Teaching by Lecture: Saving the Sage on the Stage

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Introduction

Let me stipulate at the outset that teaching economics takes place in offices, hallways, during meals, even in a teacher's home. No doubt the most important teaching economists do takes place on the pages of books and journal articles. But I plan to talk about the old-fashioned lecture method and describe some components of good classroom lectures in the field of economics.

The Lecture

First, good lectures need stories.

For veteran teachers, some lecture topics in our classes will be the same from year to year, but the content and organization must be kept fresh for a lecture to work well.

What provides the input for keeping lectures fresh? *Examples* that bring relevance and fresh perspective to the lecture.

If our lecture notes pivot on stories about the Vietnam War, the Beatles, or Ronald Reagan, or William Clinton, they probably need a pedagogical facelift. I have to step outside my own cultural boundaries, at times, in making references to fashion or music. Stories change. I have deleted stories about the OPEC cartel, when it has been in disarray, and resurrected the story when OPEC has revived. Similarly, references to products need to be updated from time to time as well.

Sometimes the best stories are those that run in the opposite direction from the preconceptions of our students. This is one of the ways Jesus taught. Jesus would begin, "You have heard it said," and then continue, "but I say unto you. . . ." We can tell stories using that method: "You have heard that the world works this way . . . but economic analysis says unto you"

When I am teaching the law of diminishing marginal utility, I go to the Bible for the counter-theoretical story of the shepherd who rejoiced inordinately over finding a lost sheep, which was the 100th sheep, and according to the parable rejoiced more over the last incremental sheep than over any of the 99 sheep who were safely in the fold. And I inquire: does this violate the law of diminishing utility?

If I am teaching the economics of tying, I use the story of IBM and punch cards, and I take a punch card to class to tell them a story – because nobody in today's student generation has ever seen a punch card, even though a few years ago there were 10 billion of them in use.

To develop and maintain informative and captivating examples involves watching for them in reading material that can range from scholarly journals to out-of-town newspapers

encountered while traveling. One surveys these sources always raising the question: is there a useful story here to weave into a classroom lecture?

Most professors keep files on research ideas. It took me too many years as a faculty member to realize I needed just as systematic a file on teaching ideas. Now when I sit down to revise a lecture, I am not wondering where I'll find new material. I am sifting through material that I have already accumulated and filed.

Refrigerators are like lectures, or else lectures are like refrigerators. I'm not sure which. Both need to be regularly emptied of items that have gone stale and to have fresh items put in. I did not catch on until well into my teaching career that the best time to evaluate a lecture and decide what needs replacing often is right after the lecture is delivered, and not a year or two later, when one next teaches that topic area. It isn't enjoyable to revise a lecture right on the heels of giving it. But unless the lecture turned out to be brilliant, there is never a better time to identify that lecture's weak spots than just after giving it.

How does one know if a lecture was brilliant, requiring no future revision whatsoever? William Breit once proposed to me a tangible benchmark. A brilliant lecture, one you can file away unrevised, is one where students respond by carrying you out of the lecture hall on their shoulders and parade you around the campus. Most of us probably only have this happen one or two times per year.

Some professors will bleed and die over academic freedom. I am much in their debt. Good teaching requires a willingness to bleed and die over audio and visual technology, over lighting, and over classroom ventilation. It may seem banal to say, but students in a classroom need to *hear* the lecture. Part of the *hearing* process is the result of good capital equipment. Part comes through eye contact. Part comes through diction.

Watching my mentor, Walter Adams, began the process of teaching me about diction. Good diction is as important as having good stories in the teaching production function. If anyone wonders about the quality of his or her lecturing clarity, there is a reliable, albeit sobering test, that can be self-administered. Record three or four of your own lectures and then listen to them. Awkward speech patterns, such as slurred words and interspersed *uhhhs* between sentences, will be so embarrassingly revealed that a cure usually follows this examination.

A parenthetical remark not on the mouth but on the eyes. One area of classroom teaching I wish I were better at is eye contact with my students. The best lecture ever in my classroom was by Alpheus T. Mason, a political scientist from Princeton who spoke on Louis Brandeis to my antitrust class. Let it be said: It is hard to give an uninteresting lecture on Brandeis. But what struck me about Professor Mason was his eye contact with the class. He told me after the lecture that he took one student at a time, and looked him or her in the eye for about 15 seconds as he lectured.

My colleagues outside of economics can restrain their enthusiasm for the analogy of students as consumers. So I try to avoid that analogy outside my own tribe. Nonetheless, a good lecture pays attention to student preferences, and is influenced at least in part by what students

want to learn. I don't want to take this point too far. At least in an introductory economics course, most students don't know their preference function. Let me suggest two feedback mechanisms.

Number one is to ask students on the first day of class to submit in writing or by email to the class homepage what *they* want out of the course. You might also tell them what *you* hope they will get out of the course. For example, I tell my students I hope they will be able to understand a newspaper article on economics better than the journalist who wrote the article. Occasionally, during the lecture, I show them how this objective is being met.

From time to time, I read one of *their* objectives in class and show how the course material is meeting that student's preferences. Sometimes I may explain why I cannot accommodate a particular written request from a student: such as this one from the last semester, "I hope to learn in this economics class how to avoid paying taxes."

The second feedback device is to ask students, about one-third of the way through the term, to respond in writing to this question: "What is the one thing you want me to do to improve the course?" I never ask that question without adding another question as a reminder to students that the success of the course is also their responsibility: "What is one thing *you* could do to improve the course?"

The feedback data that faculty traditionally receive (at least at my institution), namely, end-of-the-semester course evaluations, arrive too late to improve that course. Soliciting feedback early on enables mid-course corrections. Moreover, the signal this gives to students is always positive, particularly if the information is acted upon in a way that is transparent to students afterwards.

Let me say a few words about lecturing to large classes. I realize the term "large" is elastic. At some schools, an economics class with 50 students is large; at others, that would be small. I consider any class with more than 75 students to be large. Each fall I have over 1000 students in micro principles.

Preparing for large lecture classes isn't all that different from preparing for small classes, with one major exception. It's best to be hyper-prepared for a large lecture. The larger the group of students, the less forgiving they are of mistakes and screw-ups.

During a large lecture class, if you get lost in the middle of a proof, discover you left a page of notes at the office, or do not have a replacement bulb when the overhead projector blows, or the Powerpoint projector isn't working, students will leave you - emotionally, and even physically. Students today are used to video images, video presentations that flow seamlessly.

This means teachers in large lectures have to "own" the material they are presenting that day. I teach large classes on Tuesdays and Thursdays in the fall semester. Particularly when I was new to this, I rarely scheduled anything that would be mentally engaging on Monday and Wednesday nights. I wanted to be free to be thinking about the material I planned to give the next day.

My lectures begin at 11AM on Tuesday and Thursday. Even after forty years at this, I will not schedule anything those mornings during the hour and a half before class. That time primarily is for going over the lecture material -- not preparing the lecture -- but just going over it in my mind. Sometimes, and I know I am not alone in this, I find in the midst of this immersion a marginal change, a small detail perhaps, that, I think, makes the lecture better. Mies Van De Rohe said about architecture, "God is in the details." This could be said, as well, about lecturing to large audiences of students.

A parenthetical remark on the use of humor in lecturing to large classes: one does not have to be a comedian to teach a large lecture class successfully in any subject. It is neither a necessary nor a sufficient condition. Oscar Handlin, one of Harvard's greatest teachers, offers proof of this. He wrote, "Never did I make an effort to amuse or entertain. All such techniques seemed to me to diminish from the seriousness of our enterprise, to divert attention from the ultimate goal." (1996, p. 52)

Humor can be a helpful classroom lubricant. But in an age of political correctness and heightened sensitivities, the use of humor has its risks. The safest use of classroom humor today is when the teacher is the object of it.

If you worry you need a joke to be accepted by students, you should forget all about jokes. Put a good quotation on the board or screen each day and identify the author. That can be the class opener in a large lecture class, and probably will do more for the cause of education than a joke.

I also have a tendency to overstatement in large lectures that I don't think I have in smaller classes. I find it more difficult to deal with nuances in large lectures. I'll be curious whether anyone else has this concern. Before I hang up my spurs, or turn in my overhead projector and microphone, I hope to improve in at least these two areas: eye contact and overstatement.

One of my colleagues in the Department of English at the University of Virginia encountered the following sentence written by a student in response to an exam question: "To Hawthorne, adultery was a major digression." This was a student who had read *The Scarlet Letter*, but the student did not *own* the word *digression* (or the word *transgression* for that matter). And this brings me to my next point.

We like to think of ourselves as teaching a particular discipline or a way of thinking. But, we also are teaching a vocabulary. Just as it is important that my students learn the economic way of thinking, it is important that they learn the jargon of the discipline. As students learn new vocabulary, they can relate it to topics encountered in other classes. Giving students an ownership of the vocabulary, through careful and congenial way we use language in our lectures, inspires students toward what Sidney Hook associated with great teaching: students who have a lasting appreciation of the subject. Most students who show up in our courses will not become specialists in our particular discipline.

But if these students take away a continuing sense of the subject, it will be because they

own a portion of our discipline's terminology as a memory peg on which they hang the principles of the subject.

Demand and supply, equilibrium, liquidity preference, highest valued opportunity foregone, invisible hand, conspicuous consumption, utility maximization, sunk costs, negative externalities, time value of money, asymmetric information, bounded rationality, residual income claimant and others: to me these are memorable terms in my discipline.

So I encourage you to teach words. New words. I take some pride when I hear one of my students no longer saying, "Did you hear what happened outside the dorm last night? There was a robbery!" but instead, after taking an economics course, saying, "Did you hear what happened outside the dorm last night? There was an *involuntary wealth transfer*!"

Let me say, almost as a footnote, that I subscribe to the monthly periodical *Teaching Professor* because it sometimes gives me ideas for the way I teach.

When all is said and done, there are two basic *styles of classroom lectures*: Apollonian and Dionysian. Apollo, of course, was the Greek sun god. He thought rationality was a virtue. Dionysus was the Greek god of wine. He liked ecstasy. In today's world, Apollo would be the god of prudent consumption, saving for the future, and hard work. Dionysus would be the god of sex, drugs, and rock and roll.

Apollonian teachers identify with their discipline. Dionysian teachers identify with their students. Apollonian teachers want to be respected by their students. Dionysian teachers want to be liked by their students. An Apollonian teacher lectures with rectitude and understatement; a Dionysian teacher with flair and exaggeration. The Apollonian's examples are just outside the student's current experience. The Dionysian's examples are hip and relevant.

It is tempting for those new to teaching to think that professors who inspire their students are those with a teaching style that mimics students' tastes, in their music, their humor, their attire, their language, or what they ingest. But good teachers have come in all styles and points along the Dionysian-Apollonian pedagogical spectrum.

The good teacher is one who chooses a lecture style somewhere along this spectrum that fits his or her persona. There is no one style that fits all. What *is* common to all good teachers is a mastery of the material. Good teachers, without exception, know their subject, *and* they like to talk about it.

We live in a therapeutic culture. I can restrain my enthusiasm for this, but I cannot change or endogenize the spirit of the age. Students who hear us lecture also want to believe we care, not just for the material, but for them.

I have the reputation as teaching tough courses but caring for my students. Part of my reputation for care comes from expenditures of time; part comes from simply signaling a willingness to care. Signals of a teacher's concern may include: allowing students to call the teacher at home (I find students value this option; but very few ever exercise it); being available after a lecture as long as there are students with questions (this is the best way for me to learn

how a lecture was received); and not ending office hours until the student queue is exhausted (this may require a special dispensation if there is a family which might be affected).

But I have limits to caring. Recently a student of mine told me she was transferring to Cornell University and she asked me to sit down with her and go through Cornell's catalog to help her select courses. I declined that opportunity. Last semester, I did not respond affirmatively to a student's request that I help with her income tax forms, notwithstanding her assurance that I "could do the job in no time."

A teacher's ability to deliver a good lecture is not derived from anything very fancy or costly except in the form of instructor time and diligence. For most teachers, good teaching does not occur because of a natural or supernatural gift for teaching. Most good teaching does not come from inspiration but rather from perspiration, or what is sometimes called sweat equity. The perspiration is the result of lots of preparation, directed to the most visible part of teaching, the lecture, and to the subterranean components, like test preparation.

A commendable lecture requires no special flair that the teacher must possess; and I know of no evidence that it requires radical changes in educational technology. I say this on the basis of some reading about teaching and on the basis of a non-random sample of one. My lecture classes are low-tech, not high tech: I use a mike to be heard; an overhead projector, and now clickers.

Lionel Trilling once described college teaching as "a lawful seizure of power." That has not been my experience. For years, I would be sick to my stomach before giving a micro principles lecture on a topic I had taught several times before. I am a shy person, I always have been and I suppose I always will be, and I don't think my colleagues think of me as *the life of the party*. There is no false modesty in my saying that if I can be seen as a successful lecturer, so can most anybody.

Alfred North Whitehead, a classroom immortal, said that when he lectured, he experienced "a curious mixture of being immensely at ease *and* stage fright (Brennan 1981, p. 48)." Isn't that remarkable? Every teacher I know and admire relates to this "curious mixture of being immensely at ease and stage fright." I take comfort in these words. If Alfred North Whitehead was this way, perhaps those of us who are mere mortals in the classroom can be permitted the same mixture of comfort and anxiety.