

Random Thoughts . . .

NOBODY ASKED ME, BUT . . .

RICHARD M. FELDER
North Carolina State University
Raleigh, NC 27695

It will probably come as a shock to those who know me, but I have some strong opinions about educational matters. Very strong. Violent and unswerving prejudices, some would say. And since I will regularly be using this forum to subject you to whatever is on my mind, I thought it would be only fair to run through these opinions for you. You may then feel free to dismiss things I say in future columns on the grounds of my admitted bias. (However, anything I say about a topic not on the list may be considered absolute truth.)

Ready? Here goes, beginning with the most violent and unswerving prejudice of them all.

- *I hate 7:50 classes.*
- *I don't like people knocking on my door when I'm doing something I really want to do. I welcome them joyfully, however, when I'm doing something I really don't want to do, like grading papers or critiquing an incomprehensible thesis draft.*
- *People who assume that all engineers are culturally ignorant, anti-environment, good at math and science but little else, boring, etc., are irritating. On the other hand, our increasingly specialized and elective-free engineering curriculum almost seems designed to assure that those stereotypes are valid.*
- *I like summers that begin in early May and end in late August (until it's late August).*
- *There is no excuse for undergraduate textbooks written for professors rather than students.*
- *I value the autonomy that comes with this job—being able to choose my research problems, work late and sleep late, stay at home occasionally on days I don't teach. I can't think of another lawful profession that provides its practitioners with so much personal freedom.*
- *I don't like stress tensors.*
- *The classroom occurrence that may be most conducive to learning is spontaneous humor. (I've been using some of the same spontaneous jokes for years.)*
- *I am bemused by students who walk into my office, see me talking on the telephone with papers and open books scattered all over my desk and another student sitting across from me, and ask (all together now), "Are you busy?"*
- *The term "real world" can be intensely annoying, especially coming from people who think they live in it and I don't.*
- *Cheating is repugnant. Even more so is the system that hangs students' futures on the grades they get on timed tests.*
- *I like anything written by Octave Levenspiel.*
- *I hate walking down two flights of stairs to the department office and then forgetting what I wanted there. (This happens with increasing frequency—I don't want to think about what that might mean.)*
- *Our second-worst assumption as teachers is that if we don't cover something in class the students won't learn it. Our worst assumption is that if we do, they will.*
- *I like word processing, spreadsheeting, computer graphics, etc., but I'm worried about how dependent I've become on the computer. At this point if it goes down, I go right down with it.*
- *I don't like anything about the PhD qualifiers—making them up, grading them, and especially discussing them at faculty meetings.*
- *It is not pleasant to discover that I really don't under-*

Richard M. Felder is a professor of ChE at N.C. State, where he has been since 1969. He received his BChE at City College of C.U.N.Y. and his PhD from Princeton. He has worked at the A.E.R.E., Harwell, and Brookhaven National Laboratory, and has presented courses on chemical engineering principles, reactor design, process optimization, and radioisotope applications to various American and foreign industries and institutions. He is coauthor of the text *Elementary Principles of Chemical Processes* (Wiley, 1986).



stand something I've been teaching for years.

- *One of our best fringe benefits is getting to give seminars in some of the world's most attractive places. (Getting honoraria for them is not a bad deal either.)*
- *There is little value and much harm in tests on which the average is in the low 30's. I'm bothered by instructors who would never admit or even consider the possibility that such tests may have been unfair or the students may have been poorly taught.*
- *A university administrator who says he won't do something can be upsetting. One who consistently says he will and then doesn't (or who is incapable of giving a straight answer) can be disastrous.*
- *I get terminally grumpy at badly delivered departmental seminars on subjects I'm not the least bit interested in.*
- *I like engineering professors with interests and talents outside of engineering. If I have a hero in our profession, it is Bob Bird.*
- *Few chores are as taxing as maintaining energy in a class that acts like a wax museum.*
- *One that is as taxing is serving on a university committee that has no real function and never accomplishes anything yet religiously meets every two weeks for at least two hours.*

I am filled with admiration for Professor Vincent M. Foote of the N.C.S.U. School of Design [may his tribe increase], who chaired a committee I served on last year. Vince called meetings only when there was something to do started the meetings on time, had us do what was needed, and adjourned. The average duration of the meetings was about 20 minutes. It was a revolutionary experience.

- *The most troublesome aspect of American engineering education is the way it penalizes outstanding teachers doing minimal research and rewards outstanding researchers doing lousy teaching.*
- *The most puzzling aspect of American engineering education is the notion that engineers with years of industrial experience but few research publications don't belong on engineering faculties.*
- *The hardest thing I have to do as a teacher is decide whether I should push the final grade of a borderline student up (providing encouragement and a challenge to live up to my high opinion) or down (maintaining high standards and providing an incentive to work harder next time).*

I envy professors who believe in their hearts that this is not a dilemma—that one of these choices is the correct one for all students on all occasions. I think they're

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dead wrong, but their lives are a lot easier than mine at least twice a year.

- *I like teaching and writing. I love having a job that pays me to do both.*

Help me out—what else should be on the list? The best entry wins a free drink at the next Exxon Suite.