An Overview of How to Design Instruction Using Critical Thinking Concepts

The Logic of Instructional Design

Instructional design involves two deeply interrelated parts: structures and tactics. In this article we focus on structures. Structures involve the "what" of the course: What am I going to teach? What content am I going to teach? What questions or problems will be central to the course? What concepts will be fundamental? What amount of information will students need to access? What point of view or frame of reference do they need to learn to reason within? What is my concept of the course? What overall plan shall I adopt? What requirements shall I set up? What grading requirements? What performance profiles? etc...

Tactics involve the "how": How am I going to teach so as to make the structures work? How am I going to get the students to be actively involved? How am I going to get them to develop insights, understandings, knowledge, and ability that are essential? How am I going to get them to learn to "reason" their way to the answers to questions in the field?

Five Important Structural Determinations That Set the Stage for Everything Else

We suggest that for every course you teach, there are five defining dimensions you should carefully think through. You should note that each of these "structures" have a "tactical" dimension to them. That is, something of the "how" (you will cover) is implicit in these decisions as to "what" (you will cover). They are:

- your concept of the course,
- the general plan for implementing that concept,
- the requirements the students must meet,
- the grading policies in the course (when applicable), and
- performance profiles (that correlate with the grade levels).

The students, in other words, should know from the beginning what in general is going to be happening in the course, how they are going to be assessed, and what they should be striving to achieve. To put it yet another way, the students should know, from the beginning, what they are going to be doing most of the time-this should not be passive listening-and what exactly is expected of them in that doing. The aim of the course should be carefully spelled out. It is usually helpful to contrast the aim with that of standard didactically taught courses. It is useful to ask oneself what kind of reasoning

is going to be central to learning the content (historical, mathematical, biological, literary, etc...)

In addition to a written syllabus, the students should be given an orientation to the mechanics of the course (as you were given an orientation to the mechanics of this seminar). This orientation should include an oral explanation of the concept of the course, the plan, the requirements, the performance profiles and any other salient features of the design. The overall logic of the course should be made as clear as possible. You might consider using a "student understandings" sign-off sheet (a model will be presented to you).

Studies have indicated that, on average, 90% of the decisions made about instruction are a result of the textbook chosen. But textbooks should not drive instruction, since most textbooks are not structured to enhance critical thinking in the subject. Our decisions made about the structure and tactics of our courses should be a result of our concept of the course, of our most fundamental objectives in teaching the course.

Once we have the most basic structure (and substructures) of our course decided, we must focus on the tactics we will use to drive that structure home, to enable that structure to be effectively achieved. One can divide tactics in two different ways. The first way is into daily tactics (what we will be doing everyday) and episodic (what we will do from time to time). The second way to divide tactics is into complex and simple. Socratic instruction, teaching students how to read critically, devising an oral test format, developing tactics for student self-assessment: these are all complex tactics. As the complex ones have multiple parts and often require an extended period of time to be carried out, they are generally harder to master. On the other hand, most simple tactics, like calling on students who don't have their hands up, asking that students summarize what other students have said, requiring students to state the purpose of an assignment or to express the question on the floor-are rather easy to learn and can take up much less time.

To illustrate these two distinctions, some instructors may choose to do some Socratic instruction every day, or simply to use it episodically, or just to lead off units. Designing an instructional day around an activity (with Task, Purpose, Question, and Tactic-see seminar samples) is another complex tactic, but it is one that may be used daily. Complex daily tactics may involve a variety of different simple tactics from day to day-see the teaching tactics listed in your workshop assignments.

In sum, instructional design involves a teacher thinking about instruction in both structural and tactical ways. Overall structural thinking-for example, about the concept for the course-can help free a teacher from the Didactic Model into which we have been conditioned and the ineffective teaching that invariably accompanies it. Simple and complex tactical thinking can provide the means by which we can follow through on our structural decisions in an effective way. Our teaching will not be transformed simply

because we philosophically believe in the value of critical thinking. We must find practical ways to bring it into instruction, both structurally and tactically.

{This article is adapted from the resource: *Critical Thinking Basic Theory and Instructional Structures*.}