



Improving Academic Teaching

Organization & Clarity

throughout my lecture. Beginning undergraduates do not need to be exposed to the intricacies and complexities of a discipline; indeed, introducing them to these will only confuse them. Introductory courses are best taught by focusing on the fundamentals, using generalizations, and avoiding too many exceptions to the rule."

A History professor concurs "I tell undergraduates, 'Here is what I think you can say is true, despite all the past and current debates of historians.' I don't go into those debates because they are complex and undergraduates are not sophisticated enough about historiography to appreciate them."

4. Rephrase explanations of major points several times

"Repetition leads to learning" one Science professor says "I repeat major points several times from a di erent direction or in di erent words"

"No single explanation will be dear to all students," points out a professor of Business Administration. "By using di erent language or di erent examples, I maximize the chances that every student will eventually understand."

A Political Science professor also consciously alters the words he uses "I have a tendency to say things twice, first formally and then colloquially."

An Engineering professor reports that he develops the same point in two or three di erent modes, e.g., mathematically, verbally, and graphically.

5 Uselots of concrete or memorable examples

Most excellent teachers agree that the choice of examples is very important, favoring those that are anecdotal, personal, or humorous because they find that students tend to remember these best. "I use concrete examples wherever possible," says an Anatomy professor. "For instance, I describe a particular body organ by comparing its size or texture to an object familiar to students, like a walnut."

An Economics professor also places importance on using concrete examples of interest to students "I use specific examples whenever I can. In talking about inflation and price controls I'll use the Prince tennis rackets or Sony Walkmans rather than apples or a general product."

A Forestry professor uses the same strategy. "In talking about acre-feet of water, first I define it formally and then I give several examples which will help them appreciate the amount of water represented, such as 'equivalent to 77,000,000 ice cubes' Students tend to remember examples like that."

6 Advnowledge the di culty of concepts students are likely to find hard to understand

One Engineering teacher says, "I consciously cue students to the most di cult ideas by saying such things as, 'Almost everyone has di culty with this one, so listen closely.' Because the level of

students' attention varies throughout the hour; it is important to get everyone listening carefully

12 Reread the texts assigned to students

Teachers in several disciplines report that a major part of their preparation is rereading the texts assigned to students "I reread the text assignment over the weekend not only to ensure that it is fresh in my mind," says one History professor, "but also so I can acknowledge the parts I found dull, undear, or especially important."

An English professor says, "No matter how well I think I know the literary texts assigned, I reread them very carefully so that they are vivid in my mind."

An Anatomy professor reports that he rereads the text just after he finishes his lecture notes "I always check my lecture notes against the text a final time to be sure that I am complementing rather than repeating the text and to note any disagreements I have with its author."

13 Audit the same or related courses taught by colleague's

One faculty member in Computer Science reports that he makes it a habit to audit other faculty members' courses "Particularly if I know I am scheduled to teach a course for the first time, I make a point of taking the course from the best instructor available. I attend all of the class sessions and usually do most of the homework. I find this a much easier way to do some advanced preparation than sitting down and reading several textbooks. It forces me to do some preparation each week."

"Taking the course from a colleague not only provides a good review of content, but I often pick up two or three good teaching techniques as well. Later, I do additional research and design the course my own way, but I have the great advantage of building on a model created by a colleague."

14 Teach the same course the next semester:

One Chemistry professor frequently teaches the same course "back to back" in two consecutive terms "T is way I can maximize my learning from mistakes I have made. I make notes to myself about what went well in the course and what didn't as it goes along. For example, I might make a note saying 'Don't forget to emphasize this point before that point.' Executing these suggestions to myself the very next semester reinforces my own learning."

15 Use an abbreviated set of lecture notes

Many excellent teachers describe a two-stage process in the preparation of their lecture notes A History professor, for example, says "First, I write out a detailed set of lecture notes over the weekend or the night before class T en, on the morning before class, I take about an hour and a half to reduce these notes to a brief outline on index cards." T e professor prepares this way because, "Students like structure, but they do not like terribly formal lectures delivered verbatim. Once I have worked out fully what I want to say, I communicate it more forcefully and more informally from a small number of index cards."

A professor of History explains, "I come to class a few minutes early and write three to five objectives on the board. As class begins I present my objectives for that day for that class. During my presentation I make specific references to my objectives as I go along T is way students know what I'm thinking about while I'm talking T ey also learn why I think certain points are important."

21. Structure a lecture as you would a journal article

my students having to guess what is important if I can tell them."

31. Use dramatic pauses and repetition to drawstudents' attention to the main ideas

Several teachers stress the need for repetition (using dienent language or examples) to communicate the most important points in their lectures

Dramatic pauses are another way to highlight important ideas A History professor says that she used to tell students "T e main point is..." but she said it in a matter-of-fact manner; almost as an aside. "I discovered that many of my students did not get the message," she explains "Now I indicate a main point by pausing to get my students' full attention and then saying emphatically, "T is is the really important consideration!" T en I pause again to be sure they are prepared to write it down. If not, I restate the importance of what is to follow."

A Sociology professor also uses dramatic pauses and a sense of timing to stress the most important points in his lectures "I structure each lecture to build up to the crucial point of the topic," he says "T en I announce it in a sweeping manner, timed to occur at the end of the dass period."