HOW DO THEY TREAT THEIR STUDENTS?

A math professor in our study had a student who was having trouble with calculus—or so it seemed. The student actually did fairly well on small quizzes but performed miserably on each major examination. Nevertheless, he didn't give up. Instead, he attended extra sessions, met with his colleagues in small groups to work on problems, and gave every sign he wanted to learn. Nothing seemed to work, however. He flunked all the big tests. By the end of the course it seemed increasingly apparent that he suffered from an awful case of test anxiety.

At the end of the term, the students faced a comprehensive departmental final that the professor had no hand in preparing. A day before the final, the young man stopped by to see the professor, who started talking about calculus with him, at first casually and then gradually more rigorously. "Do you understand this?" he began asking him, and the student would reply each time that he did. The professor then asked him to explain it. After a while he had the student at the board in his office explaining concepts and working through some fairly difficult problems. In all, the teacher spent nearly two hours reviewing calculus with this young man, asking questions and letting him do most of the thinking and talking. Clearly, the student understood far more about calculus than his grades on the major examinations indicated.

After two hours of work, the professor looked at him and said, "You've just taken an oral examination in calculus. I can't tell you what grade you made just yet. I'll have to think about that, but you have at least passed the course." The student asked him what he should do about the departmental final the next day. "Oh, I don't

know. Why don't you go take it just for grins," came the rather offhanded reply. The student did just that, and not only did he pass; he made a B+.

That same professor once had a young woman come to his office early in the term to ask him to sign a drop slip. "Oh, you can't drop," he told her with a mischievous smile, "because we don't allow good students out of the class." When she protested that she was not a good student, the professor began asking her what troubled her about calculus, and for the next hour he talked with her about her difficulties. Patiently and meticulously, he played Socrates, asking her questions that helped her build her own understanding of key concepts and pulling her through difficult points on this intellectual journey. When he finished, she agreed to stay in the class, although she remained a little uneasy. Over the next few class sessions, however, the professor continued to nurture her confidence. Her performance on subsequent quizzes and examinations improved considerably. When she took the departmental final, she made a perfect score and received an A in the course.

We heard a host of such stories from the students of outstanding professors, tales of dedicated educators who did something special. We could easily characterize these acts as pure kindness and suggest that exceptional teachers are simply compassionate people who really care about their students, but that wouldn't tell us much. Besides, it might even be misleading, suggesting that other faculty members don't care. To be sure, we found some professors who had no concern for the welfare and education of the people who took their classes, but many other less successful instructors certainly did, yet their treatment of their students was different—and less effective. Is there something in the way the best professors view and treat their students that might help explain their success?

Before answering that question, just a word about what we didn't find. Despite some popular beliefs to the contrary, personality played little or no role in successful teaching. We encountered both

the bashful and the bold, the restrained and the histrionic. A handful of the subjects played aggressive devil's advocates, avoiding the hostility and terror to be sure but nevertheless acting quite assertive. Most of them, however, played more subdued and noncombative roles. Some teachers treated their students quite formally while others broke down virtually all the conventional social barriers between teacher and learner. We found no pattern in instructors' sartorial habits, or in what students and professors called each other. In some classrooms first names were common; in others, only titles and surnames prevailed.

Yet we did find an elaborate pattern of beliefs, attitudes, conceptions, and perceptions behind the way outstanding teachers treated the people who took their classes. The patterns alone couldn't transform otherwise ineffective teaching, but the most effective instructors as a group always came closer to following them than did even their slightly less effective colleagues.

Perhaps the best way to introduce these patterns is to contrast them with the attitudes and behaviors of some professors we ultimately rejected for the study because the learning in their classes was not so impressive. Let's consider, for example, a composite picture of some of those people and call that amalgamation Dr. Wolf. Some of these teachers were men, others were women. To emphasize that neither sex has a monopoly on such behavior, attitudes, and concepts, I use both gender pronouns alternately in the following account.

In each case, we had heard some good things about Professor Wolf and had begun to collect information about his or her teaching. A few students called his class "brilliant" and said it had changed the way they thought about the subject, stimulating them to intellectual insights they had not imagined possible. Yet when we looked closely at the student ratings from Professor Wolf's classes, we found a disturbing pattern. In nearly every class, anywhere from 20 to 50 percent of the students gave him the lowest ratings pos-

sible. That by itself would not necessarily cause alarm, but when we began to hear from those students who ranked him so low, they were clearly angry and frustrated.

It would be easy to dismiss such complaints as the carping of students who were not really serious about their studies and who were simply mad because Dr. Wolf didn't give them a free ride. But that didn't appear to be the case. Many of her detractors had excellent academic records and reputations for hard work. As we continued to probe, we began to find something more troubling. One person after another said she was arrogant, did not care about students, ridiculed some people in class, often bragged about the high numbers who flunked her course, and set harsh and arbitrary demands. Even some who praised her work told us that she abused others in the class.

In one account after another, one theme began to emerge consistently. Dr. Wolf was, as one person put it, "a control freak" who wanted to let his students know how much he knew, how little they knew, and how much power he had over their lives. "He wants to control everything," someone told us, and he "will put down anyone he sees as a threat."

In class, the professor was reluctant to answer questions. Her most interactive moments with students were always combative; she would take a question as an opportunity to duel with someone intellectually until she had won the battle. She was particularly fond of drawing her students in one direction before leaving them out to dry with some carefully planned pontification to the contrary. Everything seemed to revolve around her needs, including the desire, as one student put it, "to be the star of the show."

Students had similar views of the way Dr. Wolf offered criticism or feedback on their efforts. "I felt like I had been judged and put away," one person reported. "He seemed to take delight in trying to make students look dumb." Students reported that he was always willing to see them during office hours, but when they went to his

office, he often stood at the door to talk with them, as if to say, "OK, get on with it, then get out." Or he wore dark glasses, sat with his arms folded across his chest, or tapped his fingers on the desk while they asked questions, which he would answer with short sentences.

Extreme cases? Perhaps. But every description in this account comes from a real Professor Wolf. For each of these people, the relationship of students to professor is a subservient one. Students are expected to do what they are told. Professors wield a big stick in the form of the grade and credit in the class. The class becomes an opportunity to exercise that power or to display brilliance—sometimes at the expense of the students—or both.

In contrast, the best teachers we studied displayed not power but an investment in the students. Their practices stem from a concern with learning that is strongly felt and powerfully communicated. "Most important," Jeanette Norden argues, "our teaching must communicate that we have an investment in the students and that we do what we do because we care about our students as people and as learners." Yes, there are rules, and sometimes strongly stated ones (Norden, for example, insists that if students take her class they agree to attend all "personal days"), but those requirements are pared to the bone and stem from a contract—no, a strong bond of trust—between the teacher and the learner. In that relationship, the teacher has effectively said, as one of the study subjects put it, "I will do everything possible to help you learn and develop your abilities, but you must decide if you want to engage in this experience. If you do decide to join this enterprise, there are some things you must resolve to do to make it worthwhile for you and others in the group."

Outstanding teachers recognize that those rules do not constitute intellectual or artistic standards. Thus rules can be changed to fit individual needs whereas the standards of achievement cannot. Consider, for example, the story that began this chapter. To the math professor, there were two primary considerations in dealing

with all students, including the young man with test anxiety. He wanted to help them learn calculus, and he wanted to know whether they were doing so. That sounds like a reasonable and normal set of concerns, but it is not what many other professors would regard as most important. When we presented this story and others like it to a variety of different professors who were not in the study, it became clear that many of them wanted their students to perform well on calculus examinations, which is not necessarily the same as learning calculus. But because performance *on the examination* became the goal of the education—rather than learning calculus—they insisted that every student jump through exactly the same hoops. In their view, justice demanded little consideration of the individual needs of each student. The process became a game with rules for adding up scores and marking winners and losers rather than an attempt to help each student achieve his or her best and to assess the outcomes accurately.

With the rejection of power came an equally important and powerful trust. "The most important aspect of my teaching," one instructor told us in a theme we heard frequently, "is the relationship of trust that develops between me and my students." That trust meant that the teachers believed students wanted to learn, and they assumed, until proven otherwise, that they could learn. That attitude found reflection in scores of small and large practices. It led to high expectations and to the habit of looking inward for any problems rather than blaming some alleged student deficiency. "I want to make my class user friendly," a management school professor told us, "because I'm interested in students getting it. If they don't learn, I fail as a professor."

Trust also produced little if any worry on the part of teachers that students might try to trick them. While some professors seemed limited in their choice of pedagogical tools by some worry that a student might be able to cheat the system, the highly effec-

tive threw caution to the wind and did what they thought would benefit learning. They might use take-home examinations, for example, while many of their colleagues were reluctant to do so, frozen by the thought that some people might not do their own work. Most important, the successful teachers we studied exhibited trust because it was such an integral part of their attitudes and conceptions, and the way they thought about their students radiated through every encounter they had with them. Such trust was evident regardless of the nature of the students or the institution. We saw it among highly effective teachers at open admissions colleges and at the most selective places. In contrast, we encountered less effective teachers everywhere who were convinced that the gods of academia had stuffed their classes with nothing but lazy anti-intellectuals.

Professors who established a special trust with their students often displayed a kind of openness in which they might, from time to time, talk about their intellectual journey, its ambitions, triumphs, frustrations, and failures, and encourage students to be similarly reflective and candid. Many of our subjects occasionally told stories about what drew them into their fields, about the questions that swelled in their minds and how those inquiries led to other interests that eventually animated their intellectual life. They shared with students their secrets about learning, how they remembered something, or the analogies they made in their mind as they built their own understanding. Such public confessions never became a parade of old war stories—that could become deadly—rather, they emerged discreetly and judiciously, setting a tone for similar discussions among the students. "When I heard my professor tell me how much difficulty she first had with chemistry," a young woman from Pennsylvania told us, "that gave me the confidence I needed to learn it. I used to think these people were just born with all this knowledge. That's the way a lot of them act."

"The trouble with most of us," Craig Nelson is fond of saying, "is that we teach like we were god. There is no sense of the contingency of our knowledge."

That trust and openness produced an interactive atmosphere in which students could ask questions without reproach or embarrassment, and in which a variety of views and ways to understand could be freely discussed. "There's no such thing as a stupid question in my class," a sociologist told us. On the first day of class, he reminds students that others will appreciate the questions they ask. "I try to make students feel relaxed and challenged, but always comfortable enough to challenge me and each other," one teacher emphasized. "My students learn from each other," another noted. "No one is an expert in everything, so they can learn from the collective insights that the students bring to the classroom."

"Everybody can contribute and each contribution is unique," Paul Baker emphasized. "I want each of my students to understand that no one else in the world will bring his or her particular set of experiences and body chemistry to the class. Everybody has something special to offer, an original perspective."[1]

With that trust and openness came an unabashed and frequently expressed sense of awe and curiosity about life, and that too affected the relationships that emerged. It appeared most frequently and prominently in people who had a sense of humility about themselves and their own learning. They might realize what they knew and even that their own knowledge was far greater than that of their students, but they also understood how much they didn't know and that in the great scheme of things their own accomplishments placed them relatively close to those of their students. David Besanko, who teaches in the Kellogg School of Management at Northwestern, often attributed his own success as a teacher to "how slow I am." He told students and colleagues alike that he often struggled to comprehend many of the important concepts he used

in his discipline, and that struggle allowed him to understand more fully the difficulties others might have with those ideas.

A similar humility marked others in the study. They saw themselves as students of life, fellow travelers in search of some small glimpse of "the truth." They talked frequently about a journey they took *with* their students in search of a better understanding, or told us stories about insights that students had developed that influenced their own comprehension. While many of their colleagues might disdain the struggles of their students ("I don't suffer fools lightly," a former dean and university president loved to say), the best teachers generally felt a bond between themselves and their students in humankind's struggles to know anything. They even found power in their ignorance. "You have to be confused," Dudley Herschbach, the Nobel Prize-winning chemist from Harvard, confessed, "before you can reach a new level of understanding anything."

In many disciplines, especially within the sciences, some practitioners act as if they are, as Jerry Farber put it long ago, "high priest(s) of arcane mysteries," playing out an ego game in which they pretend to have special powers most students can only envy. They seem to cultivate in their students what one of our subjects called "a befuddlement degradation," the sense that only "smart men can possibly comprehend this material and that if you can't understand what I'm saying, that must mean I'm a lot smarter than you are." This attitude is probably what led so many students we interviewed to say that their "worst" teachers acted superior to their students but could not communicate clearly. As one person put it, "She is so far above me, so brilliant, but she can't bring it down to our level." For these professors, their discipline is, as Farber put it, "an arena for expertise, a ledger book for the ego."[2]

Contrast such attitudes and behaviors with the way Herschbach talked about his discipline (in a manner so typical of people in the

study). In so many introductory science classes, the chemist observed, students encounter what they see as "a frozen body of dogma" that must be memorized and regurgitated. Yet in the "real science you're not too worried about the right answer . . . Real science recognizes that you have an advantage over practically any other human enterprise because what you are after—call it truth or understanding—waits patiently for you while you screw up." He spoke about the humbling experience of standing before nature and trying again and again to figure it out. "Nature," he said, "speaks in many tongues and they are all alien. What a scientist is trying to do is to decipher one of those dialects." If scientists make progress, he concluded, they do so "because nature doesn't change and we just keep trying. It's not because we are particularly smart but because we are stubborn."

Herschbach's approach illustrates well the intersection between the way the best professors conceived of themselves and their discipline and how they treated students. He and others were no longer high priests, selfishly guarding the doors to the kingdom of knowledge to make themselves look more important. They were fellow students—no, fellow human beings—struggling with the mysteries of the universe, human society, historical development, or whatever. They found affinity with their students in their own ignorance and curiosity, in their love of life and beauty, in their mixture of respect and fear, and in that mix they discovered more similarities than differences between themselves and the people who populated their classes. A sense of awe at the world and the human condition stood at the center of their relationships with those students.

Most important, that humility, that fear, that veneration of the unknown spawned a kind of quiet conviction on the part of the best teachers that they and their students could do great things together. They had a vigorous respect both for the limits of their own achievements and for the monumental feats that any human being racks up in learning to navigate life. They believed that their own

intellectual achievements stemmed primarily from perseverance rather than from any special talent, but they also marveled at all human accomplishments—including those of their students. That mixture of humility and pride, fear and determination was most apparent in the way they approached their own failures as teachers.

"When my teaching fails," John Lachs, a philosophy professor at Vanderbilt, told us, "it is because of something I have failed to do." For Lachs and others, even the recognition and definition of shortcomings distinguished their thinking. Many professors never saw any problems with their own teaching, or they believed they could do little to correct deficiencies because "great teachers are born, not made." In contrast, the most effective instructors did see problems if they failed to reach a student, but they tried to keep any lack of success from affecting their confidence that they could fix the problem with more effort.

Sure, they became frustrated with students at times and occasionally displayed impatience, but because they were willing to face the failures of teaching and believed in their capacity to solve problems, they tried not to become defensive with their students or build a wall around themselves. Instead, they tried to take their students seriously as human beings and treated them the way they might treat any colleague, with fairness, compassion, and concern. That approach found reflection in what they taught, how they taught it, and how they evaluated students, but it also appeared in attempts to understand their students' lives, cultures, and aspirations. It even emerged in their willingness to see their students outside of class.

Derrick Bell began teaching law at Harvard in the 1960s. By the early 1970s, he had become the first African American to win tenure in the law school there. In 1980, he left Harvard to become a dean at the University of Oregon, but returned to Massachusetts five years later because he felt his colleagues on the West Coast had failed to give an Asian American woman proper consideration for a faculty

position. In 1992 he left his tenured post at Harvard, this time in protest over the lack of sufficient progress in bringing women of color to the faculty. He came to New York University as a visiting professor that year and simply stayed, serving on a series of one-year appointments.

Over the years, Bell toyed with his course in constitutional law, building the learning experience around a series of hypothetical cases that raised important constitutional issues. He wrote each case as a small but compelling story, filled with characters whose lives became entangled with the way we understand the Constitution. Bell knew how to use words to paint a picture and raise an issue, a craft he had refined in a series of allegorical stories published in the 1980s and 1990s, including one that was turned into an HBO film in 1994. His fictional heroine, Geneva Crenshaw, populated those stories, but in the constitutional "hypos" he wrote about ordinary people who became caught up in issues of equal protection and family rights. In time, he invited his students to write similar stories, and their work contributed to a growing body of hypos that he used in the course. In each life, they embedded important constitutional questions.

Students who take the class read an enormous body of material, but the "hypos" form the backbone of the learning environment, luring students into serious consideration of matters of liberty, justice, compassion, fairness, and due process. The stories raise the issues in compelling ways, pulling at both the intellect and the emotions of the students. The students learn by doing, by participating in judicial deliberations, by writing, by exchanging ideas, by arguing a case, by making decisions, and by getting feedback on their efforts. "The structure and expectations for this 'participatory learning' course," Bell says in the first sentence they read about the course, "differ substantially from the norm." Everybody reads everything, but each student works with two or three others to argue a particular case before the entire class, which acts as a giant

court, questioning, debating, and ultimately voting on the hypothetical outcome. Everything Bell wants them to learn to do intellectually he embeds in the process. Nothing is extraneous to their learning.

In his choice of language, Bell gives his students a strong sense of control. Everything he asks them to do has a justification and explanation, all tied to their learning. When he asks them to pick a hypothetical case at the beginning of the semester, he reminds them that such a process will encourage them to review the entire course as they begin their studies. When he talks about the "op-ed" pieces they will write, he says that "students will have the *opportunity* [emphasis added]" to post eight to ten such articles "unless they feel strongly motivated" to post more. Rather than stressing the minimum requirement, he emphasizes that they should post "no more" than twelve, but they can post additional comments in another section of the Web pages.

He invites them into a community of learners in which they will contribute to the exchange of ideas and to each other's education, sometimes reminding them of the obligations they have as citizens of that body. "These reflections," he says of the op-ed pieces, "are an important part of the course learning process. They should be posted in time for possible discussion" in the next class. "Late papers," he emphasizes, "will harm" other students. "Posting on the Web page," he reminds the students, "makes your views available to everyone." As for quality, the students should ask themselves, "Is this a piece I would not mind having published in a daily paper?"

In the early years of the course, he asked students to turn in hard copies of their reflections, but the advent of the Internet allowed him to create exchanges between students. They now submit their work online and then respond to one another. "Here is the real heart of the class, with students literally speaking to one another and getting responses," Bell says. "I am not in it at all." In class, students lead an hour-long discussion of these postings while Bell listens and occa-

sionally comments or asks questions. The exchanges in cyberspace and in class, he argues, raise "the level of understanding."

Bell conveys a strong investment in the lives, careers, and development of his students. That commitment appears in everything he does for them. It shines in the extensive Web resources that he assembles for their use, in the notes he provides, in the hypothetical cases he so carefully crafts, in the arrangements he makes for students to support one another, in the feedback he gives them, and in the environment he shapes. He arranges for a small group of outstanding students from the previous year to help those currently enrolled write their briefs and bench memos. He provides students with feedback on their efforts, and arranges for more advanced students to do the same. The final grade includes an extensive written memorandum on their work. "The students are so impressive," he told us. "My challenge is structuring courses that give them a chance to teach one another, both the course material and their life perspectives."

That investment in his students is also apparent in Bell's attention to improving the course and in the joy he takes in doing so. Even after nearly forty years of teaching, he still regularly calls the teaching center to ask for suggestions and comments on his work. "I am the Walter Alston professor of law," Bells jokes in a reference to the manager of the Brooklyn Dodgers who served for twenty years on a series of one-year contracts, "but I'm determined to equal Alston's record. "I will be 81 then, but if my health holds up, I hope to make it . . . they will have to pour me out of this job."

Finally, that investment is apparent in the way he treats his students with courtesy and dignity. Much of the class time belongs to the students, but he takes a few minutes at the beginning of each session to talk with them about their lives and to share personal moments from his own. On occasion, he talks briefly about his family, and in those references he blurs the distinctions between private and professional lives. He listens to students, even when they

strongly disagree with his views, and more likely than not he asks them a question rather than tells them they are wrong.

At the end of class, Bell gathers the team responsible for the day's case and takes group pictures, posing the students this way and that with all of the concern, love, and pride of a parent at a graduation ceremony. When the pictures are done, he takes the team members to a little Italian restaurant in Greenwich Village. Over dinner, he talks extensively with each student, explores their lives and ambitions, marvels at their accomplishments, shares their concerns, and engages in an ongoing conversation about the issues that animate the class.

"I took a walk with my wife one Sunday morning in the Village," a student told us at one of those dinners, "and we came across the NYU law school. I said to my wife, 'Derrick Bell teaches here. I would love to study with him.' 'Why don't you apply,' she urged me. So I did and here I am. It is a dream come true. He has such a sharp mind, but he is also so decent to his students. He treats them with respect and concern."