of different aspects of a complex project. The task was simply too long, complex, and time-consuming for one person. In contrast, a professor of a capstone course in business management asked students to conduct a final project that required several different areas of expertise, including technical expertise in financial instruments and statistics. In forming the groups, he polled his students about their previous expertise—courses they had taken or business experience they had acquired. Then he made sure that each team contained at least one person who had the special skills that would be needed.

- *Design a task that is hard to divide into silos.* A business instructor assigned students to write a report with several sections. In some of the groups, the students simply divided up the sections and then never met again. Their final reports were collections of unconnected individual writings, not a coherent and logical development of the issues.

Thereafter, the professor expressly forbade the students to divide the task in this way, suggested several better ways of dividing the work, and asked each team, early on, to report to him their plan for each person's part of the job.

- *Design a task that includes individual responsibility.* Students may feel fear and frustration if their entire grade is dependent on other people's work. Some faculty believe that in their disciplines, students must learn to work in settings where the team as a whole is held responsible for its work. These faculty tell students, "You're learning important skills. I'll help you learn, but in the end, the team's grade is everyone's grade, just as it is in professional life." However, some faculty members want to allow room in their assignments for individual responsibility. A history professor assigned his ten seminar students to use primary sources from the college's archives to produce a volume of short, researched essays on their town's history, with chapters on the town's origins, religion, commerce, politics, and other topics. Each person was individually responsible for one chapter, but each person also sat on an "editorial board" that responded to emerging chapter drafts and established common characteristics for all the chapters. Part of each person's grade was based on the quality of each individual chapter; part was based on how well the students contributed to the quality of the volume as a whole.

Fit Tests to Learning Goals

It's easy to construct multiple-choice and short-answer tests by the content you want to cover. But think also about the learning goals you want to achieve. For example, you might have as a goal that after completing Soil Science 101, students should be able to read and interpret graphic information. The process of linking tests to learning goals has been termed *test blueprinting* (Middle States Commission on Higher Education, 2007; Suskie, 2009).

To "read and interpret graphic information" is an example of a deep learning task as described by Entwistle (2001). Students must succeed at four skills: reading graphic information, processing graphic information quantitatively, interpreting graphic information, and making connections between graphic information and scientific issues (concepts or ethical concerns). Table 2.1 shows how short-answer questions could be matched to aspects of the deep learning goal. The table uses data from a graphic on banana and mango exports (not shown).

We will return to this process of test blueprinting to show how objective test results might be mapped to a rubric (Chapter Four), inform teaching

TABLE 2.1**Learning Goals and Short-Answer Test Question Indicators**

Goals: Students Will:	Test Questions
Read graphic information	For what years does this graph show export data?
Process graphic information quantitatively	True or false: Total banana and mango exports have increased over the past twenty years.
Interpret graphic information	What additional scientific data would you need to know to determine whether Fiji exports more mangoes than bananas?
Make connections between graphic information and scientific issues (concepts or ethical concerns, or both)	True or false: If the current trend continues, mango exports will increase.
	What are two questions you would like to ask about the soil composition in Fiji as related to information we have discussed in class?
	If mangoes have a higher nitrogen content than bananas, what ethical concerns might islanders have about these data?

(Chapter Ten), and contribute to departmental and general education assessment (Chapters Eleven and Twelve). The point here is that a test or an assignment is a valid measurement only if it elicits from students the kinds of learning you want to measure.

Construct a Course Skeleton

Once you have effective tests and assignments in mind, the next step is to plan how they will be placed across the semester. We suggest a course skeleton that shows just the bare bones of the course—the goals and the major assignments. This skeleton shows the course in a unique light for planning, more useful than simply a list of the topics to be covered. The skeleton helps the instructor move from a topic- or coverage-centered approach to an assignment-centered approach. But remember that content is not given up. It gets integrated later in the planning process, after the faculty member has clarified the student learning and the assignments that will teach and test that learning. Content is part of what the students need if they are to reach the goals and do well on the assignment.

To see how the course skeleton works, we follow two history professors, each planning a Western civilization course that is a general education requirement for first-year students.

Our first example is a hypothetical professor who begins to think about the course when her department head says, “Jane, will you teach Western

Civ this fall?" She next checks the catalogue description, which tells the content of the course: Western civilization from 1500 to the end of the Cold War, emphasizing such-and-such themes. Now she plans her fifteen weeks of coverage, saying to herself, *Let's see. I'd like to use Burke and Paine, Marx, Lafore, and Heart of Darkness in addition to the textbook. I'll cover 1500 to 1800 in six weeks and get through the French Revolution by midterm. Then in the second half of the course, I'll cover 1800 to the present.* Her outline of the course might look like this:

Week	Topic
1	Renaissance and Reformation
2	Seventeenth-Century Crisis
3	Absolutism
4	Age of Reason
5	French Revolution
6	Burke, <i>Reflections</i> , and Paine, <i>Rights of Man</i>
7	MIDTERM
8	Industrial Revolution
9	Marx, <i>Communist Manifesto</i>
10	Imperialism
11	Conrad, <i>Heart of Darkness</i>
12	World War I
13	Lafore, <i>Long Fuse</i>
14	World War I, World War II, and the Cold War
15	FINAL

Note that in her conversation with herself, the subject of her sentences is *I*. The most common verb is *cover*. This teacher is already well launched on the topic- and coverage-centered model. Next, she will compose her syllabus. It will go something like this:

Tues., Sept. 5: Social and religious background of the Renaissance and Reformation. Read chaps. 1 and 2 in textbook.

Thurs., Sept. 7: Economic and political background of the Renaissance and Reformation. Read chap. 3 in textbook; Machiavelli handout.

When students first see this syllabus, they are likely to assume that in class, the teacher will tell them about the topics. They might also assume that they need not necessarily read the chapter before they come to class because the teacher will lecture. Thus, the traditional course planning process and the syllabus that results from it can trap both the faculty member and the students into the coverage-centered model.

Assessment in this coverage-centered scheme is also problematic. Once the teacher has filled in the topics she has to cover, she is likely to say to herself, *I'll use essay tests at midterm and final, with questions on lecture, textbook, and supplementary readings. The midterm will cover 1500 to 1800. I'll have a comprehensive final, covering all the course material, but I'll weight it in favor of 1-800 to the present. And I'll assign a term paper due near the end of the course. Students can choose which of the supplementary readings they'll cover in their term papers.*

In this coverage-centered planning process, the tests and papers are added at the end, and their implied role is to test coverage. When asked what she wants students to achieve at the end of the course, this faculty member is likely to say that she wants students to describe events and also to analyze and construct arguments about historical issues. However, her exams and term paper are not likely to elicit coherent arguments with full evidence and answers to counterarguments. Essay exams may be merely what one teacher calls “fact dumps.”

Research indicates that many students experience school reading as a collection of discrete facts to be memorized and regurgitated on tests (Geisler, 1994). Furthermore, some students have taken essay exams that were graded in this way: the teacher went through the student's answer, placing a check mark next to every fact or idea that “counted,” and the student's score was the total of the check marks. The savvy student's way of taking such a test is to dump as much information as possible as quickly as possible. Moreover, if the students see the exam question for the first time when they walk into the class and then have twenty minutes or fifty minutes to write a cogent argument, are they likely to produce a cogent, tightly argued, thoroughly logical essay?

There might also be problems in this class with the term paper. Students might submit cut-and-paste pastiches of library or online sources, following the term paper models they learned in other settings. Pioneering writing-across-the-curriculum researchers Schwegler and Shamon (1982) found that students they surveyed often described the term paper or research paper as a collection and combination of sources, not as an exploration, an analysis, or an argument. The term *term paper* may imply undesirable meanings for your students.

The true failure of the coverage-centered course is the set of assumptions it may foster about what school means:

- Sitting in lecture and taking down what teachers say
- Studying lecture notes and the textbook the night before the test
- Regurgitating the right answers on the test

As part of a research project by Walvoord, McCarthy, and others (1990), a student described to the interviewer her expectations on the first day of a Western civilization course: “I remember going in there thinking, O.K., this is just a basic history course, you know. It’s not going to be a lot of work; you know what I mean. It’s just going to be basically all lecture, and then I’m going to have to restate what he told me on an exam” (p. 99). Another student said, “I haven’t done things like this before. In high school we took the answers straight from the book. I am not in the habit of developing arguments” (p. 102). The coverage-centered course may affirm these students’ notions of the educational process.

To see what an assignment-centered course might look like, let’s examine an actual Western civilization course whose faculty member collaborated with Walvoord to document students’ learning in the class (Walvoord and Breihan, 1990). History professor John Breihan begins by identifying what he wants students to be able to do at the end of the course:

1. I want my students to describe historical events and people
2. Most of all, I want my students to be able to use historical data to develop the elements of an argument:
 - Taking a position
 - Backing the position with evidence
 - Answering counterarguments

As Breihan concentrated on eliciting the kinds of thinking and learning he wanted students to achieve, he decided to assign three argumentative essays, one for each major area of course content. He fashioned questions that would require students to synthesize what they had studied, not simply parrot it. He then turned to the strategic timing of these three assignments in his fifteen-week course skeleton:

Week 1: Emphasizing and modeling argument and counterargument, building foundational knowledge

Week 6: Argumentative essay on Age of Reason, French Revolution

Week 10: Same format on Industrial Revolution and imperialism

Week 15: Same format on World War I, World War II, and Cold War
[this was given as the final exam]

First, notice that the course has no term paper or final essay exam. Instead, Breihan concentrated on three argumentative essays, the last of which became the final exam. He fashioned questions that would require students to synthesize what they had studied and make an argument.

He decided to give students the essay questions ahead of time so they could prepare rather than write hastily to answer a question they had not seen before. For the first essay, to help students achieve independence from merely copying their sources, he asked students to draft their essays in class without notes. Then he responded to the drafts, and students revised their essays out of class and resubmitted them.

Using the assignment-centered approach and focusing first on the essential course skeleton, Breihan selected the type of assignment that he believed had the best chance of eliciting from his students the careful arguments he most valued. He kept the paper load manageable. He structured the writing experiences so that students had the time and conditions necessary to produce coherent arguments. (The skeleton does not include minor assignments such as response to reading, map quizzes, and the like.)

We suggest that you begin course planning in this same way. Your discipline may be quite different from history; you may have labs or clinics in addition to class, for example. But the same principle applies: state what you want your students to learn; then list the major assignments and tests that will both teach and test that learning. Think carefully about the basic types of the classroom assessments you might choose and perhaps a few of their most salient characteristics. For example, if you are planning multiple-choice exams, problem-solving exams, or short-answer exams, include a summary of the skills and knowledge that the exam will test. Even if you have only one assignment (for example, a senior seminar course with one presentation or an art capstone with a single portfolio), do not list the smaller classroom tasks at this time. Stay focused on how each major assignment will enable each student to engage in and excel at the learning that you want him or her to achieve.

Check Assignments and Tests for Fit and Feasibility

As you examine your assignment-centered course skeleton, ask yourself two questions:

1. Do my tests and assignments fit the kind of learning I most want?
2. Is the workload I am planning for myself and my students feasible: reasonable, strategically placed, and sustainable?

Exhibit 2.1 presents two course skeletons: one constructed by a sociology professor and one by a business professor. As a mini-case study in fit and feasibility, examine each of these, and identify what you see as the major potential problem in each.

EXHIBIT 2.1**Problematic Course Skeletons**

Week of the Semester Schedule	Sociology General Education Course, Nonmajors, 100 Level: "I want my students to be able to apply sociological analysis to what they see around them."	Business Management Senior Capstone: "I want my students to make business decisions, using the tools we have been studying."
1 (week)		
2		Written case analysis
3		
4		Written case analysis
5		
6		Written case analysis
7		
8	Essay and objective test (midterm)	Written case analysis
9		
10		Written case analysis
11		
12		Written case analysis
13		
14	Term paper	Written case analysis
15	Essay and objective exam (final)	Written case analysis as final exam

Laying out his course major course assessments in this skeletal way, the sociology professor realized that his tests and exams did not fit well with the learning he most wanted. Students were likely to study all night before the exams, using their texts and class notes, a procedure not likely to elicit thoughtful application of sociological perspectives to what they saw around them. The term paper was also likely to appear to students as a rather detached, meaningless academic exercise.

The professor decided to change his assignments to fit more closely with what he wanted students to learn. He abandoned the term paper and the exams and instead asked his students, every other week, to write a journal in which they applied sociological analysis to something they had observed. However, the word *journal*, as he discovered the next semester, was a mistake: students interpreted the term *journal* too loosely and did not give him the rigorous sociological analysis he wanted. So he renamed the assignment *sociological analysis*. He explained that he wanted students to analyze some event or situation they observed in light of the sociological viewpoints they had been studying.

For example, suppose students had been studying the writings of French sociologist Émile Durkheim. A student attended his cousin's bar mitzvah. For his analysis that week, the student might ask himself, *What would Durkheim make of this?* The professor stated three criteria for the analysis: (1) the student had to summarize accurately the sociological perspective—in this case, Durkheim's views; (2) the student had to include the kinds of specific details that sociologists observe (it did not suffice to say "the food was great"); and (3) the student had to link the theories and the observations in a reasonable and thoughtful way, applying Durkheim's perspective to the bar mitzvah. These changes helped the sociology professor not only fit his assignments and tests to student learning but also spread the workload across the semester.

Now let's focus on the second problematic course skeleton in Exhibit 2.1. When asked about fit, the business management professor affirmed his choice of the case method, saying, "I know there is some controversy in my field about whether the case method really does teach decision making, but it works as well as anything else I know." Although he was happy with the fit, his class size had risen from fifteen to forty in the past few years. His former plan was no longer feasible. He would never get a handle on the paper load.

Colleagues in a workshop asked him, "Can the students write fewer cases?" He answered, "No, there are eight units in the course. I can't drop a unit because students need all of them, and they are all mandated by our business accrediting agency. And if they don't write on each unit, they don't learn it." Then colleagues asked, "Do students need to do a full five-to-eight-page case study each time?" That question was the solution to the workload problem.

The business professor began to ponder whether, for some of the full case studies, especially early in the course, he could design shorter assignments that would help students learn what they needed. He had long recognized that there was a cohort of students in his class who wrote one mediocre case study after another. But the papers were coming at him so fast, and there were so many of them, that he didn't have time to give these students the guidance they needed to improve, so they kept repeating their mistakes.

In particular, he noted that weaker students tended to stay too close to the chronological order of the case materials. Students were given sales figures, a history of the firm, interviews with employees and managers, descriptions of the firm's branches, copies of relevant legislation that governed the firm's operations, and so on, all in deliberately random order. Some students read through this case material, making suggestions along the way but never fully transcending its sequence.

A second but related problem was that students tended to recommend low-level solutions. They would say, “This person and that person need to talk to one another more often,” or “The company should put more resources into its aluminum business,” but they would not see the deeper underlying structural problems.

What could this professor do, in a one-page assignment in week 2, to help students transcend these problems? The professor tried having students write down the most important problem they saw in that week’s case and then list three pieces of evidence from the case out of chronological order. However, he found that students could not yet identify the underlying problem so early in the semester. So instead he focused the first assignments on building-block skills. In the first assignment, in week 2, he asked students to analyze the life stage of the business, a topic they had covered in the textbook. Was the business in question an infant business? A mature business? They had studied the kinds of problems typically associated with these life stages, so he asked them to place the business in its appropriate stage and then discern whether it exhibited problems typical for that stage. In so doing, he propelled them out of a read-and-suggest mode and gave them a larger conceptual framework. He also facilitated their use of the language by which business professionals describe the basic underlying problems of businesses. In the fourth week, he asked them for another short but more complex assignment, and he proceeded this way until the eighth week, when they wrote their first full case analysis. The teacher reported that the cases were now better than before.

A biologist used the same principle in a different form. Weekly lab reports were killing him with the workload, yet like the business teacher, he was reluctant to give up having his students write for each lab. He realized that some of his students were writing twelve mediocre lab reports; they never seemed to get the reports right, and he had to read and grade all those repetitively mediocre works. He finally asked himself, *What do I want?* and answered, *I want students to learn to produce a good lab report—not twelve mediocre lab reports.* So he decided to teach lab report writing more thoroughly and to use short, well-sequenced assignments to build students’ skills. Instead of asking for a full report on each lab, he would require, on the first two labs, that students write just the first section, the Introduction. He would concentrate on helping them do that section well. For the next two labs, he would ask for the Introduction and the Methods and Materials sections, and so on through the parts of the scientific report. He not only cut his paper load that way but was able to give more focused instruction to help his students master one section at a time. By the end

of the semester, they were writing complete reports that he judged to be substantially better than those he had received in earlier semesters.

A literature teacher used a similar principle of substituting shorter and less formal assignments for longer, more formal ones. She came up with the concept of the “start.” For each major unit of the course, she asked her students to do a one- or two-page “start” for an essay of literary analysis. The start might be a thesis sentence that captured the main idea of the planned essay and then an outline. If students did not feel comfortable outlining, the start could be a draft of the introductory paragraphs and a list of other ideas planned for the paper. These starts were treated as informal writing and were discussed in class. About two-thirds through the semester, the instructor asked students to choose their strongest start and begin working it into a polished paper of literary analysis. In this way, she kept them writing on every significant piece of literature, thus enhancing their learning, and she also worked intensively with them, over time, to help them shape good essay ideas. She gave limited ongoing response to their weekly work, partly in class and partly through written comments, but she had to fully grade and mark only one long, finished formal essay.

As you move along in the assignment-centered approach, you may get a little uneasy about content and wonder whether you are giving it up. As Dee Fink (2003) responds in *Significant Learning Experiences*, “No, we have not abandoned course content. We have simply given it a new name, *foundational knowledge*, and then wrapped several other important kinds of learning around it” (p. 57). Rest assured, lectures will still be given, and textbooks will be assigned and read. Students will continue to answer reading questions, complete problem sets, critique primary journal articles, conduct Internet searches, collect and analyze data, ask questions in class, and engage in threaded online discussions. But what we have called the assignment-centered approach increases the chance that the professor and students will move from mere coverage of material to the kinds of evaluation, analysis, application, and synthesis embodied in the best kinds of assignments. The goal is that students, held responsible for these higher goals, will be able to think critically, act responsibly, and become “self-directing learners” (Fink, 2003, p. 161).

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Earlier in this chapter, we stated that grading begins with the first moments of course planning. We suggested that you begin by reminding yourself what you most want students to learn and then adopt the assignment-centered approach as a mode of course planning.

Activity

Now, we invite you to:

1. List specifically what you want students to be able to do at the end of your course.
2. Select types of major tests and assignments that can both teach and test whether students can accomplish those objectives. Consider whether the assignments are interesting to students and whether they can make appropriate use of student collaboration.
3. Compose a course skeleton beginning with what you want your students to learn and then sequencing major tests and assignments carefully. Remember that this course skeleton need not contain every assignment or test—just the major ones.
4. Ask yourself the following questions:
 - Fit: Is there a good fit between the learning I want and the assignments I have chosen?
 - Feasibility: Is this workload reasonable, strategically placed, and sustainable for me and for my students?