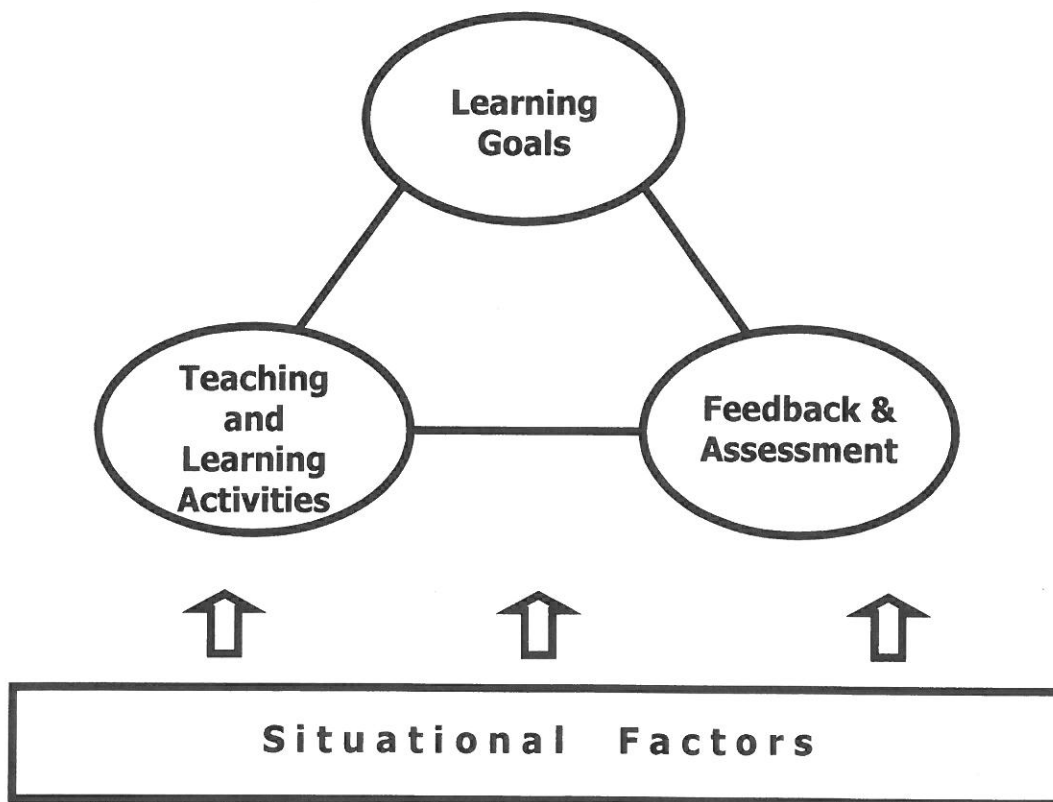


An Overview of Integrated Course Design

The basic components in this model of Integrated Course Design are the same as those found in other models of instructional design: analyze the **situational factors**, formulate the **learning goals**, design the **feedback and assessment** procedures, and select the **teaching/learning activities**. What is distinctive about this model is that these components have been put together in a way that reveals and emphasizes their inter-relatedness. (See Model 1 below)

Model 1

The Key Components Of INTEGRATED COURSE DESIGN



Step 1. Worksheet

SITUATIONAL FACTORS TO CONSIDER

1. Specific Context of the Teaching/Learning Situation

How many students are in the class? Is the course lower division, upper division, or graduate level? How long and frequent are the class meetings? How will the course be delivered: live, online, or in a classroom or lab? What physical elements of the learning environment will affect the class?

2. General Context of the Learning Situation

What learning expectations are placed on this course or curriculum by: the university, college and/or department? the profession? society?

3. Nature of the Subject

Is this subject primarily theoretical, practical, or a combination? Is the subject primarily convergent or divergent? Are there important changes or controversies occurring within the field?

4. Characteristics of the Learners

What is the life situation of the learners (e.g., working, family, professional goals)? What prior knowledge, experiences, and initial feelings do students usually have about this subject? What are their learning goals, expectations, and preferred learning styles?

5. Characteristics of the Teacher

What beliefs and values does the teacher have about teaching and learning? What is his/her attitude toward: the subject? students? What level of knowledge or familiarity does s/he have with this subject? What are his/her strengths in teaching?

Step 2. Worksheet

Questions for Formulating Significant Learning Goals

"A year (or more) after this course is over, I want and hope that students will _____."

Foundational Knowledge

- What key information (e.g., facts, terms, formulae, concepts, principles, relationships, etc.) is/are important for students to understand and remember in the future?
- What key ideas (or perspectives) are important for students to understand in this course?

Application Goals

- What kinds of thinking are important for students to learn?
 - ◆ Critical thinking, in which students analyze and evaluate
 - ◆ Creative thinking, in which students imagine and create
 - ◆ Practical thinking, in which students solve problems and make decisions
- What important skills do students need to gain?
- Do students need to learn how to manage complex projects?

Integration Goals

- What connections (similarities and interactions) should students recognize and make...:
 - ◆ Among ideas *within* this course?
 - ◆ Among the information, ideas, and perspectives in this course and those in other courses or areas?
 - ◆ Among material in this course and the students' own personal, social, and/or work life?

Human Dimensions Goals

- What could or should students learn about themselves?
- What could or should students learn about understanding others and/or interacting with them?

Caring Goals

- What changes/values do you hope students will adopt?
 - Feelings?
 - Interests?
 - Ideas?

"Learning-How-to-Learn" Goals

- What would you like for students to learn about:
 - ◆ how to be good students in a course like this?
 - ◆ how to learn about this particular subject?
 - ◆ how to become a self-directed learner of this subject, i.e., having a learning agenda of what they need/want to learn, and a *plan* for learning it?

Step 3. Worksheet

Procedures for Educative Assessment

1. **Forward-Looking Assessment** Formulate one or two ideas for forward-looking assessment. Identify a situation in which students are likely to use what they have learned, and try to replicate that situation with a question, problem, or issue.

2. **Criteria & Standards** Select one of your main learning goals, and identify at least two *criteria* that would distinguish exceptional achievement from poor performance. Then write two or three levels of *standards* for each of these criteria.

3. **Self-Assessment** What opportunities can you create for students to engage in self-assessment of their performance?

4. **"FIDeLity" Feedback** What procedures can you develop that will allow you to give students feedback that is:
 - **F**requent
 - **I**mmEDIATE
 - **D**iscriminating, i.e., based on clear criteria and standards
 - **L**ovingly delivered

Table 2

LEARNING ACTIVITIES FOR HOLISTIC, ACTIVE LEARNING

	GETTING INFORMATION & IDEAS	EXPERIENCE		REFLECTIVE DIALOGUE, with:	
		"Doing"	"Observing"	Self	Others
DIRECT	<ul style="list-style-type: none"> Primary data Primary sources 	<ul style="list-style-type: none"> "Real Doing," in authentic settings 	<ul style="list-style-type: none"> Direct observation of phenomena 	<ul style="list-style-type: none"> Reflective thinking Journaling 	<ul style="list-style-type: none"> Dialogue (in or out of class)
INDIRECT, VICARIOUS	<ul style="list-style-type: none"> Secondary data and sources Lectures, textbooks 	<ul style="list-style-type: none"> Case Studies Gaming, Simulations Role Play 	<ul style="list-style-type: none"> Stories (can be accessed via: film, oral history, literature) 		
ONLINE	<ul style="list-style-type: none"> Course website Internet 	<ul style="list-style-type: none"> Teacher can assign students to "directly experience _____." Students can engage in "indirect" kinds of experience online. 		<ul style="list-style-type: none"> Students can reflect and then engage in various kinds of dialogue online. 	

Worksheet 1

Worksheet for Designing a Course

Learning Goals for Course:	Ways of Assessing This Kind of Learning:	Actual Teaching-Learning Activities:	Helpful Resources: (e.g., people, things)
1.			
2.			
3.			
4.			
5.			
6.			

Worksheet 2

Sequence of Learning Activities**S e s s i o n s p e r W e e k**

Week	Class	Between	Class	Between	Class	Between
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
Final Exam or Project						

provide careful instructions for students to minimize confusion. Starting with major instructional units, decide how many days to devote to each one, and list the readings associated with each unit. Once you have worked out the larger units, divide them into individual class sessions.

Once you have decided on the major and minor divisions, you can block out the semester's activities. You will need an official university calendar for the semester in which you will be teaching. If you don't receive one in the mail, check with your department secretary for a copy. The calendar specifies the first and last class days and final exam days, indicates holidays and other events that might affect class schedules, and specifies deadlines for drop-add, grade reports, and similar items. Try to avoid having sessions on related material span major holidays. Remember, too, that major exams will take entire class periods to

administer, and it is a good idea not to schedule them for the day before or the day after a major calendar break. Most teachers try to give some kind of test or graded assignment before the drop-add deadline, which is six weeks from the start of the semester, so students can drop the class if they are not doing well. If you count the number of hours that you will actually be in the classroom, you will probably find that the total is less than 40. In other words, you must teach the entire course in what amounts to a single standard work-week.

When you have blocked out the course and are satisfied that its parts are well-integrated, you will be ready to consider the objectives for each class period. Think of each class as having three elements: objectives, methods, and evaluation. It is helpful to create a table for each class as in Figure 1, to plan for each of these elements. This procedure pre-empts the impulse to sit down and auto-

Instructional Planning Chart

Figure 1

Lesson on Stratification and Social Mobility

Objectives	Teaching Methods	Evaluation
<p><i>Students will be able to:</i> Explain social stratification, including its measurement in a given situation.</p>	<p><i>Before class</i> Answer questions in study guide handout, based on the reading assignment in chapters 12 and 13 of the textbook.</p>	<p>Essay questions on Mid-term: the four systems of social stratification, comparison of Marxian and Weberian views on class, comparison of Functionalist and Conflict approaches.</p>
<p>Compare and contrast the arguments concerning the inevitability of stratification.</p>	<p><i>In class</i> Fifteen minute mini-lecture on the four systems of stratification.</p>	<p>Short quiz next class on elements of U.S. social policy raised in class discussions.</p>
<p>Discuss and evaluate a given social policy from the standpoint of the sociology of stratification.</p>	<p>Twenty-minute class discussion on U.S. social policies designed to reduce poverty (based on questions in study guide and readings for today's class). Five-minute summary of important issues raised in the discussion.</p>	
<p>Describe and identify the Functionalist and Conflict approaches to stratification.</p>	<p>Two student presentations to compare and contrast Marx's and Weber's view of class. (20 min.)</p>	
	<p>Fifteen minute mini-lecture on Functionalist and Conflict approaches to stratification.</p>	

Taxonomy of Educational Objectives

Figure 2

1. **Knowledge:** The recall of specifics and universals, involving little more than bringing to mind the appropriate material.
Examples:
 - a. Define the term "short term memory."
 - b. Identify the five major Prophets of the Old Testament.
 - c. Who won the battle of Waterloo?
 - d. Write the equation for the Ideal Gas Law.
 - e. What are the five sections of a research report?
 - f. List the characteristics peculiar to the Cubist movement.
 - g. What are gram-positive bacteria?
2. **Comprehension:** The ability to process knowledge on a low level such that the knowledge can be reproduced or communicated without verbatim repetition.
Examples:
 - a. From a "story problem" description, set up the mathematical manipulation needed to solve the problem.
 - b. Describe in prose what is shown in graph form.
 - c. In one sentence give the point of a written passage.
 - d. From a blueprint describe the article depicted.
 - e. Given an experimental paradigm, state the question to be asked.
 - f. Translate the following paragraph from *Der Spiegel* into good English.
3. **Application:** The use of abstractions in concrete situations.
Examples:
 - a. Relate the principle of reinforcement to classroom interactions.
 - b. Describe an experiment to answer the question of the effects of weight on the fall of an object.
 - c. Determine the centroid of a plane figure.
 - d. Write a short poem in iambic pentameter.
 - e. Train a rat to press a bar.
 - f. Apply shading to produce depth in a drawing.
 - g. Reduce the following circuit by Thevenin's theorem and find the current.
4. **Analysis:** The breakdown of a situation into its component parts.
Examples:
 - a. Identify the assumptions underlying a geometric proof.
- b. Given an argument for the abolition of guns, enumerate the positive and negative points presented.
- c. Analyze the following oscillator circuit and determine the frequency of oscillation.
- d. Given a research design, identify the predictor and criterion variables and the constraints on external and internal validity.
- e. Evaluate the reliability of the following vapor-liquid equilibrium data using the Gibbs-Duhem equation.
5. **Synthesis:** The putting together of elements and parts to form a whole.
Examples:
 - a. Write a logically organized argument in favor of a given position.
 - b. Given a set of data derive a hypothesis to explain them.
 - c. Given two opposing theories design an experiment to compare them.
 - d. Design an overhead condenser for a distillation column which will condense 75.0 percent of the vapor. Specify number and size of tubes, flow rate of cooling water required, and control equipment for maintaining necessary pressure in shell-side of container.
 - e. Construct an original work which incorporates five common materials in sculpture.
 - f. Write a short story relating a personal experience in the style of a picaresque novel.
6. **Evaluation:** The making of judgments about the value of material/methods.
Examples:
 - a. Given an argument on any position, enumerate the logical fallacies in that argument.
 - b. Given the data available on a research question, take a position and defend it.
 - c. Given any research study, evaluate the appropriateness of the conclusions reached based on the data presented.
 - d. In a given clinical situation, select the most reasonable intervention and predict the main effects and possible side effects.
 - e. Evaluate a work of art, giving reasons in your evaluation.
 - f. On the basis of operating data for the past six months, decide whether the company should buy steel used in our manufacturing process from Company A or Company B.

From Svinicki, M. (n.d.). *Handbook for new faculty*. Austin, TX: Center for Teaching Effectiveness, University of Texas at Austin. Based on Bloom, B. (Ed.). (1956). *Taxonomy of educational objectives*. New York: David McKay.



Tools for Teaching

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Creating a Syllabus

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Provide basic information. Include the current year and semester, the course title and number, the number of units, the meeting time and location. Indicate any course meetings which are not scheduled for the assigned room. List your name, office address (include a map if your office is hard to locate), office phone number (and indicate whether you have voice mail), email address, website URL, fax number, and office hours. For your office hours, indicate whether students need to make appointments in advance or may just stop in. If you list a home telephone number, indicate any restrictions on its use (for example, "Please do not call after 10 P.M."). Include the names, offices, and phone numbers of any teaching or laboratory assistants. (Sources: Altman and Cashin, 1992; Birdsall, 1989)

Describe the prerequisites to the course. Help students realistically assess their readiness for your course by listing the knowledge, skills, or experience you expect them to already have or the courses they should have completed. Give students suggestions on how they might refresh their skills if they feel uncertain about their readiness. (Source: Rubin, 1985)

Give an overview of the course's purpose. Provide an introduction to the subject matter and show how the course fits in the college or department curriculum. Explain what the course is about and why students would want to learn the material.

State the general learning goals or objectives. List three to five major objectives that you expect all students to strive for: What will students know or be able to do better after completing this course? What skills or competencies do you want to develop in your students? (Source: Johnson, 1988)

Clarify the conceptual structure used to organize the course. Students need to understand why you have arranged topics in a given order and the logic of the themes or concepts you have selected.

Describe the format or activities of the course. Let students know whether the course involves fieldwork, research projects, lectures, discussions with active participation, and the like. Which are required and which recommended?

Specify the textbook and readings by authors and editions. Include information on why these particular readings were selected. When possible, show the relationship between the readings and the course objectives, especially if you assign chapters in a textbook out of sequence (Rubin, 1985). Let students know whether they are required to do the reading

before each class meeting. If students will purchase books or course readers, include prices and the names of local bookstores that stock texts. If you will place readings on reserve in the library, you might include the call numbers (McKeachie, 1986). If you do not have access to the call numbers or if it makes the reading list look too cluttered, give students as their first assignment the task of identifying the call numbers for the readings. Let students know that this will make it easier for them to locate each week's readings, and more importantly, it will give them practice in using the library's electronic resources.

Identify additional materials or equipment needed for the course.

For example, do students need lab or safety equipment, art supplies, calculators, computers, drafting materials? (Source: Altman and Cashin, 1992)

List assignments, term papers, and exams. State the nature and format of the assignments, the expected length of essays, and their deadlines. Give the examination dates and briefly indicate the nature of the tests (multiple-choice, essay, short-answer, take-home tests). How do the assignments relate to the learning objectives for the course? What are your expectations for written work? In setting up the syllabus, try to keep the workload evenly balanced throughout the term. (Source: Lowther, Stark, and Martens, 1989)

State how students will be evaluated and how grades will be assigned. Describe the grading procedures, including the components of the final grade and the weights assigned to each component (for example, homework, term papers, midterms and exams). Students appreciate knowing the weighting because it helps them budget their time (Altman, 1989). Will you grade on a curve or use an absolute scale? Will you accept extra-credit work to improve grades? Will any quiz grades be dropped? See "Grading Practices."

List other course requirements. For example, are students required to attend an office hour or form study groups?

Discuss course policies. Clearly state your policies regarding class attendance; turning in late work; missing homework, tests or exams; make-ups; extra credit; requesting extensions; reporting illnesses; cheating and plagiarism. Include a description of students' responsibilities in the learning process and the professor's and graduate student instructors' responsibilities. You might also list acceptable and unacceptable classroom behavior ("Please refrain from eating during class because it is disturbing to me and other students").

Invite students with special needs to contact you during office hours. Let students know that if they need an accommodation for any type of physical or learning disability, they should set up a time to meet with you to discuss what modifications are necessary.

Provide a course calendar or schedule. The schedule should include the sequence of course topics, the preparations or readings, and the assignments due. For the readings, give page numbers in addition to chapter numbers--this will help students budget their time. Exam dates should be firmly fixed, while dates for topics and activities may be listed as tentative. Provide an updated calendar as needed.

Schedule time for fast feedback from your students. Set a time midway through the term when you can solicit from students their reactions

students.

List important drop dates. Include on the course calendar the last day students can withdraw from the course without penalty.

Estimate student work load. Give students a sense of how much preparation and work the course will involve. How much time should they anticipate spending on reading assignments, problem sets, lab reports or research?

Include supplementary material to help students succeed in the course. For example consider providing one or more of the following:

- Helpful hints on how to study, take notes or do well in class
- Glossary of technical terms used in the course
- References on specific topics for more in-depth exploration
- Bibliography of supplemental readings at a higher or lower level of difficulty, in case students find the required text too simple or too challenging
- Copies of past exams so students can see at the beginning of the term what they will be expected to know at the end
- Information on the availability of videotapes of lectures
- A list of campus resources for tutoring and academic support, including computer labs
- Calendar of campus lectures, plays, events, exhibits, or other activities of relevance to your course
- Online Resources that may be helpful to students

Provide space for names, telephone numbers, and email addresses, of two or three classmates. Encourage students to identify people in class they can contact if they miss a session or want to study together. (Source: "What Did You Put in Your Syllabus?" 1985)



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