On Teaching

Volume III
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Faculty Teaching Excellence Program
University of Colorado at Boulder

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Faculty Teaching Excellence Program

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Thank you to my colleague, Dr. Nancy Mann, University of Colorado at Boulder, University Writing Program. The depth and breadth of her knowledge in copy editing and her capacity for congeniality abound.
Prefatory Note

Telling is not teaching, listening is not learning; teaching-learning is guided doing. This is hardly a new idea. In their 1924 book *An Introduction to Education*, G.W. Fraiser and W.D. Armentrout (who, interestingly enough, were education professors in Greeley, Colorado) expounded on the then fresh ideas of John Dewey. They said that “education is growth . . . and is the continuous reconstruction of experience.” That is, education is an active process, not simply the collecting of facts.

When we are at our best as teachers, we use our experience and wisdom to guide our student’s process. How is this done? The series *On Teaching* is predicated on the idea that successful teaching is not an arcane art one is born with, but rather a craft to be mastered. These essays are intended to speak to that craft, discussing how the individual writers approach various aspects of their crafting.

Being a guide is hard, expert work; telling is easy. One talent that differentiates experts in a field from novices is the ability to recognize and to generate patterns. Some of those patterns are what these essays are about. They examine many interrelated concerns, from curricular design, to classroom performance, to introspective evaluation, emphasizing that the teaching-learning relationship is a rich, multifaceted, multidimensional web. We are not dealing with some easily modeled, linear system. To pull out any one part and try to make it the essence misses the power that resides in the connections.

We hope that these thoughts of some of our finest faculty connect with yours, thereby enriching the whole of our academic community, and the patterns that we demonstrate to our students.

Professor Mark Dubin

*Associate Vice Chancellor for Academic Affairs*
Dedication

This volume of *On Teaching* is dedicated to faculty and students of the University of Colorado at Boulder. In particular, it honors faculty who are remembered by students because they were inspired, motivated, or given courage by something their teacher did or said during the experience of learning.
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Introduction

In her autobiography *One Writer's Beginnings*, Eudora Welty says: "As certain as I was of wanting to be a writer, I was certain of not wanting to be a teacher. I lacked the instructing turn of mind, the selflessness, the patience for teaching, and I had the unreasoning feeling that I'd be trapped. The odd thing is that when I did come to write my stories, the longest list of my characters turns out to be schoolteachers. They are to a great extent my heroines."

Great teachers are, indeed, our heroes and heroines. In the following book, the third volume of *On Teaching*, we see some reasons why. In these pages, successful teachers examine in diverse ways the qualities that Welty cites as necessary for good teaching: patience, selflessness, the instructing turn of mind. As they examine these qualities, they show how wrong the young Welty was to fear that teaching would be a sort of trap. They show that it can be, for both teacher and student, the highest form of liberation.

Artists often take as their subject something familiar, something we take for granted. Then they help us see it from a new perspective, as if we were seeing for the first time. In a similar way, good teachers connect with us, astonish us, give us the courage to undertake things we are not sure of. Like artists, they show us a world that is new and exciting.

Eventually, Eudora Welty came to create imaginary teachers who do just that. The very real teachers who write for this book also try to do it, both in their own teaching and in the essays they have written for this volume.

All of them teach at the University of Colorado, where a renaissance of teaching is currently underway. At Colorado, teachers in every field are beginning to share with each other their deepest thoughts about teaching. They are opening the doors of their classrooms to their colleagues, observing each other in action, advising each other in a shared attempt to improve. They are developing revolutionary new courses. They are attending seminars on teaching given by faculty colleagues. They are reaching out to students in a renewed attempt to discover what—and how—students want to learn. Through programs such as the Faculty Teaching Excellence Program and the President's Teaching Scholars Program, they are redefining the art of teaching.

As they do so, they are showing that good teaching can have all the excitement of a good short story. The kind of story, say, that Eudora Welty
wrote. The kind that she chose to people not with cowboys or pirates or Amazons or goddesses but with teachers.

She knew, I think, where the real excitement lies.

Mary Ann Shea, Director
Faculty Teaching Excellence Program
and the President's Teaching Scholars Program
Confessions of a Mask: A Personal View of Teachers and Teaching

J. E. Rivers

Editor's note: At the University of Colorado the highest recognition for teaching is the title “President's Teaching Scholar.” In March 1992 a project was begun to interview the recipients of this title concerning their views on teaching. In a series of tape-recorded interviews, each is being asked the same set of questions about teaching along with any other questions that may naturally arise during the exchange. Eventually, the interviews will be compared to see what agreements they reveal—or fail to reveal—about teaching. In addition to offering inside views of teaching, they have a certain inherent interest as intellectual dialogue and personal narrative. Each begins with the question “What makes a good teacher?” Every subsequent question elaborates in some way on that one.

Following are excerpts from one of the first interviews. J. E. Rivers is Professor of English at the University of Colorado at Boulder and a faculty member in the University Writing Program. Selected as a President's Teaching Scholar in 1989, he has won two other awards for teaching and two for writing. He was interviewed by Mary Ann Shea, director of the Faculty Teaching Excellence Program at the University of Colorado at Boulder, and Laura Goodwin, a President's Teaching Scholar and Professor of Education at the University of Colorado at Denver. To prepare the tape-recorded interview for publication, he rearranged some sections, revised and expanded others, and added notes to sources, with the goal of turning it into an essay in interview form.

Question. What makes a good teacher?

Answer. When I think about that question, I think about the ancient Greek word for teacher, didaskalos. It had a dual use: it could mean a teacher and could also mean a playwright (that is, a dramatic poet).
When the ancient Greeks called their dramatic poets "teacher," they revealed a truth not only about poetry and drama but also about teaching. If dramatic poetry is a form of teaching, it's only a short step to an affirmation of the converse—namely, that teaching is a form of dramatic poetry. As a matter of fact, the verb that goes with didaskalos in ancient Greek—the verb didasko—means both "to teach" and "to put on a play."

On the subject of teaching, I'm an ancient Greek. For me, teaching is always an exercise in certain kinds of poetry and drama. It is highly poetic because teachers succeed or fail depending on whether the words of their teaching are right or wrong, exact or only approximate, original and uplifting or predictable and dull. Because a teacher must find and use words that enlighten and inspire, every good teacher is a poet at heart. Teaching is fundamentally dramatic because it uses all the resources of drama—monologue, dialogue, gesture, certain kinds of acting, directing, rehearsing, and stage-management—to bring revelation and enlightenment. I would call it the most dramatic human activity outside the theater itself.

If you accept that teaching is an art—a poetic and dramatic art—it follows that you can have hundreds or even thousands of successful teachers using radically different but equally valid styles and methods. A good teacher has a creative view of the subject and a unique approach to it. Like a good writer, a good teacher teaches you things you can't learn from anybody else.

**Question. Do you think skill in teaching can be acquired?**

**Answer.** Some books on teaching suggest that virtually anybody can become a good teacher by mastering a subject and then following certain methods for teaching it. But to teach really well, you need more than just knowledge and a set of methods. You also need talent; you need a gift for the art of teaching.

We don't say that anybody can sing opera or write a good novel by following prescribed methods. But when it comes to teaching, we tend to put all the emphasis on methods and ignore the need for talent. I've never been able to understand why. Maybe it seems vaguely undemocratic to acknowledge that good teaching takes talent. After all, if a person needs talent to teach really well, it follows that some people who want to teach will never be much good at it, no matter how hard they try. But remember that it's possible to have a driving desire to play good basketball and still be a klutz on the court. Likewise, the desire to teach is not enough. And methods are not enough.

To be sure, a person with little or no talent for teaching can learn to teach a little bit, just as someone with little or no aptitude for music can learn to pick out a tune on the piano. Some teaching can be learned—up to a point. That is to say, some of the methods recommended by books on teaching actually do work. But they work better when talented people apply them.
The true artists of the teaching profession were born to teach. They have a spark that becomes a flame when they stand in front of a class. These people must teach. They are not happy unless they are drawing on the gift they know they possess. But that gift cannot be acquired. No book will tell you how to get it. It has to be present to begin with—present in the soul—and it will always make the difference between teaching that is so-so and teaching that is truly outstanding.

As with any other art, success in teaching comes from a combination of talent and hard work. Good teachers draw on both.

Question. How do they draw on talent?

Answer. For one thing, they instinctively switch styles to accommodate the students they happen to face at the moment or the topic they are trying to address. Flexibility and variability are aspects of talent in teaching. Although I certainly don’t succeed in everything I try to do in teaching, I do know that I use a number of different styles. They could even be said to constitute not just different styles but different teachers, different people coming to life somewhere inside me to respond to changing audiences and occasions. I am one version of a teacher when I teach freshmen, another when I teach graduate students, still another when I teach other teachers. I am a different teacher when I give a lecture than when I conduct a seminar. And to lecture on, say, Aristophanes, I have to become a different kind of teacher than when I lecture on Martin Luther King, Jr.

That I can be and have been and will be several different teachers, not just one, tells me that I have at least a little talent for what I’m trying to do. When I face a new class or introduce a new topic, several possible versions of myself wake up inside me. Then one of them takes over when it sees a chance to do what it does best.

Successful teachers summon the style or personality that happens to work at the moment. With one group they may crack a joke, with another they may crack the whip, with another they may be “dynamic,” with still another they may be passive or ironic or Socratic. They do a quick mental analysis of a class and then slip into a role that is going to work for that class. They are forever putting on and taking off different roles and personalities.

Question. Like an actor or playwright?

Answer. Exactly. Every teacher is an actor in his or her own work of dramatic art, and good teachers keep changing that work, keep rewriting and improving it, from day to day and class to class. It’s probably no coincidence that the Greek dramatic poets—whom the Greeks called “teacher”—sometimes acted in their own plays. The Greek view of teaching seems to
be: “If you would teach me, then play a role that will touch and inspire and enlighten me.”

Question. If successful teachers adapt themselves to changing topics and audiences, does it follow that they never achieve one “true” identity as a teacher?

Answer. It’s true of teachers, and it’s true of everybody else. Nobody has one “true” identity. Instead, we have a variety of selves that keep displacing each other as we play out the various roles of everyday life. Even if I could be said to possess one underlying self that is my true one, I would not necessarily achieve anything by showing it to a class. The challenge of teaching is to mold the self to the needs of the class.

The theory of teaching I’m trying to express has a parallel in modern drama. Luigi Pirandello called his collected plays Naked Masks, presumably to stress that the actor’s role, or mask, is an ultimate in the theater. For Pirandello, nothing worth knowing exists behind the actor’s role or mask. A teacher, too, is a naked mask. Nothing worth knowing about a teacher’s art exists behind the mask the teacher chooses to wear in order to lead the class toward a certain goal.

Question. Can you give an example?

Answer. Think about Socrates. He sometimes pretended to be ignorant in order to awaken the native intelligence of those he was trying to teach. His pose of knowing nothing was one of his masks, a role he chose to play. He asked people to explain abstract concepts to him—justice, beauty, piety—and to do so slowly, carefully, precisely, so that he could grasp every detail. He thus led them to formulate ideas they had never imagined they could formulate, ideas Socrates himself was not necessarily expecting. In that sense his pose of being ignorant was not a pose at all, but a reality: he educated himself by educating others. His mask was naked.

Some scholars look at Socrates’ face as depicted in ancient sculpture (pug nose, bulging eyes, broad forehead, bald head) and compare it to a mask. One writer says that Socrates looks as if he’s just escaped from a Greek comedy and has forgotten to take off his makeup—that is, his mask? (Greek actors wore carved wooden masks.) In other words, Socrates looked as if he were wearing a mask even when he wasn’t wearing one. The very contours of his face hinted at the importance—indeed, the necessity—of finding a role and playing it to the hilt.

Not coincidentally, Socrates made his mask-like face a theme of his teaching. He talked about his own physical ugliness, arguing half-jokingly that it was a peculiar form of beauty. It’s been said that he thereby created for
himself a certain "character." But I would say that he created for himself a whole gallery of characters.

**Question.** He played more than one role?

**Answer.** He did indeed. In Plato's *Symposium* there's a description of Socrates' teaching. One phrase of it can be variously translated as "He spends his whole life deceiving" or "He spends his whole life pretending" or "He spends his whole life dealing in ironies." No matter how you translate this phrase, what it finally comes down to is that Socrates always found it necessary to play some kind of role that he had invented for himself in order to achieve what he wanted to achieve in his teaching. Ancient accounts of his teaching are sometimes wildly contradictory, and the conclusion I draw from the contradictions is that he played different roles for different people and knew exactly how to act in order to reach or reach out to the person he was trying to teach at the moment. First-hand accounts of his teaching do not tally in all respects because he became different people to teach different people.

In a book about him, Gerasimos Santas shows that his teaching hardly ever stays the same from moment to moment: "Sometimes he needs to take a bombastic respondent down a peg or two and uses sarcasm to accomplish this end, or perhaps a debater's fall as well. Sometimes he needs to bring out a shy or over-cautious respondent, so he resorts to a bit of self-deprecation." Socrates was constantly changing his tone and technique and even his whole image as a teacher to respond to the demands of the moment and the needs of the person he was trying to teach. At the same time, he managed to make most of his teaching universal. Indeed, his practice implies that only by custom-tailoring your teaching to a specific person or group or moment can you arrive at the universal.

A very great scholar of Socrates, Gregory Vlastos, says: "Socrates is not a character out of Chekhov introspecting moodily on the public stage. He is a man whose face is a mask, whose every word is deliberate." Because Socrates was always more or less self-consciously on stage when he was teaching, trying on and trying out new roles for himself, new masks (in Pirandello's sense), he stands not only as a great teacher in his own right but also as a symbol and summation of the whole art of teaching. The oxymoronic title of Yukio Mishima's best-known novel would make a good title for a study of Socrates and an equally good one for any teacher's autobiography: *Confessions of a Mask."

**Question.** Can teachers play different roles for different students and still be sincere?

**Answer.** That teachers sometimes emphasize different aspects of their own personality to reach different people or sometimes invent a wholly new
character for themselves in order to teach needn't imply insincerity or lack of authenticity. Remember that I'm talking about "naked" masks. There's plenty of room for sincerity in the concept of nakedness. A mask that is naked does not conceal: it reveals. If it is possible for a mask to be naked, as Pirandello says, or for it to confess, as Mishima insists, then a mask can certainly be sincere.

In some theories of teaching, teachers are urged to unveil their "backstage self," to engage in "self-revelation." Beware of this advice. It will lead you seriously astray. Good teaching does not stem from self-revelation but from self-revision. I'd say the only way to be sincere in teaching or any other walk of life is to re-create yourself in response to whatever circumstances happen to surround you. After all, to be sincere is to be personal, and the word personal comes from the Latin word persona, meaning an actor's mask.

Question. You're saying that a creative use of "persona" is essential to the art of teaching?

Answer. Yes. I'm saying that you must construct at least one new identity for yourself when you set out to teach, or at least revise one of your everyday identities so that it fits the needs of your teaching. You simply don't have any choice in this matter. Teaching places different demands on you than any other activity in which you might engage. Precisely for this reason, teachers rarely if ever show the same face to a class that they would show when making love, or talking to a tax auditor, or confessing to a priest. Every competent teacher has at least one identity reserved more or less exclusively for the classroom, and teachers who are more than competent have a rather large collection that they use at various times and for various purposes. The right persona is not a luxury or frill or fillip in teaching, or a tour de force. It is the essence of effective communication. Teaching cannot take place without it.

Mind you, the persona that is "right" can be different for every teacher and even for different kinds of teaching done by the same teacher. No two teachers are going to teach the same topic or group in the same way, especially if they are masters. Good teachers create the role they are going to play from the parts they find lying around at the moment: the voice they were born with, the face they’ve got, the students they are facing, the knowledge those students already possess, the knowledge the teacher happens to possess (no teacher of course knows everything), and so on. You will fail if you try to address a group of freshmen in the same way that you’d address kindergarten students or graduate students. It’s not just a question of adjusting the level of the discourse. It’s also a question of adjusting the teaching persona, of becoming the kind of person who can touch that group and cause it to grow and change.

Another scholar of Socrates, James Haden, has noticed: "When Socrates is talking with someone who has intellectual pretensions he puts himself
primarily on the side of feeling, while when he is conversing with someone who is more committed to feeling he stands for intellect." There is nothing insincere about either of these poses, because human beings are a combination of both feeling and intellect. By switching personas when circumstances seem to call for a switch, Socrates is simply being human. He is also being a good teacher. He is trying to supplement and complement the person he is teaching, to make that person more complete, more fully awake and aware.

You've heard that people use only a fraction of their actual brain power. Some teachers use only one or two of their many possible identities. But great teachers use them all. They become what they behold. Or they become the opposite of what they behold in order to change it. A truly great teacher will make a subtle or even a drastic adjustment in style or personality when he or she stops talking with one student and starts talking with another. You have to adapt yourself to the individual as well as to the group. Any successful teacher who truthfully describes his or her identity will have to confess: "My name is legion."

**Question.** Do any traits keep recurring in the various roles or personalities a teacher might adopt in order to teach?

**Answer.** If I had to name just one indispensable trait for good teaching, I'd say it's an open mind. Good teachers are quick to discard old ideas in light of new evidence. What's more, they view their students as important sources of new ideas. They expect to be and want to be surprised, augmented, and changed by students.

I'm not saying that teachers ought to agree with everything a student says or ought not to hold any deep-seated convictions of their own. But I do say that good teachers think seriously about what students have to say, offer a considered response to it, and sometimes change their minds in light of it. Dogma is the death of teaching and learning.

By the way, I also think an open mind is the single most important trait in a good researcher.

**Question.** What makes you a good teacher?

**Answer.** I'm not sure I "am" a good teacher. In teaching, you're only as good as your last class. Yesterday I might have been good, but that doesn't mean I'll be good tomorrow. If I work hard on my classes tonight—preparing them carefully and thoughtfully—I might be. If I don't, I probably won't.

Whatever success I've achieved in teaching I attribute partly to hard work, which is a necessary, though not a sufficient, condition for good teaching. People who have never tried to teach have no idea what a grueling, exhausting labor it can be. I've been teaching on the university level for twenty-five years. In all that time, it hasn't gotten any easier. As a matter of fact, it's gotten harder.
The more you teach and learn about your teaching, the more clearly and starkly you see your own inadequacy. Finally, you come to view your goals as if they were reflected in a mirror held up to another mirror: they recede into infinity. Achieve one, and you can suddenly glimpse another lying just beyond it, one you couldn’t see before, whose existence you never even suspected. Because the goals are so difficult, so elusive, it’s next to impossible for me to create a memorable class without a lot of work in advance, a lot of careful planning.

**Question. How do you do that work and planning?**

**Answer.** I just sit down and do it. Sometimes I’ll stay up all night writing a new lecture. I’ll give it the next morning with all the power and conviction that’s in me, then stumble home thinking I’ve failed and crash into bed for the rest of the day, spent, drained, from working around the clock.

There’s a myth that university professors take a leisurely stroll to class once or twice a week, mumble the same mumified lecture they’ve been mumbling for the last umpty-ump years, then spend the rest of their day fumbling in a tulip bed or fishing off some pier. I’ve never met one of those gentlemen or ladies of leisure. All the good teachers I know—and I know a lot of them—are hard-charging people. They go full throttle all the time. They constantly revise their lectures and strategies. They fret about their slightest failings and will do almost anything to compensate for them. They spend countless hours of voluntary time giving students individual attention in private conferences outside of class. That’s the kind of private professional time for which a lawyer collects $150.00 an hour and a teacher collects nothing, except of course the pleasure of teaching and learning. That’s why teachers do it after all, for the sheer pleasure of teaching and learning, which demand a terrible devotion but pay it back tenfold.

I’m fond of the proverb “Genius is infinite patience.” I think it applies with some force to teaching. To be a good teacher you have to exercise an infinite patience not only with your students but also with yourself. You have to possess the ability to sit alone in your study for hours on end, thinking and planning and tearing your hair until you’ve done everything possible to make your next class a success.

**Question. Do you think inspiration plays a role in teaching?**

**Answer.** Sometimes inspiration will light on my shoulder during a class discussion and sing a sweet, spontaneous note. But I attribute even spontaneous inspiration partly to hard work. Inspiration will not happen unless you consciously seek it. You can’t be spontaneously eloquent unless eloquence is so important to you that you court it all the time, consciously and deliberately.

Almost everything that happens in a class of mine has been planned by
me, or at least hoped for by me, though it may strike my students as spontaneous or even accidental. I don’t “script” a class discussion; I don’t ask students to read my mind and discover only what I’ve decided in advance they will discover. But I do always know in general terms and sometimes in very specific ones what I’m trying to achieve and what strategies I’m going to use to achieve it.

Some of the good things that happen in class will surprise me, of course. Sometimes I don’t know where they come from. They can materialize as if by magic. But even the things that surprise me I can usually recognize in retrospect as unforeseen manifestations of the general goal I was seeking. Good things will not happen in teaching unless you know what you want to achieve and what buttons you need to push in order to achieve it. Even so-called “passive” teaching—where the teacher sits back and lets the students carry the discussion for a while—is a deliberate strategy.

Question. Can you describe what you are aiming for when you plan your classes?

Answer. I am looking for ways to surprise my students, catch them off guard, make them see things they weren’t expecting to see. If a student yawns in one of my classes, I’ll worry about it for days. A yawning student is the ultimate condemnation. But students who abide in a continuous state of surprise are not likely to yawn.

Question. Are there any other ways to forestall the yawning?

Answer. The best way to forestall the yawn is to show students that learning is one of life’s greatest pleasures. On any valid scale of human pleasure, learning sits just this side of orgasm, though you’d never know it to observe some classes. What the Roman poet Horace said of poetry also applies to teaching. It has a dual purpose, monere et delectare, to enlighten and to delight.

Without delight, there can be no true teaching or learning, and one of a teacher’s main jobs is to prove to students that this is so.

Unless you can produce in your students a sting of mental pleasure or a genuine gasp of awe, you are doing at most only half the job. You can’t produce these reactions every day, of course. If you could, you’d be some sort of numinous essence, not a fallible human being. But the classic shiver of wide-eyed wonder is a goal for which you should constantly strive, both for yourself and for your students. It is the surest sign that teaching and learning are actually taking place. No tingle up the spine, no real teaching.

Remember the ancient Greek word for teacher? Didaskalos? By a fluke, it contains the Greek word for beautiful (kalos). Every time the Greeks uttered their word for teacher, they also uttered their word for beautiful. I can’t believe they were insensitive to this chance echo. It makes their dual use of
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J. E. Rivers

didaskalos—teacher and dramatic poet—seem not only revealing but somehow inevitable.

If you contemplate this linguistic accident for a moment, the whole challenge of teaching will suddenly become very clear to you. The old word whispers a profound secret—namely, that you can't teach anything unless you can teach the actual or potential beauty of that thing.

**Question.** You see the "beautiful" part of the Greek word for teacher as applying more to the subject than to the teacher?

**Answer.** Yes. My private translation of didaskalos is not "beautiful teacher" but "teacher of the beautiful."

Strange as it may seem, I don't want my students to praise me. I don't want them to leave my classes saying, "Wow, what a great teacher!" If that's the impression they take away, then I've failed. I want them to reach a point and reach it fairly soon where they forget about me and fall in love with the subject. I want them to leave my classes saying, "Dear God, what a beautiful, thrilling thing to study!"

There's a sense in which teachers must eclipse themselves, destroy their own ego, to make learning possible for students. Paradoxically, learning to teach is learning to make yourself vanish at the right time.

The prototype of this vanishing act is Socrates' suicide as described in Plato's *Phaedo*. When Socrates carries out on himself the death sentence that his city has passed upon him, turns down a chance to escape and goes ahead and kills himself in obedience to the laws of Athens, he forces his students to break free of his teaching and to become—or to try to become—original thinkers. One commentator suggests that the deepest meaning of Socrates' suicide is that it dramatically and deliberately "cuts the umbilical cord of teaching." I agree.

In that sense, it poses an implicit challenge to every teacher who comes after him. You can't succeed in teaching unless you can master—figuratively—the art of suicide. In truly great teaching, every moment prepares the students for their teacher's eventual extinction. Every moment shows them how to get along without any teaching—or, more precisely, how to become their own teacher. Teaching is the art of making yourself progressively invisible, of fading, fading, until finally you aren't there at all, until your only residue is the knowledge you have created for your students and their desire to learn more and more and still more and to do it with no help from you, by following their own inner voices and necessities. When you teach, you achieve your greatest success when students see that they no longer need you.

**Question.** Are you saying that teachers must totally obliterate their ego in order to teach?
Answer. Not exactly. Teaching can't take place without a certain amount of control over the students. And control equals ego. Good teaching, however, depends on knowing when control should be loosened and ego withdrawn—and on doing these things at precisely the right moment.

Question. Is there a difference between "to transmit" as a teacher and "to transform" as a teacher?

Answer. All teachers transmit certain facts, but a fact is simply a statement on which everybody agrees: William the Conqueror invaded England in 1066, the chemical formula for water is H₂O, Homer's meter is dactylic hexameter. Success in teaching comes not from the number of facts a teacher transmits or from the speed or wit of the transmission but from the way in which a teacher puts certain facts together to create a compelling view of the subject and of reality. How you organize your facts or fail to organize them, the ones you choose to include and the ones you leave out, the tone of voice with which you convey certain facts—all these qualities and more create for students a certain image of the subject and of reality in general.

That's why students tend to see a teacher not just as a transmitter of facts but as a personification of the discipline. They will say to themselves and sometimes will say out loud, "Professor Rivers is English; Professor Pois is history; Professor Taylor is physics." And they are right to think of teaching in this way. When somebody teaches a discipline, he or she becomes a living embodiment of it. Of course, the embodiment of English that goes by the name of Professor Rivers may not always be interesting or compelling. But it is an embodiment nonetheless, a merging of me with my discipline, an imposition of my mind and spirit on the raw data that constitute the "facts."

In other words, teachers do not merely transmit and do not merely transform. They create. They create ways of thinking and knowing that without them would not exist. If all the teachers of a discipline were suddenly to die—to die literally, I mean—the discipline itself would also die, because no discipline has any objective existence apart from the people who teach it or write about it. (Writing, of course, is just another form of teaching.) Teachers and scholars create their discipline by the very act of teaching and writing, and each creates a slightly or sometimes a radically different version, like a sculptor chiseling something out of shapeless rock. To teach is to shape and mold a set of data that has no meaning, no coherence, and no usefulness to students until you start to shape and mold it and impress yourself upon it. The more original your shaping and molding of this raw data, the more likely you are to be good or even great as a teacher, because creativity in a teacher breeds creativity in students.

Good teachers know that no discipline exists until somebody creates it, or re-creates it, by teaching it. They also know that no two teachers will ever embody a discipline in exactly the same way. Knowing these things, they make
a virtue of necessity. They seize the opportunity of creation, an opportunity from which they cannot in any case escape. They bring to that opportunity all the knowledge and imagination and fantasy and self-discipline that are in them.

And they are careful about what they create, knowing that it will always be, in part, themselves. They wonder: "Am I about to create from the raw data at my disposal something so ugly or puzzling or abstract that it will have no meaning for students? Or can I fashion from that same jumble of facts something original, compelling, inspiring?" When good teachers teach, they summon their discipline back from the brink of potential non-existence, give it a meaning that is new and surprising, a shape and a life it hasn't had before. They remake their discipline, and make it new. For them, teaching is never a mere process of handing over a handful of supposedly objective facts; it is always an act of revolutionary re-creation.

I've said that teaching is dramatic poetry, and, for me, the poetry is just as important as the drama. A poet, literally, is a maker (the word comes from the Greek poiein, meaning "to make"). The poetry of teaching includes all the many different kinds of making in which teachers engage. Like poets, teachers sculpt and fashion and shape. They turn non-meaning into meaning, nothing into something. And, as poets do, they work not only with words and concepts but also with minds and souls—their students', and their own.

**Question. What about your discipline makes you a good teacher?**

**Answer.** Let me answer a slightly different question. I'll try to describe a strategy that works for me in my field but may not work in all respects for others in theirs. One part of it involves a certain amount of personal risk and is therefore not something I would recommend to everybody. You'll see what I mean in a moment.

For the past several years I've taught more writing than anything else, and my attempts to teach writing have shown me above all else the importance of tact in dealing with students. When I speak of tact, I am thinking of both the figurative and the literal senses of the word. The figurative sense—politeness, respect, diplomacy—is known to everybody and applies or ought to apply pretty much across the board in teaching. About ten years ago a student wrote on one of my class evaluations "I really appreciate his respect, politeness, and consideration toward his students." This comment made me see that what comes more or less naturally to some people can be a deliberate strategy in teaching, a valuable way of reaching students and inspiring them.

One of a teacher's first duties is to make students feel that they matter, that they possess abilities and potentialities worth noticing and developing. You can't instill this feeling unless you treat students as human beings, unless you respect their sense of self-worth. You can criticize them, of course. You must criticize them if you are going to do them any good, especially if you are
trying to teach them how to write. You must locate their weaknesses, point them out as weaknesses, and then do whatever you can to turn those weaknesses into strengths. But you must do all this without causing students to feel mocked or ridiculed or rejected. If you chip away at a student’s self-esteem, if you put even a tiny nick in it, you risk squelching whatever talent may be trying timidly to come to the surface. And a person who squelches or destroys talent or potential—even inadvertently—is not a teacher but an anti-teacher.

In a class run by a good teacher, the students say to themselves, “In this class I can express any opinion I happen to hold or ask any question that comes into my head and can do these things without fear of embarrassment or ridicule, because this teacher is open to any insight or potential I may possess.” Tactful teaching creates just such a spirit of adventure. It sets the students free to explore without hesitation or fear.

Krishnamurti said, “Fear is what prevents the flowering of the mind.”

And he was right. Every teacher who wants to succeed must find a way of releasing students from fear—of the discipline, of the teacher, of themselves. Tact in the figurative sense is a good way to do it.

And it’s such an easy technique! There’s really no art to it at all. It’s just a question of being sensitive and human in the presence of other sensitive human beings. A comment that I treasure from my class evaluations is the following: “He helped us see the fallacy in our argument without making us feel stupid.”

Question. And the literal sense of tact?

Answer. Literally, the word means “touch.” This meaning is also important in teaching, or at least in my teaching. A teacher of writing must be able to establish immediate mental contact with each student, to create instant current between teacher and student. A highly regarded teacher of writing, Jacques Barzun, has pointed out that you can hardly teach writing to more than one student at a time “and you must be able to observe and enter into his mind.”

That’s a high standard, almost an impossible one, but one for which each teacher of writing must strive. When you set out to teach people how to write, you have to attempt with each of them something akin to Mr. Spock’s mind-meld (fans of “Star Trek” know what I mean). You have to get inside each mind in the class and have a look around, feeling the walls and the folds and the crevices, getting a sense of the peculiar shape and structure. Without some understanding of each student’s unique mental configuration, you won’t have a clue what your students are able to achieve as writers or how you can foster their achievement.

I guess it sounds a bit mystical, this business of the mind-meld, but in practice it amounts merely to an advanced form of intelligent conversation. If you can touch each student’s mind with your own, if you can join your own mind
with that other one and then make the two somehow flow into each other, something greater than either the teacher or the student can be born from that touch and flow.

Question. Are there any specific techniques for establishing such close mental contact with each student?

Answer. There are indeed, and one of them involves an even more literal meaning of the word tact. On the strictly literal level—that is, the etymological level—tact means actual, physical touch, as in the adjective “tactile.” I will sometimes actually touch students in class as a way of reassuring or encouraging them. That’s the risky part I was talking about earlier. Nowadays, when people see sexual harassment skulking behind every bush, teachers have to be careful with physical touch. But I do think there are times when it’s effective, even necessary.

In my writing classes, which usually number about fifteen students, I arrange the desks in a circle. Every day I sit in a different place in that circle. I keep changing my position so that I can be close—physically close—to different students each day. It gives the class an air of democracy. Equally important, my presence among the students instead of in front of them makes physical touch possible when I think it is necessary or helpful.

Sometimes I’ll touch a student lightly on the shoulder if he or she makes a dramatic breakthrough in writing that the rest of the class appreciates or applauds. It’s a silent but powerful way of saying, “Way to go!” Or sometimes I’ll tap a student playfully with my pencil as a way of establishing a current between that student and me. I will almost always do this if the student makes a joke that gets a big laugh from the rest of the class. I will certainly do it if the joke happens to be at my expense. In such a case, a playful pencil-tap says, “You sly so-and-so. You really got me that time!”

I don’t care if students occasionally get the better of me in class discussion. If they reach a point where they can outdo me in words or Witticisms, I take it as a sign that I’m finally teaching something. When a student puts me in my place with a joke or surpasses me in some other way that the rest of the class recognizes, the best way I know to affirm the change that’s taking place is to give the student a playful little tap with the end of my pencil if he or she happens to be sitting within touching distance. The affirmative meaning of that touch doesn’t need to be explained to the student, because the pencil symbolizes not only the teacher’s authority but also the writer’s craft, both of which the student is beginning to usurp at that point to the benefit of everyone concerned. It’s like a touch from Prospero’s staff: it recognizes and creates a transformation.

At the other end of the spectrum, a quick touch on the hand from me can totally disarm a student who is becoming angry or hostile over some criticism of his or her writing done by me or the rest of the class. That touch
can say: "Relax. We're not criticizing you as a person. We're just trying to improve your writing." I've never touched a hostile or angry student in this way without getting a relieved smile in return.

Those are some of the ways in which I use physical touch in my teaching. It is the most literal sense of "tact." I hope people reading this are suitably horrified.

**Question. What would you say to people who might be horrified?**

**Answer.** I would remind them that physical touch was important to the greatest teacher the world has known—namely, Socrates. In Plato's dialogues there's a famous page that describes Socrates stroking the hair of one of his pupils. Plato lets the student tell the story: "Then he stroked my head and pinched together the hair on my neck—he used occasionally to play with my hair!" Socrates' touch was not sexual—or at least not primarily sexual. As far as we can tell, he kept his sex life out of his teaching, though he did sometimes use physical touch in order to teach. There's another page of Plato telling how Socrates went suddenly cold and unresponsive—became "a block of ice," one scholar says—when a student tried without provocation or invitation to seduce him.

That a touch from Socrates could be at once galvanizing and nonsexual is to the modern mind a paradox, but the paradox must be grasped in order to understand his teaching and perhaps all teaching. If we push it as far as it will go, we have to say that Socrates' touch—both mental and physical—was erotic but not necessarily sexual. It was not aimed at getting students into the sack with him but at creating a strong current of understanding between teacher and student and thereby unleashing a powerful creative energy. In the language that Socrates spoke, the word *eros*, which gives us our word erotic, could mean not just sexual desire but any deep-seated longing or yearning—a desire for food, say, or knowledge, or self-fulfillment. The touch that Socrates used in his teaching expressed and awakened a powerful *eros*, yes; but it was not necessarily or exclusively sexual. Another great teacher, Jesus, is said to have healed and transformed by means of physical touch.

In American society we've developed a horror of physical touch and as a result have lost one of teaching's most valuable resources. To assume that it is always sexual until proved otherwise is the height of prurience and puritanism. In teaching, we shun it at our peril. It can accomplish things that can't be accomplished any other way, especially if you are trying to teach a subject as personal as writing.

To use it, you must of course be able to read your students, to know instinctively which will respond favorably and which have a sign hanging around their necks saying, "*Noli me tangere!*" If you are truly in touch with the people you are trying to teach, you will always know when a physical touch is going to work and when it isn't. To the pure all things are pure.
Question. What exactly does physical touch express as Socrates used it in his teaching and as you sometimes use it in yours?

Answer. Love. But not sex. Some theorists do after all equate teaching with love, and they are right to do so. Teaching presupposes—indeed, depends on—a deep love for humanity. If you don’t love humanity and love it deeply, you’ve got no business trying to teach. On those carefully chosen occasions when I decide to use a physical touch in my teaching, it is for me precisely what some theorists say that teaching must always be: an expression of love. It does not connote sexual passion on my part but does express my spiritual affection for anyone who wants to learn and anyone whom I might help in some way to learn.

Among those theorists who equate teaching with love, the most eloquent is surely Krishnamurti. Remember that he also speaks of the need to purge from teaching and learning all traces of fear. He says that when we deal with students, “we are not dealing with mechanical devices that can be quickly repaired, but with living beings who are impressionable, volatile, sensitive, afraid, affectionate; and to deal with them, we have to have great understanding, the strength and patience of love.” Small wonder that a picture of him published in his biography shows him reaching out and clasping a student lightly, affectionately by the shoulder.16

I wonder if it’s wholly an accident that the words “teach” and “touch” constitute what literary scholars call a slant rhyme. It’s almost as if the genius who designed the English language meant these two words to go together, or at least to echo each other very resonantly.

Question. Are there any other disciplines where physical touch could play a role in teaching that people haven’t recognized?

Answer. Classes in acting offer a useful analogy. Physical touch occurs all the time in acting classes, and nobody thinks anything about it because it is so obviously necessary. It’s clearly impossible to learn acting without some degree of physical contact between the teacher and the students and among the students themselves. How else are you going to rehearse, say, the smother scene in Othello? In rehearsing that scene and a great many others, students of acting have to crawl all over each other and the teacher all over the students. I’ve done the scene as a student of acting, and I know. If you are playing Othello, the first thing you have to do is to kiss your Desdemona tenderly. Then you have to smother her while she puts up a violent struggle. A scene like this cannot be rehearsed without some degree of physical contact among the people playing it. And if a teacher wants to demonstrate tricks for playing the scene, he or she has to start touching the students. There simply is no other way to teach this scene to an acting class—or no other way to teach it so clearly and directly. The same goes for many other scenes in world drama,
perhaps for most. Teachers of acting often use one quick touch to show what a lecture could never adequately describe.

Martin Jenkins, the teacher with whom I studied *Othello*, sometimes asks students to hold hands when they rehearse dialogue, even if the scene does not require it. People who come into his class for the first time are amazed to see that the simple act of holding hands can impart a vigorous life to an otherwise lifeless reading. Every actor knows, or eventually learns, that direct contact with human pulse and warmth and skin can make the difference between mouthing a scene and actually living it.

When you teach writing, you are trying to achieve many of the same things for which you would strive in an acting class. You are trying to get in touch with deep-seated thoughts and feelings and open up channels through which they can be expressed. Physical touch, judiciously used, sometimes helps me achieve those ends. Some of the students I touch in class don't even know they've been touched. I know this from watching their reactions. All they know is that something has changed inside them, and changed for the better. Fear has fallen away. Communication has taken place.

When I speak of tact in teaching, then, I include all the possible meanings of the word, from a quick touch on the hand or shoulder as a means of reassurance or encouragement to general politeness and courtesy and respect and on to the highest form of tact—the intimate probing and molding of another mind.

In teaching, you hold a student's mind in your hand in the same way that a surgeon palms an exposed, throbbing heart. To hold a mind in your hand is a terrible, awful responsibility. It takes the right "touch."

*Question. How do you handle grades in your classes?*

*Answer. I try be as fair as I can. I have given F's and A's and every grade in between. The grades that I give tend to average around a B minus. Some would say that's too high; others, too low.

As a matter of fact, I don't have any confidence that my grading or anybody else's reveals anything worth knowing. Grades send the message that teachers know the truth and that the truth can be accurately measured. But this message does not accord with reality.

*Question. What is the reality of grading?*

*Answer. That it is subjective, unreliable, and inconsistent in every field.*

*Question. Can you mention any evidence?*

*Answer. In one study of grading—a landmark study—200 English teachers were asked to grade two sets of answers to the same exam in English. The*
answers had been written by actual students in response to an actual exam in an actual English class. The exam had asked the students to write a three-paragraph essay, to list some of the rules for using commas, and to demonstrate their knowledge of various other topics in composition and literature.

The army of English teachers got busy and graded two of the students. And the grades were—to use the researchers' own word—"chaotic." For one student's paper, the recommended grade varied by as much as 48 points. Not only did the horde of teachers disagree in their grading of each paper: they couldn't even agree on which paper was the better one.

Not content, the researchers sent the same two papers to a professor who was giving a course on the teaching of English at the University of Wisconsin, with the request that everyone in the course grade them. Again, the grades were chaotic. Then they sent them to a professor who was giving a course on "educational measurements" (that is, grading) at the University of Chicago, with the request that everyone in that course grade them. A third time, the grades were chaotic.

In all three of these grading sessions, the statistically calculated "probable error" was about the same and was alarming. It was about 5.4, meaning that the individual grades for each paper in each session deviated on the average about 5.4 points from the median of all the grades for that paper in that session. Meaning, in turn, that whenever a teacher of English grades a paper, he or she will probably misjudge it by at least 5.4 points and quite possibly by a great deal more—if, that is, the median of all the grades assigned to a paper by all the experts who grade it can be regarded as its "true" grade. And that's a big "if." What this experiment really suggested, of course, is that there is not and never can be any such thing as a "true" grade.

**Question. But what about the grading of subjects other than English?**

**Answer.** I'm glad you asked. Critics of the experiment did, in fact, suggest that a similar experiment ought to be conducted with a "hard" discipline such as math. The assumption was that teachers of math would necessarily agree in their grading of the same paper—or at least come very close to agreeing—since English is presumably "subjective" and math "objective."

**Question. So what happened?**

**Answer.** The researchers took the suggestion. They asked 180 geometry teachers to grade a student's geometry exam. The exam had been elementary: "Prove that every point in the bisector of an angle is equally distant from the sides of the angle," and so on. Lo and behold, the grades were chaotic. To the astonishment of everyone concerned, there was even greater divergence in this grading. The grades ranged from 25 to 89, a divergence of 64 points. And there was a full complement of other grades in between.
The probable error was 7.5. In one stroke, these researchers vaporized the myth that the grading of math is objective.

**Question. Did they look at any other disciplines?**

**Answer.** They did a final experiment with an exam in history. They sent a student’s history exam to 200 teachers of history and asked them to grade it. The questions had been of the following sort: “Contrast the motives and methods of settlement of the French and English colonists in America.” The grades ranged from 43 to 92, with a shotgun blast of others hitting the scale in between. Probable error: 7.7. “Chaotic.”

**Question. When was that study done?**

**Answer.** I’ve been saving that detail, because, in a way, it’s the juiciest one. The study was done in 1911, before the advent of so-called “grade inflation,” well before the 1960s and all the havoc they supposedly played with the ancient and hallowed traditions of tough grading. It was done ‘way back in the good old days when teachers were teachers, students were students, and standards rigorous, objective, and noninflated (or so we sometimes like to kid ourselves into thinking).

It rattled the teeth of every teacher who heard about it. Even now, it retains its power to shock. In fact, it has been in some ways suppressed. Or maybe I should say repressed. You will sometimes see it mentioned in other research on grading, but I’ve never met another teacher who knows anything about it. In general, teachers tend to ignore the research that’s been done on grading, and it’s easy to see why. Most of it paints a picture of us that could not be deemed flattering. In fact, most of it makes us look as if we don’t know a damn thing about what we’re doing.

In spite of being so quickly and conveniently forgotten, the study proved prophetic. A long string of other research, some quite recent, has exposed the subjectivity and unreliability of grading in every field, including math and science. Yet teachers continue to grade blithely away, assuming that their standards are objective or would at least be shared by most other teachers of the subject, thinking they are therefore doing their students some good by telling it like it is. Or maybe being just the teensiest bit strict or easy.

If only they knew. In point of fact, what we do when we grade—good intentions to the contrary notwithstanding—is to perpetrate chaos.

**Question. How can it be that the grading of math and science is subjective and chaotic?**

**Answer.** The scholars who did the pioneering research had a convincing answer: “While it is true that there can be no difference of opinion as to the correctness of a [geometry] demonstration, yet there are countless ways
in which the demonstration may be worked out, involving the succession of
the steps, the use of theorems and definitions, the neatness of the drawings,"
and so on. In short, there's an infinity of ways to grade math. Everything
depends on what the teacher wants to emphasize. "It is therefore fully evi-
dent," said the pioneering researchers, "that there is no inherent reason why
a mathematical paper should be capable of more precise evaluation than any
other kind of paper."

It's not hard to extrapolate from the grading of a geometry proof to the
grading of any other mathematical demonstration or any scientific one. It's
possible—no, easy—for a math teacher to flunk you merely because he or
she does not like you and then to prove mathematically that you deserve
to flunk.

**Question. And these conclusions have been supported by later research?**

**Answer.** They have been supported by reams of later research. The research
that's been done on the grading of college science courses has found no way
of achieving objectivity. Nor has objective grading been found—or, indeed,
defined—in any other field. After all, even a so-called "objective" test is really
just a set of questions subjectively chosen by a teacher. That each question
happens to have a right answer doesn't mean the test as a whole is objective.
It isn't.18

If you really want to shudder, look at the research on so-called "regrad-
ing." It shows that when a teacher is asked to regrade a paper that he or she
has graded once before, the teacher will often give it a different grade if a
few months have gone by and the original grade and comments are concealed.
The difference can amount to as much as twenty-five points. It's not that
teachers get smarter or dumber as time goes by: it's just that they often can't
remember what they were thinking when they gave the first grade. The stan-
dards that teachers apply in their grading are very often standards of the
moment, standards _du jour_. Research has shown that they can be influenced
by the teacher's mood or energy level at the time of the grading—as if we
didn't know that already.19

The research I've been describing merely tells you the same thing that com-
mon sense tells you if you stop and think for a moment—namely, that a stu-
dent's grade depends not so much on what the student actually learns as on
what the teacher decides to test and how the teacher chooses to determine
the grade. Grading is always somewhat subjective if not totally so, no matter
what the field, because what's being graded is always at least in part the
teacher's own view of the subject.

**Question. Are you saying that grades should be dispensed with?**

**Answer.** They serve no useful purpose that I can see. Eighty years of research
on them by scholars of education has proved their worthlessness to my
satisfaction. And so has my own experience in giving and getting them. To be sure, not all the research condemns grades. But scholars who study grades closely are hard pressed to say anything good about them, and almost no one argues that they are objective. Schemes have been concocted for trying to make them objective, but all such schemes are creaky, Rube-Goldberg contraptions. After all, grades are given by human beings. If we knew only that much about them, we would have ample cause for suspicion.

Nevertheless, grades are probably here to stay. Academe craves them. It needs them like an addict needs a fix. Students are trained to tie their self-image to the grades that they get. So they go around asking each other, “Whadja get? Whadja get?”—as if that were the most important question that could be asked in academic life. Administrators point lovingly to piles of grades as proof that teachers are keeping busy, earning taxpayer dollars. And let’s face it: some teachers get thrills from giving grades, and some get a special thrill from giving a low one. For some, it’s a power trip, pure and simple. So any talk of getting rid of grades is idealistic, if not quixotic.

A few nontraditionalist schools have dispensed with grading and suffered no ill effects. And—mirabile dictu—graduates of these schools manage to get into college even though their transcripts show no grades.20 In traditionalist education, however, teachers have to give grades if they want to keep their jobs. Yet many of these same teachers know from their own experience—never mind the research—that the grades they are giving, try as they might to be fair, are counterproductive.21

Question. In what way are grades counterproductive?

Answer. Their most obvious drawback is their tendency to stereotype people, to tell students what they are good for and not good for before they have a chance to decide for themselves. Some proponents of grading actually refer to it as a “sorting” of students. I sometimes wonder how many budding geniuses have been stymied or destroyed by being sorted at an early age into a pile marked “average” or “below average.” I myself may have inadvertently destroyed a few potential geniuses with some of the low grades I have given. What struck me as gibberish in somebody’s paper could well have been a totally new kind of language trying to be born. Who’s to say for sure?

The irony of all this “sorting” is that it has no usefulness whatever in predicting a student’s success in later life. No research has ever been able to show a necessary correlation between a student’s grades and that student’s success or lack of it after graduation.22 The lack of any necessary correlation is obvious to anyone who cares to look. The other day on the radio, for example, I heard a startling fact: half the chief executives in the Fortune 500 companies graduated from college with a C average. Are they dumb? I doubt it.

Thus, one of the few good things that can be said about grades is that their sorting does not work very well. Some students are able to throw off the
negative stereotype of a low grade, forget about it, and forge ahead with their successful lives.

**Question. But how can teachers know what students are learning if they don’t give them grades?**

**Answer.** We can ask our students. We can scrutinize their work. Remember that it’s possible for a student to say to a teacher, “No, I don’t understand. Could you please explain that again?” But strangely, cruelly, the very existence of grading discourages the all-important confession “I don’t understand.” Students hesitate to make that confession lest they appear stupid in front of a teacher who will eventually give them a grade. And so grades sometimes achieve the opposite of their ostensible purpose. Sometimes—perhaps usually—they create a climate of fear and thus stand directly in the way of open, adventuresome, collaborative learning.

**Question. Don’t students—especially students of writing—need an honest reaction to their work in order to improve?**

**Answer.** Yes. But it doesn’t have to take the form of a grade. After I’ve told a student what I think is working in a paper and not working, what I think needs improvement and how I think improvement can occur, I’ve said all the student needs to know and all any teacher should want to tell. Once I’ve said these things—sometimes orally, sometimes in writing—I ask the student to revise the paper in light of our discussion. Then the whole process starts over. More comments. More discussion. More revision. There is no reason except habit or custom or tradition that a grade should have to be given at any stage of this process.

Any honest reaction to someone’s writing is going to be complex, multifaceted, sometimes even self-contradictory. Nobody, expert or not, can honestly translate such a reaction into a number or a letter of the alphabet. The translation can be done, to be sure, but not honestly. It can be done by squeezing and pushing and packing, by cutting off arms and legs that don’t fit, by forgetting about inconvenient or complex details. To assign a grade to someone’s writing is always to oversimplify, always to tell some kind of lie.

The only worthwhile response to discourse is more discourse. Discourse can be as complex and as varied as the discourse to which it responds. A grade can’t be. The very presence of a grade contradicts whatever discourse purports to justify it.

Peter Elbow, a scholar of the pedagogy of writing, once asked his colleagues, “Have you noticed how grading often forces us to write comments to justify our grades—and how these are often not the comments we would make if we were just trying to help the student write better?” Another teacher of writing says glumly, “Just try writing several favorable comments on a paper and then giving it a grade of D.”23
Not surprisingly, research on grading suggests that students make better and faster progress when they receive extensive, thoughtful commentary on their work but no grades.24

*Question.* Some teachers say grades motivate students. You don’t agree?

*Answer.* I do agree. Grades do, in fact, motivate students. But consider what they motivate students to do. To brown-nose. To plagiarize. To cheat on tests. To steal or hide or mutilate library books so that other students cannot use them. To view their teachers as enemies to be outmaneuvered or as oracles to be second guessed rather than as friends or coaches or helpers. To parrot what teachers say instead of thinking for themselves.

What grades motivate students to do is to grub for grades. And since nobody has ever been able to prove that grades reveal anything worth knowing, the argument that they are worthwhile because they motivate students is hopelessly circular. Corporal punishment is also a way to motivate students, but that doesn’t mean teachers should use corporal punishment. The threat of a low grade is a shabby device. Teachers who use it do no more for students than Pavlov did for dogs.

*Question.* You don’t think grades have any place at all in education?

*Answer.* None but the one teachers and administrators have arbitrarily decided to create for them. All the brouhaha over grades masks their essential irrelevance. Ultimately, they are beside the point. The main purpose of teaching is to find and develop the unique ability of each student, and this purpose has no necessary connection to the giving of grades. Socrates didn’t give any grades. Think about it.

In an ideal world, where students studied for the sake of learning and teachers taught for the thrill of teaching, grades would not exist. In such a world, they could not exist. But we don’t live in an ideal world. I give grades because I have to give them unless I want to spend all my time arguing with the dean and the department head and, yes, the students themselves, most of whom have been conditioned by years of schooling to slaver after grades and to define themselves with reference to them. Some students, hooked on the grade lottery, will grumble even if everybody gets an A. For them, being supposedly on top doesn’t mean anything unless somebody else is supposedly on the bottom. So to give an A to every student—one professor I know does precisely that—is no solution. To give no grades at all is no solution either, not if other teachers are giving them. As long as most teachers give grades, students tend to expect them from every teacher and to feel shortchanged if they don’t get them—but also hurt or irritated or disenchanted with the discipline if they get a low one. Grades have come to involve so much custom and ritual and reflex on the part of both teachers and students that
teachers are always going to step into some kind of mess no matter what they try to do about them.

For all these reasons, I'm not ready to conduct a jihad against grades, not at the moment. I'd rather spend my time teaching. To be sure, grades often get in the way of what I try to do, and sometimes they do more than just get in the way. Sometimes they murder both teaching and learning. But they are not always totally disabling. I view them mainly as an irksome irrelevance, as one of several clouds of demons that conspire to keep perfection always out of my reach. Yes, they are a bad thing: quirky, subjective, oppressive, time-consuming, beside the point—necessary if you want to keep your job.

They are no doubt here to stay, but I wish they didn't loom so large in teacher-student relationships. In any case, good teachers always have better ways to motivate students and inspire them. There are few absolute truths about teaching, but the following statement may come close to an absolute truth: any teacher who depends on grades to motivate students is not a good teacher.

Question. If grades are not the best way to motivate students, what is?

Answer. The first sentence of Aristotle's Metaphysics says that all people have a natural desire to know. When you base your teaching on this assumption, students eventually begin to see this truth about themselves and to share with you and with each other the curiosity that they already have. The best way to motivate students is to take their motivation for granted and never even bring the subject up.

To assume that students are naturally curious does not constitute a fail-safe formula for success, but it does work better than threatening or slave-driving or grade-giving. There's no point trying to force knowledge onto people. What they don't want to know, they often don't need to know. But all students do in fact want to know some things about nearly every subject. We ought to try to find out what they want to know and then try to help them learn it. In The Closing of the American Mind, Allan Bloom says, "There is no real education that does not respond to felt need; anything else acquired is trifling display."25

I'm not suggesting that teachers ought to start offering seminars on the relation of rock music to trigonometry. You don't have to pander to respond to felt need. From time to time students have come to my office of their own accord—students who were not even in my class—sat down before me, and bitterly wept because they could not write well. They were ashamed, frustrated. They had things to say but could not say them. They begged me for help.

Each student is a seething whirlpool of interests, and many of their interests will surprise you. I've taught people who were experts, severally, on Chinese pottery, antique cars, classical music, martial arts, tulip growing, and the stock
market. They burned to say something about these subjects and to say it elo-
quently. It was easy to get them interested in writing.

A teacher of writing can teach what students want to know by letting them write about what they want to write about. Writing then becomes a way for students to understand their own deepest interests and to communicate their understanding to others. And it becomes a way for them to learn even more about the things that really interest them. It's been said that no one truly understands a subject until he or she tries to write about it.

When you teach people how to write, you hand them a vehicle for self-expression and self-understanding. And who could turn down a gift like that?

Question. Do you have any specific techniques for encouraging the natural curiosity of students?

Answer. One is to work with them as a collaborator.

Question. How do you do that?

Answer. Sometimes when I criticize an illogicality or lapse in style, I'll admit to the students in the same breath that I've been known to make that same mistake myself. The admission makes me their collaborator instead of their tormentor. I'm telling them subliminally that my teaching of them is in part a reminder to and a correction of myself. And it's nothing but the simple truth I'm telling them. In my own mind, my most important qualifications for teaching—and especially for the teaching of writing—are the many blunders I've made and learned from.

When students see that their teacher isn't taking himself too seriously, they tend to relax. And when they relax, their curiosity and creativity begin to emerge. They start to experiment, to take risks, to see things about their writing and about themselves. And the more they see, the more they want to see.

Question. Do you know of any other teachers who sometimes use a little self-depreciation as a way of getting students to open up?

Answer. Socrates was the greatest self-depreciator who ever lived. On more than one occasion, he said he didn't know anything. He meant of course that any knowledge he might appear to possess was provisional, not necessarily or even probably the final truth. His offhanded honesty about his own lack of perfection was a major reason he was so loved and sought after by people who wanted to make learning a genuinely cooperative enterprise.

Every teacher must find a way of subjugating his or her ego to a larger, communal purpose. A little honest self-depreciation is one way of doing just that. When it works, it produces more than just relaxation; it produces trust.
Students know very well that no teacher is perfect, so there's no use trying to fool them on this score. Posing as perfect gets you nowhere. But if you can admit to students that you're still trying to learn even as you try to teach, the effect on them can be exhilarating. Barriers can fall like Jericho's walls. Suddenly, they start teaching you—about the stock market, tulip growing, Chinese pottery.

**Question. Which do you think is more effective, lecture or class discussion?**

**Answer.** I enjoy both. In fact, I think both are necessary. In all the recent emphasis on "active" learning, lecturing has come in for some rather harsh criticism, most of it undeserved. The lecture is a very important tool. In fact, it is the ultimate test of whether a teacher is any good, sure-fire proof of whether he or she has any knowledge worth conveying and any original perspective on that knowledge. When you get up in front of a lecture audience, you'd better have something worthwhile to say, and it had better not be available in any other form. You'd better have it well organized and timed to the minute. You'd better look and sound like an authority.

When you lecture, you show what someone who really controls the discipline looks like, thinks like, sounds like. You enact for students how the discipline makes you feel, how it challenges your mind. You offer your own mind and voice and personality as proof that your discipline is worthy of study and that mastery of it will have some genuine human benefit. A good lecture shows how the discipline can live and flow and move when it is working at its best.

For all these reasons, it can engage the minds of an audience just as actively as any class discussion. It's ridiculous to say, as do some theorists of teaching, that people listening to a lecture are necessarily passive because they do not speak. A good lecture is, in fact, a dialogue, not between mouth and mouth but between mind and mind. It anticipates questions before they have a chance to be fully formed in the minds of the audience. It gauges the intellectual limits of the audience, takes them to those limits, and sometimes even pushes them beyond the limits they thought they had. It gives voice to thoughts that people curious about the discipline have tried on their own to express but without success. It speaks not only to the audience but for it. It is the collective, idealized voice of thinking humanity.

**Question. And teachers can't perform those functions in a class discussion?**

**Answer.** Sure they can, but sometimes not as cleanly, economically, or dramatically. A lecture gives you a chance to do absolutely the best teaching of which you are capable. It allows you to tune and polish every word that you utter, to hit the mark for which you are aiming and hit it dead center—if, that is, you are capable of hitting it. There's no excuse for a poor lecture,
because you've had your whole lifetime to prepare it. In fact, your whole lifetime as a teacher and thinker should flow in some way into it.

The unique strength of class discussion is that it creates a forum in which anything can happen, anything can get said. Its obvious weakness is that sometimes nothing worthwhile happens or gets said, no matter how hard the teacher may try to control the discussion or inspire it. One function of a good lecture is to show what might have happened in class discussion but didn't—not necessarily to deliver the final truth but to dramatize disciplined thought in action.

The two basic forms of teaching—lecture and discussion—are beautifully complementary and can of course be mixed. Some teachers like to use a short lecture as a prelude to class discussion, and some like to pause for discussion during a full-fledged lecture. I would hate to have to choose between lecture and discussion. Each has its own uses and potential.

Question. What is the role of passion and enthusiasm in teaching? Do they have a special place in lecturing?

Answer. I've often seen those two words in standard descriptions of what makes a good teacher, and in those descriptions they usually refer to a cheerleading or grandstanding style. The other day I happened to read a description of a teacher with just such a style, a certain Mrs. Peacock (I did not invent the name) who taught high school in Raleigh, North Carolina. “When she read Shakespeare, her classroom trembled. Upon a chair shoeless one minute, on her knees the next, you couldn't call what she did lecturing.”

When I see such descriptions of memorable teaching and notice their emphasis on grand passion, I'm troubled by an inconvenient fact, one these descriptions seldom mention. Some of the greatest teachers in history—Socrates, Jesus, Gandhi, Gotama—were not especially passionate or enthusiastic. They had passion aplenty, of course, but it smoldered beneath the surface. On the surface, they were almost the opposite of passionate. They were ironic, self-effacing, very low key. Every one of them would have been a washout in a cheerleading contest.

There is doubtless a place for Dionysian displays of passion in teaching, or I should say in the teaching of some people. Mrs. Peacock produced several famous writers, among them Reynolds Price and Anne Tyler. Her style worked for her and worked for them, but that doesn't mean it would work for everybody.

When people read about Mrs. Peacock, they tend to conclude that to teach with genuine passion you have to be shoeless one minute, on your knees the next. It's not true. Sometimes the most passionate thing a teacher can do is to be utterly dispassionate. Some great teaching—including some great lecturing—is calm, unruffled, serene. Think about Jesus telling his parables or Socrates asking his questions. Or listen, if you get a chance, to the Dalai Lama. In one lecture that I heard him deliver, he ended with a smile and
the following comment: "If you have found anything useful in what I have said, I hope you will use it. If you haven’t, I hope you will forget everything I’ve said."

The teaching of Jesus and Socrates and the Dalai Lama is not lacking in passion. It is passion carefully channelled and controlled. Calm on the surface, at times ironic, it is just as fervent in its own way as Mrs. Peacock’s Sturm und Drang.

The style of teaching that we sometimes call the cheerleading style—the high-energy, high-decibel approach—is one way to show passion and enthusiasm but perhaps not always the best way. I’ve sometimes pulled my cork in class and effervesced, but I’ve never been totally sure the students gained anything from the display. Afterwards, I’ve usually felt a little ashamed, as if I’d done something just the slightest bit dirty. Whenever I give myself up to a flashy display of my own passion for the subject, I usually wonder in calmer moments for whose benefit I did it, the students’ or my own.

In any case, it’s not true that students will automatically feel whatever the teacher feels as long as the teacher lets the feelings show. To assume that passion always fetches an answering passion is to believe in sympathetic magic. Teaching is not like the mating dance of the sharp-tailed grouse. Sometimes it needs to be minimalist, not maximalist. Often you don’t know what’s going to work until it actually starts to work, and nothing works all the time, not even passion. Some students will no doubt catch fire from a display of passion by the teacher, but others won’t. For them, you need other approaches.

**Question. Are you saying that there can be such a thing as too much passion?**

**Answer.** I think there can be. If you become too passionate in class, you run the risk of seeming somewhat crazy. You become a tempting target for parody. You make it easy for students to write you off as just another dingbat schoolmarm or -master. You also run the risk of appearing dogmatic, of implying by your very passion that there is only one way to approach the subject—your way. Too much passion can have the opposite of the intended effect. It can close off in students their natural desire to think and explore on their own. “Why should we be passionate?” they may say. “This teacher obviously has enough passion for all of us.” And what about those calm, dispassionate scholars who might be trying to grow and develop in your class? They might respond to a calm, dispassionate style. After all, Mrs. Peacock’s approach did not work for everybody: “She inspired love in most, anger in a few.”

Teachers ought to be careful with passion. It is not wise to let it loose for the mere sake of letting it loose. Untrammeled, it can destroy as well as create. Oddly enough, it is sometimes most effective when masquerading as the opposite of what it really is.
Question. Has anyone ever mentored you in teaching?

Answer. I come from a long line of teachers, and many of them have mentored me in one way or another. My mother taught kindergarten, grammar school, high school, and college. She is the only person I know who has taught on every level of formal education. To try to tell what I’ve learned from her about teaching would take days, weeks. When I was small, she ran a kindergarten in our home, and I attended as one of the regular pupils. Sometimes I think that everything I do in my teaching is an attempt to re-create for my own students some of the fun and thrill of discovery and sense of security that I knew in my mother’s kindergarten. In any case, the masks that I carve out for myself usually steal a few of their features from that awe-struck, giggly little boy.

My father, like my mother, taught high school, before he went into business for himself. And several of my aunts were teachers. One of my older cousins was principal of our local grammar school. I have another cousin who is a retired teacher of economics and still another, closer to my age, who teaches English at the University of South Carolina, where he directs—the writing program. Every now and then I talk with him about teaching and especially about the teaching of writing. One of his aunts by marriage taught me English in high school.

In my family, you can’t turn over a rock without turning loose a teacher, so I grew up with teaching all around me. In my world, it went on all the time, not just in the classroom. My mother, my father, and my aunts who were teachers helped me extensively with my schoolwork, and I started to learn about teaching by observing them when they were teaching me. I guess you could say I was born to the trade.

Question. Has anyone ever mentored you in teaching on a more formal basis?

Answer. My other mentors have been my students. They have taught me the most. The best way to develop as a teacher is to teach, to get into a classroom and actually do it, to observe yourself in the act and find out in practice what works for you and what doesn’t.

All the theory in all the books can never replace the experience of teaching, because students will always let you know what’s working and what isn’t, either by their facial expressions and body language or by their comments in their written evaluations. I take the evaluations done by students very seriously. I study them carefully and make changes in light of what the students recommend. Nobody is a better mentor in teaching than your own students. After all, they are the ones who know for sure whether any learning is actually taking place.
Question. You said that a "giggly little boy"—a sort of kindergarten self—sometimes contributes to your teaching persona. Can you elaborate? For example, do you ever tell jokes in class? And would you say that joking and playfulness are good things in teaching?

Answer. I never tell jokes for the sake of telling jokes. But I do watch for opportunities to inject a little playfulness into the proceedings. Teaching ought to be taken seriously, but not too seriously.

Read Plato's dialogues, and you'll see right away that playfulness is central to Socrates' teaching. He's constantly teasing his pupils and poking fun at himself. He invents wonderful puns, loves to play with language. On one occasion, when he says he knows nothing, what he says in Greek is "'Oun ouk oida, oude oiomai" ("In point of fact, I don't know anything, nor do I think I do"). Look at the alliteration and at how it reiterates the Greek letter omicron, which stood in Greek mathematics for nothingness. Nobody who knows nothing could utter such a sentence. The Greek is, in fact, a paradox: a craftily emphatic confession of ignorance. And like all paradoxes, it is essentially teasing and playful.

Socrates' playfulness mirrors the complexity of the mysteries he is trying to solve. He comes at them from all angles, poking them, prodding them, tickling them to watch them wiggle and shake. He is the most playful of all the great teachers. Sometimes you can't tell quite what he is up to. Small wonder that a book about him is called Socrates: Ironist and Moral Philosopher.39

If a main purpose of teaching is to make things clear, you might at first think that playfulness, irony, and humor ought to have no place in it. But the truth is that some things are not clear and can never be made so, at least not by human language. Some things have to be suggested, implied, groped for, partially felt. Socrates' playfulness is a way of feeling around for possibilities, of toying with reality for no other purpose than to see how reality will react, a way of casting off limits and limitations so that teaching can expand into the infinite.

The philosopher Johan Huizinga has argued that playfulness is basic to human culture, and many novelists and dramatists have presented human life as a huge and complex game.30 If they're right, then teaching like that of Socrates—teaching that is always somewhat playful, that catches you off guard and keeps you always a little tipsy and is always suggesting just the slightest bit more than it actually states—represents life at its most basic and intense. Playfulness such as you find in Socrates' teaching is an experience that people long for and that culture cannot do without, not a way of preparing for life, but life itself.

Question. Would you call your own teaching essentially playful?
Answer. I don't know if playfulness lies at the heart of it but it's often a part of it. It's hard to talk about this side of teaching without sounding silly or self-indulgent, but I'll try to give you an example. Once in a colleague's drama class, I presented a guest lecture about Pirandello's play *Henry IV*. It concerns a man with no identity. He falls from a horse, hits his head, and wakes up thinking he's Henry IV of Germany. Pirandello never says who the man "really" is. The point of the play, or one of its points, is that people have no identity other than the ones they manufacture for themselves or that others manufacture for them.

When I taught this play as a one-shot lecturer in my colleague's class, I refused to let the regular teacher introduce me. I arrived a few minutes early, chatted with her briefly in the hall, and found out that she had not yet announced my impending visit either orally or on the syllabus. But now she was ready to go with a standard academic introduction: the works our esteemed speaker has published, etc., etc. I asked her not to do that introduction or any other. So at the top of the hour she got up and said, "Our speaker today has asked that there be no introduction." Then she sat down. When I got up to lecture, the students did not know who I was.

I began by joking that I was just some nameless person who got hit on the head with a copy of *Henry IV* and woke up thinking he was a professor of literature. All through the lecture, I kept alluding to this little joke. The point, of course, was to make the students wonder about my identity and therefore about the question of identity in the abstract. Pirandello's "Henry" has no identity other than the role he plays, and neither did the person who suddenly appeared on that day to lecture about "Henry." For all those poor students knew, I was not even a professor at all, though I suspect most of them guessed that I was when I started to analyze the play.

Question. How did they react to the joke?

Answer. Most of them got a chuckle out of it. They thought it was mildly funny. But they also found it—as I had intended—somewhat exasperating, especially the ones who came up to chat with me after the lecture. They wanted to know, dammit, who I really was. And I kept insisting that I'm just somebody who thinks he's a professor.

When I concealed my identity from that class and kept reminding them that they didn't know who I was—or for that matter who anybody really is, especially "Henry"—I didn't do anything especially earthshaking. It was mainly a way of getting the students to pay a little extra attention, a bit of good-natured intellectual teasing. Still, it had a serious purpose. In a way, I became "Henry" to teach "Henry."

After that one-shot lecture, I disappeared. The students never saw me again. But I hope I left in their minds a nagging question—Who was that masked
man?—and along with it a desire to solve the general problem of identity in some intellectually satisfactory way.

If you want a word for what I was trying to do in this lecture, you could perhaps invent one and call it an experiment in meta-teaching—that is, teaching that tries to leave no gap or fissure or crack of light between the subject being taught and the way it's being taught, teaching whose matter and manner are the same. The Greek word for this kind of teaching—if indeed such teaching could ever be said actually to exist—would be metadidaskalia (if the word existed in Greek, which it doesn't), and the Greek word would mean not only meta-teaching but also meta-drama, because didaskalia means both teaching and drama, just as didaskalos means both teacher and dramatic poet.

I think meta-teaching is what every teacher aspires instinctively to do but probably never actually succeeds in doing because it may well be impossible. It is the Holy Grail of teaching, that which we seek but never really find.

If it could ever truly come to be, it would have to be, I think, essentially playful. Even if drama were not its ostensible subject, it would have to show in every sound and movement and gesture why one word of a gorgeous ancient language means both teacher and dramatic poet and why we call plays "plays."

By the way, I got the regular teacher, a good friend of mine, to promise she would never tell who I "really" was.

Question. You've never had any regrets that the students never found out who taught them on that day?

Answer. Not the slightest. When I chose to do without the usual introduction, I deliberately relinquished a little bit of ego gratification in order to pursue what seemed to me the possibility of a higher end—not to mention the possibility of having some fun.

I hope I won't sound trivial if I say that one of the most important touchstones for good teaching is a spirit of fun. You should be having fun, and so should your students. If that spirit of fun ever ceases to bob and weave, if it disappears and does not come back, if Puck and Ariel fly away and Till Eulenspiegel dies and does not live again, then it's time to stand back and take stock of what you're doing, because you're doing something seriously wrong.

Question. Can you think of the time when you realized you were confident as a teacher?

Answer. Very clearly. I was teaching Shakespeare's A Midsummer Night's Dream to a seminar of fifteen or so graduate students. It was my first, maybe my second, year of university teaching, and I was still quite green. In fact, I hated my own teaching. I was serving up clichés and bored in my own classes.

But one day a student asked me about the theatrical imagery in A Midsummer Night's Dream. I started to talk about this topic without much interest
but realized at some point that I had risen to my feet and was speaking for once with fluency and considerable originality. I was quoting the epilogue to the play, analyzing its versification and imagery, and showing how it sums up this play and foreshadows later developments in Shakespeare's theatrical theme, especially as that theme re-emerges in Shakespeare's last play, The Tempest. Even more important, I was showing what the closing words of the Dream suggest about the theatrical nature of life. For the first time, I was using literature as a way to understand life—its pageantry and theatricality; its fragility and beauty; the role-playing in which all of us engage, sometimes for good, sometimes for ill; the suspicion that all of it may be an illusion, a shadow's dream. I was suggesting to students and showing them with specific references to Shakespeare's text that if only they can understand the closing words of Shakespeare's dream they can also understand something of their own dreams and fears. I think I became a teacher at that very moment.

I don't know why so many things suddenly came together in that instant, but I think it had to do with the fact that I was sitting among intelligent people who were expecting me to say something intelligent, perhaps even moving. I was reacting, I think, to the expectations of the class. Students were looking at me and saying with their eyes, "For God's sake, Rivers, tell us something worth hearing." In response to that mute summons, I looked inside myself and found something that until that moment I hadn't known was there. The students made it happen by refusing to take anything less. They forced me to become what I wanted to be.

If the moment could be played back to me now as a film or videotape, I suspect I'd find my remarks still somewhat trite. At the time, however, they represented a definite crossing-over for me and (I like to think) the students as well. The whole time I was talking about that eerie but beautiful theatricality of Shakespeare and of life, riding that new wave of inspiration, I was blinking back tears, because I knew I had just been born.

Question. Do you feel that teaching is worthy of intellectual discussion and study?

Answer. Absolutely. The idea that teaching is not a respectable subject for research is a major reason we have so much bad teaching. As with people in any other profession, teachers need a body of research against which to test their methods and opinions.

Some people think research on teaching isn't getting done. They are wrong. Hundreds of people are doing it. In one way or another, people have been doing it almost as long as there have been people. Plato's dialogues, with Socrates at their center, are an extended research project on teaching. Formal research on teaching spans this century.

The problem is getting teachers to notice this research and take it seriously. Think about all those studies that prove the unreliability of grading and about how we teachers have managed to act as if they did not exist.
Sifting through the research on teaching won't teach you how to teach, at least not by itself, but it certainly will make you think about what you're doing when you get up in front of a class. "The unexamined life is not worth living." Socrates.

**Question. How could we proceed with research on teaching?**

**Answer.** We are doing it right now. The interview project is potentially very revealing. The mere act of asking a question can be a powerful stimulus to exploration and understanding. That's why Socrates' teaching so often took the form of question and answer and why you've no doubt hit on something fundamental in deciding to use interviews to find out what teachers do—or think they do—when they teach.

I imagine you'll find that each teacher with whom you conduct an interview has a different approach to teaching or a number of different approaches that he or she uses at different times. I imagine you'll also find that teachers sometimes contradict themselves as they struggle to express exactly what it is that they do when they teach. I wouldn't be surprised if I've contradicted myself once or twice during the talk we've just had. At least I've left an escape hatch of sorts by saying that teachers sometimes need to switch styles or even personalities to say what needs to be said.

In any event, it will be fascinating to see if you can generalize from the interviews. Even if you can't, that, too, will tell us something about teaching.

**Question. In conclusion, would you be willing to say if you have a dream job that is different from the one you are doing now?**

**Answer.** I am doing my dream job. From the first day I went to school I knew that a teacher was what I wanted to be, and I consider myself lucky to be living my dream. As a matter of fact, I started rehearsing to be a teacher quite a few years before I actually became one. Let me tell you about that before we call it a wrap.

When I was in college, I had a friend who has now also gone on to become a university teacher. He and I would sometimes hang around one of our classrooms after everybody else had left. In the deserted room, we'd practice how we were going to walk into our own classes once we became teachers. I'd sit in the middle of the room and criticize his entrances, and he'd do the same for mine. Just think about all the possible ways of walking into class and facing your assembled students, about the extent to which the teacher's entrance sets the mood for the whole class to follow, and you'll realize there's actually quite an art to it.

So we practiced and perfected every possible way of making that entrance. We started with an easy, familiar one: the glowering, intimidating entrance,
with eyebrows bristling and mouth turned down in a snarl. Then we gradu-
ated to a more challenging impersonation: the vacant, bemused, absentminded
entrance, where you feel your way from door to lectern with one hand stretched
out feebly before you, eyes turned to heaven and brain obviously engaged
in airy cogitation, like the blind Oedipus wandering directionless across a
vacant Greek plain. After we got that one down, the rest came quick and
relatively easy: the rushed, harried entrance, ten minutes late, dropping papers
and paper clips, muttering excuses and apologies; and the poised, debonair
entrance, with a stack of graded papers tucked neatly under one arm and a
tiny, inscrutable, vaguely minatory smile hovering half-invisible on your lips;
and of course the bold, determined entrance, trailing a billow of pipe smoke
or cigarette smoke (people still smoked in those days), swinging a briefcase
in tight, anal half-arcs, and heading for the lecture platform like a torpedo.

We even practiced a few strategies for salvaging the most mortifying of
all entrances. After a quick stop at the rest room, you stride into class, wheel
to face your students, raise both arms in a lecturely gesture, draw a pregnant
breath . . . and realize your fly is hanging open. How to get out of that one?

A lot of this was parody, of course. We were poking fun at teachers we
actually knew at the time and twitting our own aspirations to teach. But the
whole business was also secretly thrilling. To stand on the edge of that moment
when knowledge is about to begin, when pencils poise and intellects open
like a flower—this was a game we never tired of playing.

I still get a secret thrill when I walk into class and see young faces turn
expectantly toward me. At that moment I am about to become everything
I want to be. At that moment absolutely nothing—no person, no time, no
place—stands between me and infinity.

Notes

1. Luigi Pirandello, Maschere nude [Naked Masks], 2 vols. (Milan: Mondadori,
1958). On the implications of Pirandello's phrase "naked masks," see Eric Bentley,
Theatre of War: Comments on 32 Occasions (New York: Viking, 1972), 341-42. Here
in this first note, I would like to thank the people who talked with me about this essay
and thus helped me to get it into final form. The most important person, as always,
is my best teacher, my mother, Martha Rivers. Also (in no particular order) Mary
Ann Shea, Nancy Mann, Chuck and Peggy McVay, Rolf Norgaard, Joan Lord Hall,
Charlie Fasanaro, Alan Taylor, Beth Nelson, Marilyn Krysl, Jim Rivers, and
Jim Kincaid.

2. Pearl Cleveland Wilson, The Living Socrates: The Man Who Dared to Question,
As Plato Knew Him (Owings Mills, MD: Stemmer House, 1975), 5. See also Plato,
Symposium, 216D6, which compares Socrates' appearance to that of a "carved"
(geglummenos) figure of a satyr; Plato, Theaetetus, 143E7-9, which mentions Socrates'
bulging eyes and pug nose; and Xenophon, Symposium, 5.1-5.7, which mentions
Socrates' bulging eyes, pug nose, flaring nostrils, big mouth, and thick lips. In refer-
ring to Plato, I give Stephanus pages and subdivisions of pages (for example, Sympo-
sium, 216D). "Stephanus" is Henri Estienne, a Genevan humanist whose edition of
Plato appeared in 1578 and whose pagination constitutes an internationally accepted
method of referring to Plato. Stephanus pagination appears in the margins of modern editions of Plato's Greek text and in those of some English versions, including The Collected Dialogues of Plato, ed. Edith Hamilton and Huntington Cairns (New York: Pantheon, 1961). The line numbers that I give in referring to Plato (for example, the last two numbers in the reference Theaetetus, 143E7-9) are those of John Burnet, ed., Platonis opera, 5 vols. (Oxford: Clarendon, 1905). Translations from Plato and other writers are mine unless otherwise noted.


4. Plato, Symposium, 216E4. The word that lends itself to such different translations is the participle eiron euomenos. On the word and the passage, see Vlastos, Socrates: Ironist, 33-34.

5. Gerasimos Xenophon Santas, Socrates: Philosophy in Plato's Early Dialogues (Boston: Routledge, 1979), 72.


9. Horace, Ars poetica, 333-46, especially 343-44: "Omne tultum punctum qui miscuit utile dulci, / Lectorem delectando pariterque monendo" ("He who has mingled the useful with the sweet has won every vote, / Delighting and instructing the reader in equal measure"). For a commentary on these lines and a history of the idea before Horace, see C. O. Brink, Horace on Poetry, 3 vols. (Cambridge: Cambridge University Press, 1963-82), 2:352-58.


11. J. Krishnamurti, On Education; quoted in Tompkins, 653. See also J. Krishnamurti, Education and the Significance of Life (New York: Harper, 1953), 57 ("Fear kills creative thinking").


14. Plato, Symposium, 217A2-219D2. See also Vlastos's discussion of this passage in Socrates: Ironist, 34-42. For Socrates as a "block of ice," the same work by Vlastos, 42.

15. On the use of the word eros in ancient Greek, see Kenneth Dover, ed., Symposium, by Plato (New York: Cambridge University Press, 1980), 1. Homer uses the word to refer to a desire for food and drink, and, as Dover says, it "can denote any very strong desire (e.g. for victory)." On Socratic eros, see Vlastos, Socrates: Ironist, 38-42. Vlastos's discussion supports my view that Socrates' teaching was erotic, but not sexual, in the very special senses I try to give those words above.


18. On grading in college science courses, see Wilfred J. Remillard, “Comparison of Grading Procedures,” Journal of College Science Teaching 12 (May 1983): 403-04; 429-30. For an overview of research on grading, see the annotated bibliography in Howard Kirschenbaum, Rodney Napier, and Sidney B. Simon, Wad-ja-get? The Grading Game in American Education (New York: Hart, 1971), 251-91. For an overview of more recent research, see the ERIC database, compiled by the U. S. Department of Education. In ERIC, search under “Grading” or “Grading and _____” (enter name of discipline, for example, Mathematics). See also James A. Bellanca, Grading (Washington, DC: National Education Association, 1977). Bellanca systematically lists and destroys the arguments in favor of grading, sometimes by pointing to the research, sometimes by using common sense.


21. For a poignant personal description of the dilemma, see Ruth Ann Blynt, “The Sticking Place: Another Look at Grades and Grading,” English Journal 81 (October 1992): 66-71. She concludes, “Trashing the traditional grading system is the best thing we could do to ensure better reading and writing among our students” (66).

22. Bellanca, 18. See also Donald P. Hoyt, The Relationship between College Grades and Adult Achievement, ACT Research Report no. 7 (Iowa City: American College Testing Program, 1965).


26. On Socrates’ claim to know nothing, see Plato, Apology, 21D5-6 (“In point of fact, I know nothing, nor do I think I do”) and Gorgias, 506A3-4 (“For I don’t lay claim to any knowledge when I say what I say but am seeking along with you”). See also Vlastos, Socrates: Ironist, 32, 82-86; and Haden, “Socratic Ignorance.”


28. Morell, B5.

29. The book, cited in previous notes, is by Gregory Vlastos. Socrates’ statement of his own ignorance occurs in Plato, Apology, 21D5-6. In Greek mathematics, omicron was an abbreviation of the Greek word ouden, meaning “none,” and was the ancestor, though not the exact equivalent, of our zero. Nobody knows when the symbol entered Greek mathematics. It seems to have originated with the ancient Greek astronomers, and there is evidence that Socrates was interested in astronomy, at least as a young man (Plato, Phaedo 96A6-98A6; Xenophon, Memorabilia, 4.7, 4.5; Aristophanes, Clouds, 225). The symbol appears in calculations by the Greek astronomer Ptolemy, who lived about five centuries after Socrates, and in certain papyri of the early Alexandrian period. See Thomas Heath, A History of Greek Mathematics, 2 vols. (Oxford: Clarendon, 1921), 1:29, 39, 45; Morris Kline, Mathematical Thought from Ancient to Modern Times (New York: Oxford University Press, 1972), 132; Ivor Thomas, ed. and tr., Selections Illustrating the History of Greek Mathematics, 2 vols.,


Riflery and Other Nonacademic Metaphors for Teaching

When I began teaching twenty years ago, I thought about teaching in the same terms as I did writing articles for social science journals. I would develop a research question (lecture topic), investigate it, draw conclusions concerning it, organize the results in an orderly fashion, and present them. This was what I had been taught to do in graduate school, and, to me, it was the way scholarship was carried out. To my surprise this strategy of preparing and teaching courses seemed to evoke quite uneven reactions from students. It was always most successful with the brightest members of the class, but even some quite good students seemed to miss the point. I fielded questions such as “Why are we learning this?”; “How does this relate to what we are reading in the books for class?”; “Where are you getting this material from?”; and “Do we have to know all this for the exam?” Less-engaged pupils were often hostile to or suspicious of the entire approach, frequently complaining that too much was expected of them.

I was left wondering how I could communicate information and findings in my field to students without watering them down or misleading students about what was involved in understanding a complex subject matter. To work through this problem, I began to think of teaching as a fundamentally different medium from doing research, although it is grounded in the same base of knowledge. I began to understand that, logically, just as transmitting information in writing is different from doing it orally (and particularly doing it orally with a “live audience”), teaching is not the same as participating in a written dialogue with scholars. To adapt to such a dissimilar medium, I began to incorporate some nonacademic metaphors for teaching as I started to reorient my teaching in a way that was more rooted in the oral tradition of everyday life than in the method of creating new knowledge that I had been taught in graduate school.

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I stumbled on my first teaching metaphor during my first semester of teaching. I have always thought of it as my riflery metaphor, but it may instead be a myopic image. When I first progressed from working as a teaching assistant for faculty to teaching my own course, I was shocked at how easy it is to observe student behavior in even a relatively large classroom. Excitement, inattention, boredom, skepticism are all plainly readable on the faces of individual students. This was rather frightening to me as a novice instructor. In large lecture courses there was always that student who came in late and sat in the back row and promptly fell asleep, as well as the person who sat closer to the front and used class time to catch up on reading the newspaper. There were also the more average students who would respond to some observations in lecture with murmurs of puzzlement, or no reaction at all, although the point was a startling one. Then one day as I left a class, I remembered the summer when, as a child at camp in New Hampshire, I began to excel at target shooting. The spring before that summer, I had gotten a new pair of glasses. My first time on the rifle range, I noticed that after each shot I took, I could see a dark dot on the target if the shot landed outside the bull’s eye. I had never seen this before, and I quickly began to use the new information to adjust my aim on subsequent shots. If the shot were low, I would sight the rifle above the bull’s eye. If it were high, I would sight it below. In that and future summers, I began to hit the bull’s eye fairly consistently and knew what to do if I fell outside.

In thinking about that experience, I realized that having a live audience in the classroom allows a faculty member, in the same way, to adjust for missed opportunities during the course of a lecture. As I experimented with my audience, I found the students far more revealing than a target. It was not only possible to say, “You sound or look puzzled about this point, tell me why” and then try to clear up the confusion; sometimes, when even a second shot went astray, one could say, “Obviously, I am not doing well today, can someone else state this point for me?” When murmurs of confusion rose from the group, one could ask why. Often gut responses from students as they reacted to new material in a lecture led to extremely illuminating discussions of why certain assumptions exist in a field. In my experience, if students understand that they are collaborating with the instructor to create a class to fit their own backgrounds, needs, and interests, they do not mind being “targets” in this metaphor.

My second metaphor for making midcourse corrections in lectures and courses, I think of as “normality.” Early in my teaching experience, many students would come up after class and during office hours to tell me that they knew that I was very interested in American politics (my specialty in political science), but I had to understand that they were not very interested in the subject. From these comments I began to realize that those who teach courses at a university level are unusual, if not abnormal, and therefore, from one perspective at least, are exceptionally ill-suited to teach their courses.
Because their level of interest and involvement in a subject matter is exceptionally high, most of them have little perspective on what would make the subject interesting to a normal student. I am a particularly grave offender in this regard because at the age of twelve, I started to accumulate data that eventually became my doctoral dissertation. Once I recognized how odd I was, I began asking family and friends about their perspectives on American political institutions, interest groups, and American political events generally, trying to understand what makes this subject matter compelling to those who are not obsessed by politics. I continue to be surprised by what intrigues non-political scientists about politics. Introducing such subjects—ranging from why the government can never seem to reduce the deficit to why Congress exempts itself from many of its own laws—gives me points of departure for lectures, points that have more inherent interest than textbook categories.

As part of my quest for the normal student, I also have each of my students fill out an index card during the first or second class session in a semester, explaining what they most want to know when they leave the course. This not only helps me to cover what the students most want to learn, but also makes it easier to avoid creating situations of a kind I remember quite well from having been an undergraduate. I often felt then that I was in a class different from the one I had signed up for after reading its description in the course catalog. Knowing what students expect for their educational dollars is a prerequisite to delivering it. If a student’s expectations are seriously at variance with the content of the class, she/he can be told that in time to drop the course. If this happens many times, the professor should change the catalog description, so that students know in advance what the course is about. I also make it a point to begin every lecture with an explanation of what makes a topic important and why a normal person might either want or find it useful to understand that topic.

These first two metaphors for adjusting one’s classroom style came early in my career and emerged out of often painful experiences. Several subsequent metaphors came later and were part of the delightful aspects of teaching. Although I worked to break away from a research model of teaching, for many years I retained the view of the lecture or lecture/discussion as ideally a straightforward progression from one point to the next. A professor should explain the significance of the topic, respond to cues from the audience, and move methodically through a subject. My view altered as a result of a postdoctoral year I spent at Harvard University. In that year, I attended a number of lectures, many of which were in fields outside my own. I found that a large number of these presentations were logically discontinuous. One speaker would start by explaining the power of Niagara Falls as a symbol in American arts and letters, move on to discuss European writers in a certain period, and return again to American literature. Despite their discontinuity, these lectures not only were easy to follow but also enriched my understanding of the major narrative by adding more context. As I thought about how we live
our lives, this began to make sense to me. There are few periods of time
the length of an average lecture when we do not normally switch perspec-
tives, sometimes frequently. We start to read an article on crime in the news-
paper, the doorbell rings, someone wants us to contribute to an environmen-
tal cause, our mother phones to talk to us about how her grandchild’s stitches
are healing, we drive to the university and teach a class on the American
legal system. In real life we and our students make subject matter transitions
easily and regularly. This understanding encouraged me to begin to splice
into lectures material that was related to the subject matter but that did not
flow in a linear direction from previous points. This practice seemed to make
classes livelier and sometimes even woke up the sleeper in the back row. I con-
tinue to believe that lectures and classes need a beginning, a middle, and an
end (and that the lecturer needs to know which is which), but within this
loose framework, the class can move a good deal. Students sometimes take
a class in an unexpected but interesting direction with questions and observa-
tions. Professors should do this as well. Since more classrooms are now
equipped for multimedia presentations, one can assist this “programmed dis-
continuity” by adding visual materials to the oral and written (handout)
materials already in the classroom.

My other “fun” metaphor comes from a favorite pastime. I normally read
one mystery novel each week. First in my classes and later in some of my
research, I began to incorporate the mystery form as a device to present
material. Is it more interesting to be lectured at or to be invited to help solve
scholarly puzzles? As a fairly average person (in this regard!) I prefer to solve
the puzzle. Students can be given a sense of the intellectual history of a field
by being presented with some of the inadequate conclusions that scholars
arrived at in the past, before they reorganized the evidence to come up with
current solutions. For some subject matters, it is possible to give the students
evidence and a conclusion identified as wrong and then have them derive a
more satisfactory solution. Because there are usually a variety of ways to come
up with a plausible solution, this process encourages students to think criti-
cally and to value the diverse perspectives which, through class discussion,
can provide multiple insights into a problem. Presenting social science mate-
rial as a “whodunit” works particularly well because by and large the most
interesting questions are ones that remain unanswered: why have there been
so many one-term presidencies in the United States since Kennedy’s assassi-
nation? why are American citizens today so fond of divided government (with
one party controlling Congress and the other the presidency)? what has led
to the current decline of political parties in the United States?

By midcareer I began to understand some of the many ways one burns out
in a classroom. If one is continually asked to view a subject matter through
the eyes of a new group of students semester after semester and year after
year, it is challenging, but one may also feel empty. One’s knowledge, time,
and attention are continually expended on classes and individual students.
The metaphor appropriate for this problem is exchange. Just as no faculty member should offer a class which students leave having learned nothing new, no faculty member should finish teaching a class in which he or she did not learn something new. This metaphor, which can be as challenging as any of the others, forced me back to reestablish a connection between teaching and research.

Although I continued to believe that the processes of writing up research and presenting material in a class are fundamentally different, I began to see the classroom as a place where the veteran researcher could see something familiar through the eyes of people who have not been steeped in the "accepted" way of representing that reality. This requires that students be given information and problems and allowed collectively to figure out solutions. In seminars I find it helpful to take a session to present a piece of my own research, inviting discussion and criticism. A question raised in an undergraduate honors seminar once led me to reconstruct the way I was measuring one of my central variables. I was using a standard procedure; no one in the field, even at the graduate level, would have thought to do it differently. Yet the student was absolutely right that the variable did not truly represent what it purported to. I revised my own work accordingly. I try to learn from my students in less dramatic ways as well. I invite individuals with special experiences to give presentations to the class. I encourage students to raise related material from other classes. Students frequently lend me books, cut out newspaper articles and even cartoons on the subject matter of the course, and show me syllabi from other courses. These are all ways that I learn from my classes.

Many years ago when my father was teaching a Sunday school class, he brought to my attention the folk saying, "If the pupil has not learned, the teacher has not taught." Although I suspect that my father was of the "pound it into them" school of teaching, I was troubled by that saying for many years. Any number of students go through classes without learning much even though other students in the same class may be learning a good deal. Is the teacher really to blame? The notion of exchange puts my father's saying into a more useful perspective for me. Students have to bring something of value into a class before they can be expected to take anything out. What they bring may be experiences, ideas, information, or practically anything else. Even curiosity and openness to new ideas are valuable coins in this realm. If there is nothing, as is unfortunately sometimes the case, then it is not the teacher's fault that little is returned. That is an appropriate exchange.

Parenthood is also a possible classroom metaphor, although more controversial than any of the others. Early in my career I tried to be the students' friend. I would take students to the campus library after class and explain how to work on a research paper. I would try to advise students about personal issues unrelated to political science. Among the unfortunate repercussions of this behavior was the fact that students often felt hurt by the grades they got from
me. If you are someone's friend, you do not give her an A—, let alone a B+. Although like most other beginning teachers I backed away from the friendship model very quickly, it was not until I became a parent that I acquired a metaphor that fit better. A quasi-parental stance allows one to express concern for individuals who are under one's care, while remaining an authority figure for them. I now explain to students how to acquire the resources they need to do an assignment, I do not take them to the library. College students need to take responsibility for their own lives, not turn it over to others. One caveat: if students request advice on work or career, they deserve to get it, as long as it is made clear to them that decision-making belongs to them. In this respect, parenting is fundamentally different from teaching. Parenting a minor child is inescapable. The parent must always pay attention to what the child does and be prepared to accept some responsibility for it. "Parenting" one's students is much less proactive. Professors have no right to offer unsolicited advice on any but the most strictly academic matters. To advise someone to use "spell check" before turning in a term paper is okay. I now have come to believe that even advising an apparently disturbed student to consider counseling may be going too far.

For me, these metaphors add up to a view that, although there are parallels between teaching and scholarly research, it is the differences that are key. The major differences involve the audience and the medium of communication. When I prepare articles for journals, I start out knowing that the likely audience for the article has a fundamental understanding of the literature in a field. I communicate with this group by drawing on its knowledge and tailoring observations to connect what is new in my manuscript with what the audience already knows. To teach most effectively it is also necessary to build on existing experiences and information. I teach material that is unfamiliar to the students, connecting it to what is familiar. But there are few ways to know in advance what your students will bring to a class. I try to teach, then, in such a way that I will learn from students what they know as the class progresses. Teaching as a medium is oral and interactive. It follows that the process of deriving metaphors for teaching is more important than their content, because teaching needs a connection to personal experiences, yours as well as the students'. This connection is much more intimate and demanding than it is for research. What we are taught in graduate school will get us published and, perhaps, lead us to make significant discoveries in our fields, but it is only a first step toward making us effective communicators of knowledge in a classroom. We need the rest of our lives for that.
Teaching Portfolio

Phillip K. Tompkins

Editor's note: Since 1992, the Faculty Teaching Excellence Program has offered to help faculty members at the University of Colorado at Boulder, compile teaching portfolios as a way of documenting their classroom teaching for regular University performance reviews. The Department of Communication was the first department on the Boulder campus to experiment with this process. As part of its experiment, Professor Phillip K. Tompkins submitted an unusually detailed portfolio devoted entirely to one course, a senior honors seminar. That portfolio included the following narrative along with a syllabus, exams, course rating forms, and other materials.

Preface

As a student of rhetoric and communication, I take it as given that all discourse is addressed to an audience. What, then, is the audience for a teaching portfolio? Certainly not my students, not if I am to be completely honest, nor my colleagues in the department. The answer is also negative for the administrators in Regent (or any other) Hall. I rule myself out as an audience because I talked to myself about my teaching every day of the semester. The only natural audience for a teaching portfolio seems to be the person who persuaded me to prepare one: Mary Ann Shea, Director of the Faculty Teaching Excellence Program. This portfolio is addressed to her.

Background and Description of the Course

Sally Planalp, director of the Honors Program in the Department of Communication, had encouraged me to try my hand at teaching an honors seminar in organizational communication in the spring of 1992. I agreed to teach Communication 4520-801, the Honors Seminar in Organizational Communication. The enrollment was to be limited by the instructor—in other words, students had to persuade me to let them in. Some were admitted on the basis of their standing in either the departmental or the college honors program. Others persuaded me by their overall GPA. Some got in by exhibiting recent growth in scholarly standing. All thirteen promised to work hard.

I had taught a senior-level course in organizational communication for several years. The course was fairly well received by students; word got back to me
that students who had taken it recommended the course highly. The student ratings reflected that. I regularly received A/A ratings and sometimes A+. In fall 1991, however, either the course or I got tired. The climate in the class was cool and formal, and students seemed to be guarded in their responses to me. Some students became bored by the steady stream of theoretical abstractions and expressed a need for more attention to concrete organizations. The student evaluations for that course were consistent with my experience. The instructor rating was an A, but the course grade dropped to B. The course needed to be revitalized.

I therefore began to develop a new strategy for the course; and in keeping with Alfred Chandler’s formulation about complex organizations—structure follows strategy—I realized that changes in the structure would have to follow. Experience as well as rhetorical theory had taught me the power of a good narrative to capture a reader's or listener's attention and thereby increase the chance of learning. For this reason, I selected for our first reading R. Preston’s (1991) American Steel, a narrative of a significant organization. I had read a shorter, earlier version of the book in two installments in the New Yorker, and thought it a gripping account of how a revolutionary steel-making company, Nucor, adopted new technology and work procedures to attempt to make steel in one step for the first time in the history of the industry. Nonetheless, I couldn’t be sure how students would take to it.

When the fourteen of us met for the first class (the course met from 2:00 to 3:15, Tuesdays and Thursdays), I told the students that this was the smallest undergraduate course I had taught in six years at the University of Colorado. Explaining the concept of a seminar, I warned them that I had high expectations of them. We moved our chairs into a circle and each person introduced her/himself to the group. I walked them through the syllabus, explaining the tough penalties for unexcused absences; the nature of the term paper, midterm, and final exam; and the group presentations to the class about a contemporary organization. I stressed that the syllabus was a contract, and like all contracts, it should be scrutinized carefully before the next class period.

I also explained to them during the first meeting that the syllabus specified exactly how many pages should be read for each period. The teaching method would be the Socratic method of questions and answers, the dialectic. I would call on students at random, I promised, asking questions to determine (a) their depth of understanding of the reading assignment and (b) their ability to infer conclusions and implications from the material. Twenty percent of their grade, a full 100 points, would be assigned on the basis of attendance and participation in the questions and answers and full class discussions.

Book One

I showed up five minutes early for the second period and was delighted to find that someone had arranged the chairs in a circle and that half the
students were animatedly talking about the first reading assignment in American Steel. After checking the roll and asking a few direct questions, I took a less prominent part as nearly all of the students jumped into the discussion. They agreed and disagreed with each other and I sat back in satisfaction. It was working. The narrative had gripped them.

After several periods it was clear that many of the students were racing ahead of the assignments. Some were slightly frustrated at not being able to discuss the outcome to avoid spoiling the suspense for those who had not finished the book. The discussions were lively; one student (let’s call her Marsha) was perhaps too talkative, but we were patient with her.

At the beginning of a subsequent period we were surprised by a request from Marsha. She wanted to give her copy of the book as a gift to her father but somehow she had lost the dust jacket. Would anyone be willing to part with his or her dust jacket to make the gift more appealing? Another young woman wordlessly peeled the jacket off her book and passed it to Marsha.

“That was a nice gesture,” said the middle-aged man we’ll call Manny.

Even though the students were gripped by the book, as I had hoped, they were not uncritical readers. Several faulted Preston’s rather florid and exaggerated style. I agreed with them and told them that an otherwise favorable review in the New York Times had made the same point. They found inconsistencies, some more important than others. The students also refused to become blindly enamored of Nucor. They agreed that the company had gone too far in the direction of decentralization; self-directed work teams were great in theory and seemed to be working for Nucor, but, as Preston reported, one man, a vendor, was killed during the plant’s start-up. We decided that there were no doubt certain functions, safety being one, that could not be completely decentralized.

I seized numerous opportunities to deliver mini-lectures when the narrative had aroused curiosity. I related, for example, that I had met and conversed with the hero of the book, Ken Iverson, the CEO of Nucor, after listening to him lecture on the importance of organizational communication to Nucor’s success the previous spring. I summarized Iverson’s lecture for them, and they hastened to find examples or instantiations in the Preston narrative. I also lectured on an article by Peter Drucker in the Harvard Business Review that had provided some guiding principles for Iverson.

I explained that in my estimation Nucor was successful (it has rapidly grown to become the sixth largest steelmaker in the U.S. and its ability to produce sheet steel in one step allows it to compete effectively with Japan, Germany, and Korea, as well as Big Steel in the U.S.) because there were only four layers of management above the worker. The Nucor structure has become the model many U.S. firms are now belatedly trying to emulate. (The advantages to communication and cost containment should be clear, Mary Ann, even though I can’t go into theoretical detail in this document.) I also related
how Iverson gets phone calls from executives all over the country asking for advice about how they can "delayer" their companies; i.e., how can you fire so many good friends? Iverson doesn't know—he never let the Nucor structure grow into such an overgrown condition.

Mini-lectures from my forthcoming book on NASA from 1967 to 1990 allowed the students to compare and contrast practices of the two organizations.

**Book Two**

Now that the students had a detailed understanding of how two significant organizations worked and understood that communication could be regarded metaphorically as the nervous system of organizations, it was time to move into a broad coverage of theory. For this purpose I had adopted *Writers on Organizations* by D. Pugh and D. Hickson, two English scholars who are masterful at providing precise and concise summaries of the prevailing theories of complex organization.

As we marched through these theories, from Weber to Taylor, from the Hawthorne studies to Tannenbaum's control graph theory, from Alfred Chandler's historical studies of DuPont, General Motors, and other industrial giants to the simplistic prescriptions of some management theories, the density of the prose quite naturally dampened the enthusiasm of the students; it was hard work. My role of asking questions and correcting answers was a bit more central at this point. But from time to time a student would excitedly find a way to apply a theoretical concept—say, span of control—to his or her memory of how Nucor or NASA worked. The time spent on the Nucor narrative was not merely an attention-getting piece of entertainment. Instead, it provided students with the material, or ontological "stuff," by which to make theory come alive.

We were developing a warm rapport. Three of the students had taken a seminar with me the previous semester in which they had slowly worked up the courage to call me Phil. The first time one did it in the honors seminar, other heads snapped in my direction to observe my response. Soon the others tentatively imitated the three, and finally they were all calling me Phil without any self-consciousness.

Once I had jumped up from my seat and begun sketching an organizational model (i.e., lines of authoritative communication) on the blackboard when, glancing over my left shoulder, I saw that half the class was either smiling or giggling.

"What's going on?" I asked in my gruffest voice.

One of the students I knew best, a young man who loathed wearing socks, pointed to my right leg. Static electricity had caused my pant leg to get caught up on my argyle sock just below the knee. It did look pretty silly. Now they were all laughing. For some reason still unknown to me I told them how a teacher's worst fear had materialized for me one night in class when a
student in the front row passed a carefully folded note to me as the class was gathering. I unfolded an imaginary note for the seminar and read its message: “Your fly is open.” Then I regaled them with what I have always regarded as my most brilliant solution to a classroom problem.

A week or so later, Marsha told a story about an experience at the Post Office involving “a girl I know.” The class moved on to theoretical matters. Then came the explosion.

“I have been sitting here for some minutes,” said Carla, a normally quiet woman, “thinking about the fact that a roomful of communication experts did not respond when a worker at the Post Office was referred to as a ‘girl.’” Silence. Then Marsha responded that she considered the person a friend, a girl friend, and didn't think anyone should take offense. Others thought that Marsha's choice of words was not a serious matter. I didn’t intervene, probably in part because of my surprise at the intensity of Carla's reaction. But I filed the episode away in the memory bank, in that area all teachers will recognize as the file on classroom dynamics.

During this part of the course I asked the students to organize themselves into four groups of equal size. Three groups wound up with three members each, the fourth with four. I told them that the group work was a test of their ability to apply their knowledge of communicating and organizing. Their initial task was to select an important organization as a topic for research whose results would later be presented to the class. In their sixty-minute presentations (allowing 15 minutes of questions and answers) they would have to apply at least two of the theorists they were studying at the moment.

As we moved through the theory book, I began to think about the midterm exam. It was to be an objective test designed to cover the many theories we were studying. I had read a publication mailed from the Faculty Teaching Excellence Program, “Characteristics of Highly Respected Courses,” by Richard J. Light. It reported the results of a study in which some researchers attempted to isolate factors associated with the most respected courses at Harvard University. The factor that got my attention was feedback. No one has to remind me, a communication theorist, about the importance of feedback. After all, the students cheered for each other when I recorded “stars” on a student's index card for a particularly insightful answer to one of my questions. But this study stressed the speed of feedback, not its existence. Courses were highly respected when graded exams and papers were returned as quickly as possible. That made sense to me theoretically and intuitively.

This class is small enough, I thought, to use the practice I used many years ago when classes were smaller than now: having students grade each other's objective exams immediately after they had completed them. While thinking about this I began to consider a much bolder experiment. I knew the students were working hard. They were not only reading, they were also working at understanding and talking about the material. They were honors students and
were likely to receive very high grades no matter what kind of exams I gave them. What was I hoping to achieve with the midterm exam in this class?

So I made a carefully considered proposal to the class. "I have an exam prepared," I said, "but am willing to let you write your own exam." Smiles broke out around the room.

"How would we do it?"

"We have existing mechanisms by which to achieve the goal," I said rather pretentiously—"the groups. Let each group take a portion of the material and write enough questions to give me a total of fifty."

They liked the idea; their excitement was palpable. Then we heard that intense voice again. It was Carla, the woman who had exploded in protest about the use of the word "girl." She presented her case: it means more work for me; it is the professor's job, not the student's, to write the exams; an honors course with exams is unheard-of.

The final argument was the only one that bothered me. Shouldn't honors courses have exams? I didn't know, but was trapped in any case by my own emphasis on the syllabus as a contract obligating both parties. An intense discussion followed in which the majority of twelve tried to find a way to satisfy their wants and those of the thirteenth. Rusty, the young woman who had donated her dust jacket to Marsha, suggested that I could give my exam to Carla, and the other twelve could take the one they had constructed together.

After much grousing by Carla, the class agreed to construct the exam questions. I gave them a brief explanation of test validity, primarily face or content validity, and they accepted that their questions must cover all portions of the material. They all realized that my motives were transparent. "You know we'll work harder this way than if we studied for your exam." What they only dimly understood—do they understand completely now?—was that I also wanted to maximize their teamwork, to have them cooperate within groups and between groups to achieve a common purpose.

They performed well. The questions were good and covered the material in a balanced way (i.e., had "content validity"). One woman—let's call her Edna—joked with me as we walked out of the building after class, saying that I had also generated a large new pool of test questions; I laughed and agreed. I indicated to the class which questions I would use, and each group saw to it that every student in class got its questions and answers. I wondered about that: might there not be some hidebound colleagues in either my department or another who might regard my experiment as unethical? Perhaps it was rationalization, but I was satisfied that my method was educationally sound in an honors class. These students would do well on any exam. Anyway, the midterm was worth only 100 points, or twenty percent of the grade.

At 9:00 a.m. on the Tuesday before the exam, I had a visitor during my office hours: Carla, the woman who had exploded at Marsha's use of the word "girl" and at my experiment. She had a list of grievances. It was National Women's Week, she reminded me, and she pointed out that I had used a
masculine pronoun in class and was shirking my responsibilities and was causing her more work by my experiment and that I must be offended by the aggressive communicative style she had learned growing up in New York City. My nonverbal reaction must have registered.

“Aren’t you from the Midwest?”

My anger couldn’t be contained. I told her that I resented any suggestion of sexist talk on my part. While chairing a communication department at the State University of New York at Albany in 1971, I had been liberated from such language by feminist friends and colleagues, including my boss, a feminist dean. Furthermore, I added, fifty percent or more of our students at Albany were aggressive downstaters. I had admired them and worked effectively with them for nine years.

Surprised by the content and the manner of my reply, she quickly produced her evidence: Manny (the middle-aged man in the class) and I had carried on an exchange in which I had used a generic masculine pronoun. Recollecting the exchange in question, I calmly explained that Manny was a philosophy major as well as a communication major. He had been asking an ontological question to which I responded with a quotation from Hobbes’s *Leviathan*: “Life for man in a state of nature is nasty, brutish, and short.” In my own lexical choices, I avoided such expressions. Carla agreed that this was true. I then explained that in writing I often revised quotations involving gender by means of brackets but that in speech such revision sometimes became awkward; Hobbes’s words, memorized in 1957, had popped out in a side conversation without the normal censorial constraint. She seemed to be satisfied. And then I really got mad.

I told her rather heatedly (and I would have been less heated, I am convinced, with a younger student) that I welcomed her counterarguments, criticisms, and objections to my methods. What I found difficult to accept was the accusatory quality of how she expressed them. How much more constructive it would be, I suggested, to make her points without implying guilt or accusing people of bad motives. I explained carefully what I hoped to achieve with the examination and offered again to let her take my exam so that I could honor the contract and not expect her to participate in the group project. She thought about the offer and then declined it.

She then wanted to talk about her term paper for another class she was taking from me. She told me that she been moved by a reading I assigned in which Kenneth Burke analyzed rhetorically the letters of the dying poet John Keats. She began to weep. While I was moved by her emotion, it was not clear whether the tears might have been caused, in part or in whole, by my earlier show of anger. Would she lodge a grievance against me for some category of abuse? Subsequent conversations with a thoroughly liberated woman colleague revealed that Carla had the reputation of being a harsh, accusatory participant in many classes; gender-related grievances were apparently not the cause of her behavior.
I gave the exam. When the students had all completed it I redistributed the papers, asking the test grader to write his or her name in the space designated. The Faculty Teaching Excellence Program should be proud of this instantaneous feedback about the exam. As I read out the correct answers there were questions about the acceptability of some short definitions. When I gave my rulings, two people shouted exceptions: Marsha and Carla. If I ruled in favor of one I would have to rule against the other. I was shaken.

The outbursts were difficult for me to process as I walked back to my office after the exam. Part of my purpose in the experiment was to reassure the students that they could be secure in cooperation. Grading the exam had revealed, in the tension of the moment, that competition was as powerful as cooperation, perhaps even more so. The incident nagged at me for weeks; it continues to nag at me as I keystroke this portfolio. I shall return to it.

The midterm exam was difficult. Several questions were selected from it for the departmental outcomes project. The student scores ranged from 100 to 104, the "variation" depending on how well they did on two bonus questions. I am convinced that the experiment was a success for this class. The two weakest students were lifted by the experience; for the moment at least they were "A" students.

Book Three

I anticipated another kind of problem with the third book, *The Cooperative Workplace* by J. Rothschild and J. Whitt. I had used the book in the fall of 1991 and it had "turned off" the students (as we used to say in the 1960s). It is the study of several cooperative (read nonhierarchical, participatory) organizations that were functioning in California at the time of its publication, as well as a survey of the meager existing research on such collectives. My fall semester students had had no ambitions of working in such organizations. The idea of taking turns sweeping out the newspaper offices or switching from job to job or taking part in a totally participatory democracy was not in their motivational field. I suspected that they were also put off by the absence of a hierarchy to climb. Kenneth Burke, my primary intellectual mentor, was not wrong in positing the "hierarchical motive" as one of the most important drives in this century. As I paraphrased his words to my students: when people preach schemes of equality, always ask, who will be first among equals?

It was neither my purpose nor my desire in the fall of 1991 to recruit students into a movement for cooperative or collective organizations. I did want them to see the liberating possibilities of such alternative organizations. They were not interested. Their rejection overrode my attempts to get them to see the theoretical possibilities of collectives within hierarchies. They were deaf. In reflecting upon the course at the end of the semester I decided that the problem was more with me than with them. I should have found ways to make them see beyond their immediate ambitions to the long-range objectives of the organizations of the country and the world.
As we marched through the book on the cooperative workplace, I again perceived a high degree of resistance. This time, however, it was coming from the more mature students in the class. It was now not so much a question of ambition as it was of experience. They were skeptical about people's ability to manage their own affairs. This was the section of the course in which I experienced the most fear. I would not have discussed the matter of fear in this portfolio had I not happened on an essay by Jane Tompkins (no relation that I am aware of) called "Teaching Like It Matters."

Jane Tompkins analyzes what she calls the "performance model" of teaching and its driving motive: fear. "Fear is the driving force behind the performance model. Fear of being shown up for what you are: a fraud, stupid, ignorant, a clod, a dolt, a sap, a weakling, someone who can't cut the mustard." "Thinking about these things," she continues, "I became aware recently that my own fear of being shown for what I really am must transmit itself to my students, and insofar as I was afraid to be exposed, they too would be afraid." Teachers do not often put such ideas in print; rarely do they even talk about such fears and anxieties.

For me, the fear of performance is pervasive. I am convinced that Kenneth Burke's theory of communication and human relations, Dramatism, is, as he claims, more than a metaphor. People do literally act, in both senses of the term: we do make choices, not just respond; and we are constantly performing before real or imaginary audiences. If Burke is right, we are always performing, whether we are lecturing or listening to a student report; but students may not perceive the different kinds of performance as equal.

My fear in this seminar was that the structure of the assignments, my attempt to get them involved, to accept responsibility for learning, to get them to think theoretically and enact the theory in their group and class projects—all this would fail. If it failed they would think of me as "stupid, ignorant, a clod, a dolt." Even worse, they would think me irresponsible. Carla had suggested as much. And if they didn't engage the material, didn't participate, they would force me to take on the performer's role. I could play that role, but I knew in my heart that it would not produce the same level of learning as if I were playing the role of playwright or producer.

It is my belief, one that borders on a fear, that students often value the professor as performer over the professor as director or dramatist. During the semester I was invited by Susan Whalen, a young colleague, to address her large lecture class on the subject of Kenneth Burke's New Rhetoric, with emphasis on the theory of identification. I prepared carefully for the performance and it went well. The students listened actively; they gave me a nice round of applause; several later congratulated me on the performance. One of my honors seminarians was in Whalen's class. She stopped me the next day and complimented me on my lecture, asking, "Why don't you lecture that way in our course?" I answered that such lectures were not appropriate in a small seminar; to her that must have sounded like a lame excuse. What
I wanted to say was: don't you realize that I’m doing a better job of teaching in the seminar than I was in that performance yesterday? Don't you realize you’re learning more in the seminar than in listening to lectures? It hurt.

The Cooperative Workplace concentrated on five case studies of cooperatives in California during the middle eighties. Much of the remaining “evidence” on worker-run organizations came from the cooperatives in the Mondragon region of northern Spain. When the students learned that George Cheney, a faculty colleague in the department, was going to take a ten-day research tour through this region during the semester, they urged me to invite him to give a lecture in class.

Cheney's low-key lecture, amply illustrated with slides, was rich in information. The students pressed him with questions during and after the lecture. The questions were mainly theoretical in nature, a source of satisfaction to me, because I wanted them to be curious about what cooperatives could teach us about organizations in general. They pressed Cheney on the difference between representative and participatory democracy in the collectives. They asked about size and its effect on the height of the hierarchy, or the number of layers or levels of management.

We had come as a class to a tentative conclusion that size was a limiting factor in self-governing organizations. This idea was related to the concept of the span of control or the maximum number of employees a supervisor can effectively manage; in that self-directed groups theoretically required each member to keep track of every other member, they faced the same situation as a single supervisor. Cheney taught us a kind of dilemma the Basque cooperatives faced: grow or die. Growth required hierarchy, an enemy of self-determination, but the economy of scale dictated that the collectives must grow. Nonetheless, in the limited hierarchy of the Mondragon cooperatives, the ratio of managers’ pay to that of workers was tiny in comparison to the differences found in commercial organizations in the U.S. The students also concluded that the Mondragon experiment had enjoyed some degree of success in the past because the workers owned banks. (In the U.S., cooperatives have difficulties securing financing.)

The students applauded Cheney’s presentation and were thinking theoretically about the possibility of creating cooperative units within traditional hierarchical organizations. Some began to realize that their groups and group projects were real-world instantiations of such arrangements. I was keeping the pressure on the groups, and there was evidence that they were hard at work researching the organizations they had selected. I was receiving fax messages directed to Group II from its informant in Pepsi-Cola, the organization it was studying. Group I had selected General Mills, Group III picked Celestial Seasonings, and Group IV was looking at Alfalfa’s Market. The groups usually assembled at the beginning and end of class meetings to exchange data and arrange for meetings outside class.

There was other evidence that the students were involved in learning. One
distributed stock market reports in class (they were keeping an eye on Nucor's economic performance even though they had come to think of a company's profits as "validation" that it was doing something right, not as an absolute criterion). They were also bringing me homework to do: articles, book reviews, and other "handouts" for me to read. Manny, skeptical about the claims of The Cooperative Workplace, did some library research and some statistical analyses to refute the idea that cooperatives last longer and perform better economically than do hierarchical organizations.

**Book Four**

My apprehension, if not fear, began to build as we moved to the fourth and final textbook, Karl Weick's The Social Psychology of Organizing. My experience with the book in the past had been varied. Students were not at all neutral in their responses: they either hated it or loved it. The book advocates an evolutionary model of organization that is protean and difficult to understand. I did not enjoy defending some portions of the theory at times, but other sections of the book are provocatively consistent with my educational objectives.

As we began our discussions of the book I gave them some biographical details about the author. Weick and I have appeared on a number of convention programs together. I explained that Weick, trained as a psychologist, was a product of logical positivism. (This required a mini-lecture on that philosophy of science.) Rebelling against that orthodoxy, Weick had rejected quantitative empiricism as the *only* way of knowing, and was widely believed to have embraced a communicative approach. What I wanted them to consider most carefully in his book were the ways in which students could learn to theorize for themselves about organizations.

I then revealed that I was trying to prepare them to function as lay theorists of organizations and communication. The course would teach them what theories look like, but to cope with complex organizations they would have to figure things out on their own. In addition, each student was required to come up with an original metaphor for complex organizations on the final exam.

We had fallen behind the schedule for several reasons—we lost a period to Cheney's Mondragon lecture and then got bogged down on some interesting theoretical questions—so we would not be able to concentrate on every chapter in Weick's book. Our compromise was to stress his epistemological approach.

The final exam was much on my mind. I wanted this exam to allow them to exhibit knowledge in depth and to synthesize diverse material. An objective examination wouldn't accomplish such objectives as well as an essay exam. So I approached them with my second experiment. Would they, I asked, like to participate in writing the questions for an essay examination? Although groaning under the burden of preparations for their group presentations and individual term papers, they jumped at the opportunity—all thirteen of them.
We spent some time talking about the criteria for good questions and good answers. The four groups agreed to a division of labor in order to assure that all aspects of the course were covered. They also agreed to provide a detailed outline of an “A” answer to each question. They accomplished all these tasks on their own time outside class. I read the questions and the outlined answers carefully, indicating what should be added to and subtracted from each answer. I reminded them that they had to work their original metaphors into the essays, as well as employ material they would learn from the four groups. I promised that I would select four of the eight questions and add one of my own. They would be required to write answers for two of the five questions.

The students’ response to the Weick book was, I thought, quite intelligent and discriminating. Parts of it they liked; others they attacked. That was my own response. They began to ask whether or not they could do some theorizing in their group reports and term papers. “Fine,” I said, “but don’t forget to apply at least two of the theorists we read in class in both the oral report and the term paper.”

At this point in the course a conflict between my personal life and teaching began to create problems for me. Students in both of my courses had many questions about term papers, the exam, and other assignments. On the home front, it had been necessary to rescue my 87-year-old mother from a nursing home at the end of February. We could not leave her alone for extended periods of time. Elaine Tompkins taught on Monday, Wednesday, and Friday, while I taught on Tuesday, Wednesday, and Thursday. We hired an attendant who came in several days a week at lunchtime, but Elaine and I had to spend more time at home than usual, making it difficult for students to reach me. I didn’t want to announce the situation in class, and one of my students began to chafe at my “inaccessibility” outside class. It is a cliché that students don’t realize that professors have lives outside the university and that problems do sometimes arise that are difficult to explain.

Group Reports

Finally, the day arrived for Group I’s oral presentation on General Mills. The other students were attentive because they knew they would have to make a similar presentation, because they would have to work the material into their final exams, and because I supplied them with a form to complete. It had three ten-point scales (ineffective-effective; inefficient-efficient; shallow-deep) and room for written comments. I computed the scale means for each group and typed the anonymous comments of other students, as well as my own comments, and the grade for the group.

The group project emphasized cooperation and communication. For that reason, each student received the same grade. (The term paper, however, was another matter; it fixed individual responsibility.) I had some trepidation about the assignment. I had required students in previous courses to give reports
on theorists, with varying degrees of success. Most were creative and entertaining, but some were a bit shallow. In addition, I had realized after the fall semester that the reports needed a better balance between theory and empirical analysis.

Group I astonished me. It was a group of three women: Marsha, Edna, and Carla. Given the previous clashes between Marsha and Carla, I'd felt some anxiety about the group dynamics in this case, but that day they were all models of cooperation. They sounded like insiders (they did have at least one informant), but said later that they had picked up much of their information from articles in the press.

General Mills, they explained, was “restructuring” itself and introducing self-directed work teams. Theory had paid off; the students knew how to interpret the organizational transition. They even had some scoops on power politics and the problem of CEO succession within the corporation. They filled the blackboard with the organizational chart. They demonstrated Chandler’s thesis by showing how the mistaken strategy of diversification in the 1970s and 1980s had created a cumbersome structure that was now being dismantled through divestment of fashion and clothing companies and a restructuring. I can’t summarize the entire presentation, but it more than met the requirements.

Three aspects of it especially pleased me. First, the three women had scripted an interactive presentation. They alternated speaking every five minutes or so in a way that kept one’s attention and distributed responsibility, all the while integrating effectively their visual aids and videos. Second, they did an excellent job of applying numerous theories. They even telephoned two distinguished theorists, Alfred Chandler and Arnold Tannenbaum, professors emeritus at, respectively, Harvard and the University of Michigan, to test the applications of their theories. Third, they handled themselves well in the aggressive questioning that began at the end of the presentation. Several members of the class felt that Group I hadn’t been critical enough of the corporation (I agreed), but I was extremely proud of the group and told them so. They set a high standard for the remaining groups. At the end of the period, Group II was huddling in nervous loquaciousness.

Group II followed with a presentation about Pepsi-Cola, another company currently involved with restructuring. Its management even claimed, as the students explained, to be reversing the traditional pyramid, placing the base on top and the apex at the bottom, and calling the organization the “right-side-up company.” Management’s buzzword was “empowerment.” I had seen some of this group’s research material as I served as a messenger, delivering faxes from informants in the company. These students used theory in insightful ways.

Group III analyzed a local company, Celestial Seasonings. Although I didn’t think it would be possible, I was astonished again. One of its members, a student I liked and admired from a previous course, had been working all
semester as an intern at Celestial Seasonings. This group knew that organization inside out. The students even got an interview (which is contrary to company policy) with a top executive by persuading his secretary to give them an appointment.

The bureaucratization of CS by Kraft, the students argued, had led to a hardening of the communicative arteries. The leveraged buy-out of the company from Kraft put a heavy debt load on the firm that made it difficult for the employees to get back to the informality and spontaneity of the early days. Mo Siegel's return to the firm, despite his charismatic reputation as heroic founder, had not yet produced the solution to the company's problems.

But there was hope, or so Group III would have us believe. Its heroine, a new member of the Total Quality Management department, was a specialist in organizational communication and was determined to shake CS up and bring back the original culture. She was working on the packaging assembly line to learn about all aspects of the work and all the workers. She planned to champion integration and stress teamwork, concepts that had fallen into disuse. The students pronounced her a theorist in organizational communication (intending it as praise) and explicated her ideas. The group predicted that it would take CS five years of traversing a rocky road to get back where it had been in the 1970s and to be able to enact the company motto of "truth, beauty, goodness." I was impressed by these students and let them know. They came to my office the next day to pick up their comments and group grade, a proud little group.

Group IV dealt with another local firm, Alfalfa's Market. Although its members indulged a bit too much in dry academic lecturing, they had burrowed deeply inside the organization, interviewing several employees on videotape (parts of which were shown during the presentation). They applied theory effectively, one member boasting that he had not just read about the theories they were applying, e.g., lessons from Peters and Waterman's *In Search of Excellence*, he had read the theories themselves. They gave us their own videotaped tour of the Boulder store along with the interviews with employees. Although one of the members, Rusty, had given other groups trouble for not being critical enough, Group IV had clearly come to identify with Alfalfa's.

**Term Papers**

The term papers gave me a check on whether all members of the group understood the group effort: the paper presented the individual's analysis of the focal organization and application of theory. No two papers were identical; some were more or less optimistic, for example, about the focal organization's future. Several of the papers—including Carla's—were so well done that I requested copies to use as models for future students. (After the angry and emotional confrontation, Carla and I had developed a productive relationship.)

Two students were late with their papers. They were the weakest papers, and both students received a "B" for the course. One took an incomplete,
and it is not clear whether she will earn an “A” or a “B.” She also lost the key to the audio-visual cabinet, making things difficult for the following three groups and landing me in trouble with the AV people for entrusting a key to a student. Well, you win some and lose some.

Implications for Future Classes

Writing this portfolio has forced me to reflect systematically on my teaching; that may be the primary benefit of creating one. There are some problems I must resolve before teaching this course again. The first is the question of the readings. I was pleased with the students’ response to American Steel and will search for more narratives to include. I can see other ways of accomplishing my objectives by means of mini-lectures and handouts. Yes, the course needs some restructuring (much like most American organizations), but the group and individual assignments will stay the way they are for the immediate future. I am satisfied with the level of learning produced by the changes introduced in the honors seminar (as compared to how the course had been taught the previous semester).

Will I let students help in the construction of the exams in the future? Probably not, unless I teach an honors course again. The university requires faculty to discriminate among the various levels of achievement, and I accept that responsibility. Nonetheless, it worked in this instance. I know the students learned more by participating than by regurgitating. The more vexing question is the dialectical relationship between competition and cooperation. I have read Alfie Cohn’s Against Competition and believe he has a fairly sound case. Yet I also believe that competition is inevitable; indeed, it is required in the sense mentioned in the paragraph above: the state and the university require faculty to discriminate among levels of student achievement.

I am myself both a cooperative and competitive person, a person who seems at times to combine the two, to compete by “out-cooperating.” Perhaps I communicate my ambivalence to the students.

Some of my students reached what I believed to be their highest possible level of achievement by cooperating with others; some were able to achieve their best in both cooperative and individual efforts. But the verbose student, Marsha, still troubles me. She outtalked everyone in class. She traded outbursts with Carla over two points out of a possible total of 500. She gave the lowest ratings to the other three groups. She seemed to put less effort into her written work than into her class performance. Did I do her a disservice by stressing that an individual’s performance in the Socratic dialogue and class discussions was worth a possible 100 points?

I will not resolve the cooperation-competition dilemma in this teaching portfolio. I will have time to read and think about it next fall on my sabbatical leave, in breaks taken from pounding away at the books and articles I hope to produce. But it may turn out that both competition and cooperation are
what the philosophers call Essentially Contested Concepts (ECC), concepts on which even the experts cannot agree.

On the other hand, I do not want to accept a "foul compromise," such as being content with an easy "balance" between cooperation and competition. It may be that a balanced solution is unbalanced from a higher perspective. I doubt that I can produce a resolution that will convince the rest of the world, but as I tried to teach my students, "we are all theorists." A teacher, whether we acknowledge it or not, is perforce an educational theorist. Clearly, my next task is to achieve a theoretical position on competition-cooperation that I can sincerely enact inside the classroom and out.

Notes
1. Richard J. Light, "Characteristics of Highly Respected Courses," Memo to the Faculty, Number 26, a publication of the Faculty Teaching Excellence Program, University of Colorado at Boulder, reprinted with permission from the Harvard Assessment Seminars, First Report, 1990, issued by the Harvard University Graduate School of Education and Kennedy School of Government.
Developing and Teaching an Inclusive Curriculum

Deborah Flick

Women and men of color, white women, the working class and underclass, people with disabilities, and gays and lesbians have been absent from the “center” of analysis, research, theory, and the curriculum. To locate the experiences and perspectives of these groups at the “center” is an important step toward creating an inclusive curriculum. What does it mean to make this move?

Mainly, it means change. Developing an inclusive curriculum is a transformative process for the instructor and the students. It entails a paradigm shift in which basic assumptions are examined and changed. Thus, undertaking the project requires desire, curiosity, willingness to travel into unknown pedagogical terrain, and patience with oneself and with one’s students. In what follows I briefly review guidelines for developing an inclusive curriculum; explore the classroom turbulence that an inclusive curriculum can generate; describe three difficult dynamics and helpful interventions; and explain five pedagogical techniques intended to help students reap the benefits of an inclusive curriculum, along with concrete teaching tips for the instructor.

Guidelines for Creating an Inclusive Curriculum

Peggy McIntosh has outlined four phases in the process of creating an inclusive curriculum.1

Phase I. White, middle or upper class, male experiences, authors, and theorists are the focus of the syllabus. The experience of upper-class white men is “the human experience.” They are the norm, the ideal, the standard against which others, i.e. women and nonprivileged men, are compared and found wanting. Their theories are thought to be “objective” and “uncontaminated” by political considerations. Elizabeth Minnich comments:

A few privileged men defined themselves as akin to what mankind/humankind ought to be in fundamental ways that distinguished them from all others . . . . Their notion of who was properly human was both exclusive and hierarchical with regard to those they took to be properly subject to them—

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women in all roles; men who worked with their hands; male servants and slaves; women and men of many other cultures.2

Phase II. A few white women or persons of color, authors or theorists, are added to the Phase I syllabus. They are treated as anomalies, exceptions from their groups. The same standard of normality applied in Phase I applies here as well. The difference is that an occasional “outstanding” representative of the nonprivileged group is granted admittance to the inner circle.

Phase III. Issues concerning people of color, white women, and/or the working class are addressed as “problems” and “special topics.” Members of groups that were invisible or distorted in Phase I and given token status in Phase II are coming into focus at the margins, but they are not yet at the center of study.

Phase IV. The lives of people of color, the working class, and white women are located at the center of the syllabus, because, to paraphrase McIntosh, if you start with the lives of people of color, for example, you will get to the lives of white men and women, but if you start with white men and women you will not necessarily get to the experience of any person of color.3 In phase IV, race, class, gender, and sexual orientation are treated as interactive systems that shape everyone’s experience and all social institutions. What was invisible in Phase I is visible in Phase IV. For example, whites, not only blacks, have a “race,” men, not only women, are “gendered,” and heterosexuals, like gays, lesbians, and bisexuals, have a “sexual orientation.” The presumably neutral, but in fact privileged, standards and norms characteristic of Phase I give way to a comparative approach to human experience. Fundamental human strivings and struggles can be elucidated, but no one group lays universal claim to them. For example, for Harriet Tubman as well as Thomas Paine the risk of death was a small price to pay in the courageous pursuit of liberty and freedom. A comparative investigation that values their struggle for freedom and locates it in their specific political, legal, historical, and social circumstances would fall in the domain of Phase IV.

Of course, any teacher may move back and forth from one phase to the other or experience aspects of more than one phase at the same time. Nonetheless, these phases illustrate, in broad strokes, what it means to embark on the journey toward an inclusive curriculum.

Checklist

The following checklist, an adaptation from Patricia Hill Collins and Margaret L. Andersen, can help teachers assess whether or not a syllabus is in concert with a Phase IV curriculum.4

1. Does thinking about gender, race, and class pervade the entire syllabus, or are these issues treated as “special topics” or “social problems”?
2. Does the syllabus recognize all groups as being affected by the interactive structures of race, class, and gender, or only white women, people of color, and the working class?

3. Is one group's experience held as the norm against which others' are measured and evaluated?

4. Does one group dominate in defining the other groups, or do groups define themselves? Is diversity represented and articulated within each self-definition?

5. Does material in the syllabus reinforce prejudice and stereotypes, or does it expose and refute them?

6. Are the assigned readings by authors of the same race and ethnicity as the group you are studying? This is especially important in studying the status of women, both in non-Western cultures and in so-called minority cultures in the U.S.A. Do the assigned authors include women within the culture who critically analyze their culture, as well as those who endorse the status quo?

Navigating Turbulent Waters

In many ways, developing an inclusive curriculum is the easier aspect of the project at hand. Teaching it is more difficult, because it almost always generates waves among students. Some of those waves can be of seismic proportions. Over the course of my teaching career I have identified three key dynamics that tend to churn the waters. What follows is a discussion of each, including some suggested navigational instructions.

Before moving on to this discussion I would like to introduce some helpful terminology. It quickly becomes redundant and cumbersome to list diverse groups—African Americans, gays, lesbians and bisexuals, Native Americans, persons with disabilities, working-class people, women, etc.—and to specify the dominant or privileged group as white, European-American, heterosexual, Protestant, middle-class, and male. Instead, I use the terms "target" and "nontarget." Historically, some groups in the United States have been systematically denied legal and social power, resources, and status, and have been considered inferior and deviant by the dominant groups. These "target groups" are located at the center of the Phase IV curriculum mentioned above. Non-target groups are those that have had easier access to the rewards and benefits of society. Such groups—whites, males, heterosexuals, etc.—have also been deemed to be superior and the norm against which target groups are compared and found wanting. Nontarget groups traditionally have been situated at the center of study and theory (Phase I curriculum). These categories express the complex reality that almost everyone in our universities is a member of both target and nontarget groups. This truth has implications for negotiating the crests and troughs of the choppy waters generated by an inclusive curriculum.
Conflation of Levels of Analysis

"I have never done anything to hurt an African-American person. I don't understand why they are so angry." (white female)

"All this talk about rape is male bashing. All men aren't rapists." (white male)

Such comments are not unusual in a classroom in which an inclusive curriculum is being taught. They often generate waves of confusion, because there is a kernel of truth in the remarks and yet they seem to be missing important points. I have found that it helps students to clarify the multiple meanings embedded in such comments by disentangling the levels of analysis that are conflated in them.

Each of us constantly deals with intersecting and overlapping levels of experience: personal, interpersonal, cultural, and institutional. Personal experience includes our conscious and unconscious attitudes, values, and beliefs, which typically are informed by widely held convictions that nontarget groups are superior. Minnick reminds us that such "preconscious cultural assumptions and habits are fraught with emotion and reflect not only the ignorance but the systemically created and reinforced prejudices of the dominant culture." For example, women are incompetent at technical tasks; gays and lesbians are unsuited as parents; poor people are lazy and unmotivated. Members of both target and nontarget groups have been socialized to these attitudes, to some degree.

Personal values and beliefs influence our interpersonal behaviors, how we interact with each other, one-to-one and in groups. Theoretically, even a person who harbors a prejudice toward a particular group can behave in ways that do not manifest the prejudice or are not discriminatory. More often than not, however, even when we try diligently not to let it show, prejudice sneaks through in some way, especially in our nonverbal behavior. For example, without consciously acknowledging it, an instructor might not select women students to take the lead with technical tasks, instead favoring males regardless of their technical acumen.

Cultural experience is characterized by standards, written and unwritten behavioral norms, presentations and representations, stereotypes, assumptions that one group is better—more right, more important, more beautiful. For example, what do most of the "experts" called upon by the media look like and sound like? Whose views do they tend to represent? What does this tell us about who and what an expert is? What does this tell us about which groups in our society are the most important? Research indicates that experts are overwhelmingly white, upper-class, highly educated, center or right-of-center males. In other words, they are members of nontarget groups.

The institutional dimension of experience is characterized by rules, policies, laws, practices, and procedures. It's how "things are done." The marital
exemption from the charge of rape and prohibitions against gays and lesbians in the military are examples of legal institutionalized prejudice—sexism, and homophobia and heterosexism, respectively. The practice of denying mortgage loans to African Americans who have higher incomes and better credit ratings than whites who are granted loans is an example of illegal (but continuing) institutional racism.

Both of the student comments quoted above were made by members of non-targeted groups (in terms of the issues at hand: race and gender, respectively) about members of groups targeted for race and gender, respectively. For the purpose of this discussion, let's take at face value the assertions that neither has personally harmed a member of the target group—in fact, the white woman supports civil rights and abhors bigotry, the man believes rape is a horrendous crime. Therefore, the white woman is confused by the anger of African Americans and the white man hears a discussion about epidemic male violence against women as an attack on him personally.

Both, however, are missing something. Although personally they may have freed themselves from some of the racist and sexist messages that permeate our society and interpersonally they may not behave in harmful ways toward African Americans and women, they nonetheless benefit from prejudice at the cultural and institutional levels. Culturally prescribed behavioral norms and messages, for example, reinforce the superiority of whites and males: institutional policies and practices tend to work more to their advantage. For example, because the institution rewards faculty for researching and publishing within a Phase I model of "real" scholarship, white students and male students see themselves reflected in the curriculum much more than do African-American ones or women. The result is affirmation and validation for whites and males and a sense of exclusion and devaluation for the target group members, African Americans and women. Thus, a target group person can experience a nontarget person as safe and friendly on the personal and interpersonal levels but as taking advantage of or passively reinforcing and benefiting from cultural and institutional discrimination. When the nontarget person is not aware of or does not acknowledge this unearned privilege, his or her interactions with target group members are likely to be marked by conflict and distrust. To the nontarget person, it is helpful to know whether the issue is in fact personal or interpersonal or not. If the issue is cultural and institutional, it is helpful to both the target person and the nontarget person for the latter to acknowledge the privilege that he or she possesses merely by virtue of being a member of the nontarget group. There is an issue of moral responsibility here. In acknowledging cultural and institutional unearned privilege, the nontarget person is confronted with the question of what to do about it. It is not enough to question one's own beliefs regarding race and gender or to treat African Americans and women with respect and dignity. One also needs to question one's participation, unwitting perhaps, in the perpetuation of the status quo. On their part, target group persons have a responsibility
not to blame individual members of the nontarget group for all of the injustice perpetrated at the cultural and institutional levels.

Privilege Deprivation

“I feel outnumbered, kinda strange. I feel like I don’t fit in. Isolated and ignored. Sometimes it’s like they are just tolerating me. It’s like reverse discrimination or something.” (white female talking about her experience of an African-American studies class)

“What’s the point of reading black women authors? I took this course because I wanted to learn about great American literature. You know, like Hemingway and Steinbeck. This is unfair. I shouldn’t have to pay for this.” (white male)

Teaching a Phase IV inclusive curriculum means locating the experiences and perspectives of target groups at the center of the syllabus. When nontarget experience is introduced, it is examined from the points of view of the target groups (not merely as it views and constructs itself) and is not held as a standard against which the target group experiences are compared and found wanting and deviant. Nontarget group students who, for example, identify as white, male, heterosexual, middle-class persons may experience this shift in focus as an assault on their (unarticulated) sense of entitlement. Typically they do not explicitly identify the uneasy feeling of being dislocated from the center of study, much less the feeling that they were entitled to be there in the first place. Unaware of their own privilege, they feel victimized by its withdrawal. I refer to this dynamic as “privilege deprivation.”

What options are available to the nontarget student in this situation? Unfortunately, many claim victim status: “Male bashing.” “White bashing.” “Straight bashing.” “Reverse discrimination.” There is another possibility that is more likely to lead to calmer waters and, perhaps, safe mooring. The instructor can create a safe climate in which nontarget students are encouraged to become conscious of their privilege and simultaneously use their sense of exclusion as an opportunity to develop empathy for members of target groups. It is critical that awareness of privilege accompany an examination of one’s own feelings of being excluded. Focusing on those feelings without an understanding that it is privilege that generates them can reinforce the victim position. On the other hand, understanding the dynamics of privilege deprivation can allow nontarget students to develop a sense of inclusion by allying themselves with members of target groups in undoing cultural and institutional damage.

Dilemma of Difference

The “dilemma of difference” primarily affects students who are members of various target groups. Given the enormous amount of cultural and institutional misinformation, denigration, and devaluation of target groups that, in
Iris M. Young’s words, “deviate from allegedly neutral standards,”10 we should not be surprised when some target group students who are desperately trying to assimilate to those standards resist a Phase IV curriculum. Such a curriculum openly challenges what Young calls the “ideal of general human standards according to which everyone (including target groups) should be evaluated equally. . . . Where there is an ideal of general human standards . . . then Puerto Ricans or Chinese Americans are ashamed of their accents, . . . Black children despise the female-dominated kith and kin networks of their neighborhoods,” and women who seek success in a man’s world “seek to root out their tendency to cry, or to feel compassion for a frustrated stranger.”11 The aspiration to assimilate produces both a sense of quasi-belonging and self-loathing. This is the dilemma of difference. “To participate means to accept and adopt an identity one is not, and to try to participate means to be reminded by oneself and others of the identity one is.”12

The Phase IV curriculum makes visible this dilemma. Target group students who have chosen to assimilate and who struggle to deny their (target group) identity will find their denial difficult to maintain in the Phase IV classroom. The student may feel she or he is drowning in the struggle to hold the potential self-loathing at bay. Unfortunately, such self-devaluation, culturally induced, often surfaces when the protective layer of denial is challenged. In order to help students to negotiate this turbulence, I have found it useful to openly challenge the notion that equality and justice require us to ignore differences, to assimilate to those not-so-neutral dominant standards. Instead, I argue that denying differences among groups of people has oppressive consequences, not liberating ones. Young elaborates:

Blindness to difference disadvantages (target) groups whose experience, culture and socialized capacities differ from those of privileged (non-target) groups. The strategy of assimilation aims to bring formerly excluded groups into the mainstream. So assimilation always implies coming to the game after it is already begun, after the rules and standards have already been set, and having to prove oneself according to those rules and standards. In the assimilationist strategy, the privileged groups implicitly define the standards. . . . Because of their privilege they (non-target group members) do not recognize these standards as culturally . . . specific, but rather as (a neutral and universal) ideal in which all can participate without regard to race, gender, religion, sexuality.13

This, of course, is impossible if for no other reason than that the ultimate assimilation can never occur, i.e. women can’t become men, Native Americans can’t become European Americans, gays and lesbians can’t become heterosexual, etc. In place of assuming that assimilation is the goal, I encourage students to examine the positive differences among groups. This typically leads to a discussion of the value of group solidarity and autonomy among target groups, the need for target groups to form coalitions, and the responsibility for nontarget groups to act as allies in combating injustice.
Pedagogical Techniques

Setting Guidelines

I have found the following guidelines useful in creating an atmosphere that is conducive to learning and maintaining calm seas during discussions. It is most effective to introduce them during the first or second day of class.

1. Try on—"When you go shopping you don't buy everything you try on. Likewise, during this semester, I do not expect you nor do I require you to personally adopt the views and perspectives offered in this class. I do want to invite you to try them on, however. To hang out in them, so to speak, until you feel you are familiar enough with them to make an intelligent decision."

2. Agree to disagree—"I want to invite you to develop an interest in understanding each other, who each person is and where each person is 'coming from.' The goal is to understand. We don't need to convince each other that our position is the only correct one. We can hear each other out. Understand each other. And, finally, agree to disagree."

3. Don't blame—"I don't know about you, but when I feel blamed I tend to dig in my heels. Not one of you said this morning as you were getting dressed, 'What can I do today to increase sexism, racism, classism, and homophobia in the world?' Whatever baggage we bring to this endeavor we learned. When we are born into this world we are dry sponges dropped into the huge liquid vat of society and culture. We absorb everything. This is the socialization process. In this class we are going to wring out the sponge, become aware of what we have absorbed. We are not responsible for what we absorbed as children. Often our lives depended on taking in certain information. The issue is not blame but responsibility. As we wring out the sponge, what responsible action can we take?"

4. Acknowledge not knowing—"The approach of this class stresses discovery, not perfection. I want to encourage you to ask questions in the spirit of questing for knowledge and understanding. Please don't feel concerned about appearing stupid or uninformed. I am not perfect and I assume none of you are either."

5. Take responsibility for self—"Some of the topics we will discuss this semester will probably elicit strong feelings and reactions. This is great. The question is how to manage those feelings in discussions with each other. I have a couple of suggestions. One, speak in terms of I: I feel . . . I think . . . In my experience . . . My opinion is . . . . Two, when you feel the urge to blame others or to lash out, take a moment and ask yourself, 'What is the impact of this on me? Why do I feel the way I do?' Important learning can occur when you assume this posture."
Fostering Empathy

Many students, particularly those who belong to one or more nontarget groups, have trouble understanding and relating to people who are different from themselves. “Why do we have to hear all this stuff about Jim Crow, World War II internment camps, and broken treaties? I came to school to learn sociology. What does this have to do with sociology or me?” One can help to bridge this chasm by providing students with an opportunity to explore a time in their lives when they felt “different” from the dominant group or the majority.

1. Ask students to recall a time when they felt “different.” Tell them to write it down. Give students a lot of latitude in defining the experience of being different. Some of them will need it.
2. Ask them to write about how others reacted to them. How they felt. How they behaved. For example, did they try to hide their difference? Accentuate or exaggerate it? Ask them to explore why they did what they did and whether it worked.
3. Finally, ask the students to write what others, from whom they were different, could have done to support them. Ask them to be very specific.
4. Ask students to share what they have written with two or three others in a small group.
5. Facilitate a whole-class discussion with an eye toward building bridges and common ground. This is an opportunity to explore how the “same” treatment is not necessarily “equitable” or “fair” treatment. It can also be helpful to clarify differences among differences. For example, the experience of being the only ballerina among a group of friends who are tap-dancers is different from being a Chicana in a predominantly white school. The former is situational and limited; the latter carries with it the effects of historical and institutionalized prejudice and discrimination.

This exercise can be referred to during future lectures and discussions to help address denial of the issues at hand, blaming the victims, and what it means to take responsibility if one is a member of the dominant group or if one is “different.”

Countering Stereotypes

Race, gender, and class stereotypes are socially created lenses through which complex people are reduced to distorted but “manageable” characteristics. Such stereotypes are very resistant to change. Consequently, regardless of how scrupulous one is about trying not to reinforce stereotypes, there is always the risk that students will inadvertently draw unintended conclusions. The following exercise may head off this possibility.
1. Ask students to “brainstorm” stereotypes for a particular group whose experience the class is studying, e.g. African-American women. Write them on the chalkboard.


3. Test the verity of the stereotypes, for example, “the African-American woman on welfare.” This stereotype can be countered with the following information: most women on welfare are white; most African-American women are in the labor force; there is a significant population of highly educated middle-class African-American women.

4. Explore with the class why such stereotypes persist when they are factually wrong. Whose interests do such images serve? African Americans? Middle- and upper-middle-class whites? How do they serve those interests—what social contradictions and tensions do the stereotypes resolve, and for whom?

5. Create new positive images from the point of view of those whose experience is being discussed. Be prepared with ideas of your own. Your students might find it difficult to generate nonstereotypic images. DO NOT single out students who represent the group under consideration to answer this question.

6. Compare and contrast the new images with the original stereotypes. Explore their implications, given the particular interrelations of race, gender, class, and sexual orientation in the society under discussion.

**Target/Nontarget Exercise**

This exercise helps students to see that most of them are members of both target and nontarget groups. The realization that they hold membership, so to speak, in both kinds of groups can help prevent them from identifying as victims. And the visual impact of both lists illustrates the complexity of the interlocking dimensions of diversity at all four levels (personal, interpersonal, cultural, and institutional).

1. The instructor facilitates a brainstorming session in which the class generates a list of target and nontarget groups. The lists might look something like this:

<table>
<thead>
<tr>
<th>Target</th>
<th>Nontarget</th>
</tr>
</thead>
<tbody>
<tr>
<td>women</td>
<td>lesbians</td>
</tr>
<tr>
<td>African Americans</td>
<td>bisexuels</td>
</tr>
<tr>
<td>Native Americans</td>
<td>poor people</td>
</tr>
<tr>
<td>Latinas/Latinos</td>
<td>uneducated people</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>persons with disabilities</td>
</tr>
<tr>
<td>elderly people</td>
<td>Jews</td>
</tr>
<tr>
<td>children</td>
<td>gays</td>
</tr>
</tbody>
</table>
Developing and Teaching an Inclusive Curriculum

Nontarget
men educated people
European Americans rich people
adults heterosexuals
middle-aged people able-bodied people

2. Ask each member of the class to name a nontarget group with which she/he identifies and about which she/he would like to answer the following questions:

What do you like about being a member of this group?
What privileges accrue to you as a member of this group? What did you learn about how to behave and how not to behave as a member of this group?
In what ways are you systematically hurt by the “ism” that characterizes your group's privileges? (For example, how are men hurt by sexism, whites by racism, the middle class by classism, etc.?)

Try to narrow the choices of nontarget groups down so that each group contains at least two students and, because of time constraints, there are no more than four or five groups.

3. Ask each group to designate a recorder and spokesperson.

4. Give the groups 20 to 30 minutes to answer some or all of the questions. They should brainstorm rather than try to reach a consensus.

5. Take one question at a time. Ask the spokespersons to read the answers. Facilitate a discussion of the responses.

6. Repeat the process for target groups using the following questions:

What is it like to be a member of this group? What do you like and dislike?
In what ways do you think you perpetuate or allow to continue the oppression of your group?
In what ways do you resist colluding in the oppression of your group?
What strategies do you use to empower yourself as a member of this group?

7. Conclude with a discussion that processes the entire exercise.

Guided Visualization

This experiential exercise helps nontarget group members recognize the privileges they enjoy. It also helps target group members to get in touch with the nature of nontarget status and experience.

Because this is an exercise in role reversal, it is contraindicated when nontarget students are entrenched in claiming “reverse discrimination.” It can be misused to fuel paranoid fears that “the target group will do to us what we have been doing to them—and—two wrongs don't make a right.” This exercise involves the instructor in creating a guided fantasy in which the world as we know it is turned on its head. For example, women of all races and ethnicities occupy all positions of power except for a few token males. Males are ridiculed for being unsuited for leadership because testosterone poisoning leads them to compete destructively about everything. The generic “she”
is used, God is feminine, etc. Or you might create a world in which African Americans are dominant in all institutions and cultural expressions. Flesh-colored bandages and nude pantyhose don't match white skin. Education stresses the contributions of African people and the legacy of African cultures. European culture is considered to be derivative. Or consider a world in which being gay or lesbian is the norm and heterosexuals must hide their sexual orientation from friends and families. When they are found out they are quizzed: when did you know? why must you flaunt your sexuality? can't you keep it to yourself? It is important to include as much detail as possible. Before reading the visualization to students, ask them to get comfortable, relaxed. Give them time to fill in the blanks for themselves. Don't rush. Invite students to notice how they feel and what they are thinking as they go through the visualization.

**Concrete Teaching Tips**

Following are some concrete teaching tips that will help keep the instructor's classroom behavior congruent with the spirit of a diverse curriculum.

1. Do not ask a student of color or a white female to give "the African-American point of view" or "the woman's point of view" on any given topic. An individual cannot speak for a group. To ask a student to do so not only is potentially embarrassing for the student, but also implies that the group itself is monolithic.

2. Do not expect, and do not ask, students of color to be knowledgeable about their history or culture. The same applies to language. For example, do not ask a Chinese-American student, "How would you say this in Chinese?" Many students of color have not had an opportunity to learn the history, culture, and/or language of their ethnic heritage. Even those who have had such cultural and educational opportunities may not wish to be involuntarily singled out.

3. Become conscious of your assumptions regarding students of color. For example, do you assume that all Asian students are good at math? that Asians are highly intelligent? that African-American males are not very smart and are attending college on athletic scholarships? that students of color are less qualified or intelligent than your white students? Be careful not to act on such assumptions.

4. Anticipate students' tendency to negatively stereotype women, people of color, and lesbians and gays. For example, use the exercise in countering stereotypes before beginning the study of an American Indian nation.

5. You are a role model to your students. Share your own process of developing awareness of gender, class, sexual orientation, and race/ethnic stereotypes and issues. Help students understand the value of understanding diversity in their personal, academic, and future professional lives. Use examples from your own life.
6. Learn to use gender inclusive (nonsexist) language. Encourage your students to do the same when they speak in class as well as in their writing.

7. Use (learn) group facilitation skills to manage discussions regarding the difficult subjects of race, gender, class, and sexual orientation.

8. Create a comfortable climate for students who are in the minority in your class by not making them inappropriately visible. In a class in which women are a clear minority, don’t say something like “We shouldn’t make sexual references like that, we’ll embarrass Sally and Jane.”

9. Be aware that silence on the part of students of color and women does not necessarily mean they are comfortable with the class. It might mean the contrary: that they’re so uncomfortable they’re reluctant to speak up about their discomfort. If you are concerned about this, don’t single out such students, publicly or privately, and ask them how they feel about the class. They would probably feel uncomfortably visible and you would not get a candid response. Rather, approach the whole class with something like, “I am concerned that some points of view are not being expressed. I think we are missing out on important, diverse opinions. What would make it safer and easier for more of you to speak up?” The faculty member might suggest some diverse opinions that are missing as well as ask for examples. Invite everyone in the class to contribute.

10. Be clear about your motivation for creating an inclusive curriculum. If you are doing it because you need the approval of your students of color and women students, you may be disappointed. For any number of reasons your efforts may not be appreciated. Also, be prepared to address the concerns of students who feel confused or resentful of an inclusive curriculum.

Notes


7. Minnich, 93.

9. I want to thank Dr. Glenda Russell for the insightful term “privilege deprivation.”


11. Young, 166.

12. Young, 165.

13. Young, 164.


15. This exercise was brought to my attention by Dr. Gaia Mika and Dr. Karen Rafforth, psychologists who do multicultural awareness education.
Joys of Teaching Science

Michael C. Grant

Serendipity—that greatly overemphasized aspect of scientific discovery—has played a major role in my professional career, but in an entirely unorthodox manner. The most important discovery of my science career (to me personally) did not come from any research investigation, although, like most students of science, I was initially attracted to an academic career almost exclusively because of my interest in research. Research offered the opportunity to do something original, to find out things about nature, to captain my own small program—all career aspects highly attractive to me. Further, graduate school brochures, advisors, curricula, career services counselors, and faculty nearly always emphasized these research elements of academic life. Certainly I knew that university science professors taught classes, guided graduate students, and were thought of, at least partly, as teachers. Yet teaching per se carried minimal weight as I contemplated a career in academia. My considerations merely mirrored an unbalanced emphasis by the academic advising environment despite clear evidence that teaching, not research, would constitute the major responsibility of most holders of doctoral degrees; fewer than 10 percent of the Ph.D.s produce more than 90 percent of academic research. So although I was contemplating a career in academia, I seldom thought about teaching.

As I now complete nineteen years as a university professor, my interest in research continues very much in the style I envisioned as an aspiring young graduate student, but my academic life has proved much richer, more interesting, and considerably more demanding because of my teaching commitments. I write this short essay to share some of the reasons why, partly in the hope of encouraging talented individuals to include the attractions of teaching science as they weigh their career choices. Certainly some of the themes touched upon here are not unique to science teaching; they are elements which I find especially relevant to my own teaching experiences. Nor are my views necessarily shared by other teachers of science; they are personal ones, strongly influenced by the fact that I frequently teach honors level undergraduates and highly talented, dedicated graduate students. And I have chosen to state my comments in direct, unqualified language, heightening contrasts and patterns.

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I believe this approach more effectively stimulates thought, engenders reaction, and highlights sometimes subtle configurations than does softer, more qualified, more temperate language. I aim to construct crisp, even idealized, characterizations, hoping to elicit crisp, idealized responses from the reader. I have chosen to characterize three elements of teaching science that I value most highly: students, methods, and the discipline itself.

The principal joys of teaching science clearly identify themselves every semester: the students of science. They are, by far, the single most important ingredient in the joy of teaching science. From entering freshmen to graduating Ph.D.s, the science students with whom I have worked for nearly two decades regularly exhibit genuine, infectious optimism. While varying greatly in sophistication, they typically exude a confident, sanguine outlook on life. Problems, big or small, represent challenges to be met, puzzles to be solved, opportunities to be grasped. In this property, I believe they differ significantly as a group from, say, students in some areas of the humanities, who discouragingly often seem imbued with a dispiriting cynicism. In contrast, the science students I interact with rarely evince notions of human hopelessness or helplessness. For example, students of European history over the last few hundred years frequently interpret that sequence of human events as evidence that many human institutions are essentially and unavoidably ineffective. Science students, in dramatic contrast, seem much more likely to focus on the positive elements of that same period; they typically emphasize remarkable human achievements: disease prevention and control, greatly enhanced human life expectancy, expanded understanding and control of the physical world. I find much joy in the intellectual ambience created by optimistic, confident, forward-looking students.

Science students routinely evince a clear commitment to the concept of never-ending expansion of human knowledge; they are convinced that knowledge is potent. While some intellectuals assert that expanded human knowledge commonly, even necessarily, results in expanded human misuse of knowledge, their ideas have fortunately had minimal effect on the students of science I see. Presumably, people who find that perspective convincing do not pursue science careers. Those who do, genuinely believe they can better their world through the purposeful development and exercise of intellectual power. And they typically deeply admire scientific achievement. Misuses of scientific knowledge are considered as such and roundly condemned; they are not deemed justification for discontinuing the scientific enterprise itself. This belief in the efficacy and power of learning strongly influences how these people react in the classroom, in the laboratory, and in many other facets of their lives. Their natural human inquisitiveness, coupled to their belief that ever-increasing human knowledge is a common good, generates a deeply rewarding intellectual milieu for the teachers of science.

Most science students are also willing, perhaps even eager, to choose difficult, rigorous pathways to their collegiate degrees. Collective university-
student wisdom clearly distinguishes the so-called hard sciences as more arduous than many other possible pathways to a college degree. Students who willingly choose these evidently demanding disciplines tag themselves as self-confident and ambitious. They aim to be achievers, doers, practitioners of success.

Scientific methodology provides one major mechanism by which human beings gain knowledge, knowledge about their world, about themselves, about each other. I suspect it would be quite difficult to overestimate the impact of science-derived knowledge on today's college students. Many college science majors are attracted to the field because of the methods themselves; they typically arrive with a strong, if somewhat undeveloped, commitment to those scientific methods. Their life experiences, strongly influenced by science-derived knowledge, have naturally persuaded them that the most efficacious road to understanding lies through application of science techniques: observation, experimentation, analysis, hypothesis testing. They find other approaches—say, the study of sacred texts to discover divinely revealed truths—to be considerably less convincing. I find it delightful to capitalize on these students' predispositions—to guide, lead, cajole, push, coax, wheedle, promote, encourage, bully, and perhaps even occasionally inspire them to develop a deeper, more sophisticated appreciation for scientific approaches. I like to emphasize three particular aspects of scientific methodology: evidentiary persuasion, provisional status of factual information, and falsifiability.

Persuasion based on a preponderance of evidence forms a regular part of most empirical scientific enterprises. A science student frequently encounters bits and pieces of evidence that may point to two different answers to a particular question. For example, several studies of humans were conducted to find out whether people with different blood types (A, B, O) were different in other ways as well; no other differences were found. That is to say, people with blood type A seemed to live just as long, be just as healthy, smell just as good as people with blood type B or O. Other scientific studies, however, reached the opposite conclusion; they found significant, measurable effects of the different blood groups. For example, people with blood type A suffered a significantly higher frequency of heart disease than people with type B or O. Beginning science students very often chafe at such apparent inconsistencies among scientific studies. They believe that science should be able to say, unequivocally, that blood type either does or does not matter. In reality, biological science is so complex and context dependent that perfectly clean, exception-free generalizations are quite rare. It is a joy to watch students learn to include and acknowledge ambiguous, inconclusive evidence, perhaps even treating it as a challenge to be addressed personally. They learn to evaluate evidence, judge data, critique analyses, and reach supported conclusions. Inconsistencies often characterize the circumstances most likely to capture their imaginations and stimulate their personal ambitions: "Well, maybe I can find the answer to that question!"
"Just the facts, ma'am." Sergeant Friday's famous old television line could serve as a decent motto for scientists; science aims to determine the facts. But what in fact, really? In science, we treat facts a little differently than in everyday language. "Fact" is the term we apply to an explanation or piece of information generally accepted as true at some point in time. Today's facts, in science, may be tomorrow's falsehoods. Only a few decades ago, every educated biologist knew that humans possessed 45 chromosomes. This fact could be found in any standard genetics textbook. Today, every educated biologist knows that humans possess 46 chromosomes. This fact can be found in any standard genetics textbook. Yesterday, every educated biologist knew that any organism which possessed genes A, B, and C had the potential to exhibit the corresponding traits in a simple, straightforward manner. Today, every educated biologist knows that for some traits, it matters very much the order in which those three genes occur: the genes which occur in the order A, B, C produce different traits from those with order B, C, A, and each of these sets would be different from traits produced by the order A, C, B. Tomorrow?

A provisional discipline, science. New, different, and better information may require complete revision of facts that have been taught and learned for many years. In this critical and characteristic manner, science remains always dynamic, energetic, and current. Science students often rebel against this view of facts at first; I know I did. Just as many students do today, I had a powerful urge to consider facts as unchanging, error-free; in essence, Truth. If a fact had to be revised, then it hadn't been a fact in the first place. The contrary notion that scientific facts change with new and better information leads directly into the central concept of falsifiability.

Falsifiability, I preach, characterizes scientific hypotheses. Infallibility, many preach, characterizes religious doctrine. For me, the core distinction between a religious approach to human knowing and a scientific approach turns on this concept of potential falsifiability. To illustrate: some major religions teach that a great flood of water covered the entire earth. The human knowledge about this event derives directly from sacred texts typically treated as inerrant, divine, revealed Truth—not, in principle, subject to falsification. Any apparent error or contradictory information must necessarily emanate from some form of human mistake. In this particular example, the unchanging, unquestionable truth would be that a great flood covered the earth. Since the sacred text states that a great flood covered the earth, any facts, data, or analyses must begin with that as their basic, unchallengeable premise, and all interpretations and conclusions must conform to that inerrant truth.

Science, in marked contrast, would frame this idea as an hypothesis to be tested: was the earth covered by a great flood? The central element of a scientific approach is the possibility of falsification—the answer might be yes, no, or "unknown." Data would be collected and analyses carried out with the express goal of arriving at a conclusion about the truth or falsity of the
hypothesis. Even after a conclusion is reached, it remains always provisional, subject to new data, new analyses, and new interpretations.

Good scientific hypotheses always carry the potential of being shown false, of being wrong. I experience a genuine thrill watching students exercise and enhance their developing powers of scientific reasoning by working industriously to examine and perhaps falsify some commonly accepted idea. As they critically examine the data, the procedures, and the conclusions, enthusiastically employing the notion of falsifiability, they develop a deep sense of the openness and accessibility of science. Many students come to the university with notions that scientists form a special, privileged clique somehow different from everyone else. But students quickly recognize that idea as myth; they too can apply the methods of science—indeed, have been doing so inadvertently most of their lives.

As they incorporate scientific methodology more precisely and more explicitly into their thinking, a number of changes often occur in science students' personal approaches to life. A genuine appreciation for the provisional nature of all empirical science can't help but enhance an individual's receptiveness to new and different information or circumstances. Mental flexibility, an essential tool in science, also proves useful outside science. For example, learning to critically evaluate and assess data can play an enormously important role in recognizing and identifying human actions or beliefs that are essentially superstitious rather than scientific.

My discipline, biology, affords special pleasures to a teacher of science. We, as human beings, embody excellent biological examples, and students invariably have a considerable amount of intrinsic interest in things biological when they first enter the classroom. I frequently ask first-semester freshman students to try to list biological properties that they, as individual human beings, share with an earthworm, an elephant, an oak tree, a sea weed, and an amoeba. In general, most students have a difficult time listing more than a half dozen attributes. By the time they take the course final, their appreciation for the unity of living things has expanded to the point where such a list often contains several dozen items. Often their newly acquired understanding of the deep commonalities of life influences many aspects of their personal belief systems.

I also usually challenge my students to identify some behavioral differences between domestic cats and domestic dogs. The class generally has no difficulty agreeing that dogs are much more obedient and willing to take instruction from a human than are cats. I then ask them to explain why those differences exist. Rarely do freshmen offer any sort of scientific hypotheses about why cats behave so differently from dogs in this respect. Usually, someone will answer, "That is just the nature of cats and dogs." I then ask, "Why is that their nature?" Once the topic is framed in this manner, they usually latch on to it with genuine interest and enthusiasm. A few hints about where to look and within a week, they can talk excitedly about evolutionary ancestry,
solitary hunting patterns, pack social structure, and how these concepts relate to their domestic animals. What fun it is to watch them “solve” this problem and explain to each other and their friends these common, everyday phenomena, which most of them have recognized for years.

Biological insights can often greatly enhance understanding of well-known human historical events, too. Most college students are fairly familiar with some of the major influences of Europeans on the region in the western hemisphere now largely encompassed by Mexico—for example, the decline of the Aztec empire and the rise of Catholicism. Many students of that era now believe that biological phenomena played major roles in each of these historically significant processes. In particular, the European invaders inadvertently introduced smallpox, a lethal disease previously unknown in that area. Since the people indigenous to the region had not been previously exposed to the smallpox virus, very few of them were resistant to this disease. As the highly communicable pathogen swept through the Aztec empire, it was enormously damaged, economically, socially, and militarily.

At the same time, the Europeans advertently aimed to convert these peoples of the new world to Catholicism. Many students of that era now believe that a key ingredient in the Europeans’ evident success in introducing and establishing Catholicism derived directly from their comparative immunity to smallpox. Since smallpox had been known in Europe for a long time, many Europeans had built up immunological resistance, much as we now build resistance via smallpox vaccination. Given that both groups looked to their respective deities for, among other things, protection from disease, the Europeans’ deity may have appeared to be considerably stronger, thus providing one strong impetus for the indigenous peoples to choose to change religious allegiance. This one example of biology’s explanatory contribution to our understanding of important historical events frequently heightens students’ appreciation for biological science by yet another increment.

My personal appreciation for the serendipitous discovery—the joy of teaching science—continues to deepen with each passing semester. The personal pleasure I have derived from working with science students has vastly exceeded anything I ever imagined when beginning graduate school or my faculty career. I strongly encourage any individual who might be considering a career in academic science to weigh teaching heavily among the benefits. I also encourage those who advise potential young scholars to stress the advantages of university teaching. It’s a life that can’t be beat!