

## MEET YOUR STUDENTS

### 4. Jill and Perry

RICHARD M. FELDER

North Carolina State University  
Raleigh, NC 27695-7905

Jill and Perry are senior engineering students. They met at their freshman orientation seminar, started dating soon afterward, and have been together ever since. A friend once remarked that they had the only perfect relationship he had ever seen: there wasn't a single thing they agreed about!

They had an appointment to meet in the student lounge at 3:00 this afternoon. It is now well past 4:00. Jill is sitting at a table alone, trying to work but frequently looking over at the door and scowling. Perry finally walks in, greets a few friends, walks over to Jill's table, and sits down.

*Perry:* (brightly) "Hi—get it all figured out yet?"

*Jill:* (glaring) "Where were you?"

*Perry:* "Oh, a few of us in Tau Beta Pi got going on the plans for the Awards Banquet and I lost track of the time...I'm not *that* late, am I?"

*Jill:* "Not for you, maybe, but for normal people an hour and twenty minutes might qualify for *that* late. Am I wrong or did we agree Sunday that we'd study for the design test from 3 to 4 today?"

*Perry:* "Come on, lighten up. We still have a couple of hours till supper, and the exam's not until Friday—you know Professor Furze postponed it yesterday."

*Jill:* "I know he did, but we still had an appointment...and I've got a 331 lab report due Thursday and I planned to work on it between 4 and 6 today and I told you I'd go to a movie with you tonight. If we study for the test now and go to the movie, when am

*Richard M. Felder is a professor of chemical engineering at North Carolina State University, where he has been since 1969. He received his BChE from 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 effective teaching to various American and foreign industries and institutions. He is coauthor of the text Elementary Principles of Chemical Processes (Wiley, 1986).*



I supposed to do the report?"

*Perry:* "You and your ridiculous schedules... couldn't you have worked on the report while you were waiting for me?"

*Jill:* "Look, my ridiculous schedules are the only reason we're seniors now—if it were up to you to plan our lives we'd still be working on our sophomore course assignments and the only time we'd ever study for a test is all night the night before...that is, if you managed to remember we were *having* a test."

*Perry:* "That's not true...besides, which of us got the highest grades on the first two design exams?"

*Jill:* "That has nothing to do with anything! Anyway, it's 4:30 and we haven't started yet...let's see...maybe if we study for about 45 minutes now, then I'll work on the report and we can get a pizza delivered, and that way we can leave at 7 to get to the movie...yeah, I think that should..."

*Perry:* "Why don't we just get started and see where we are at 7 and decide then what to do—we can always skip the movie or go and study some more when we get back if we need to."

*Jill:* "No, we need to set it up now or else we'll

just drift along and never get anything done. OK, let's say we work through these Chapter 5 problems for about twenty minutes and then we...now what?"

*Perry:* "I'm just going for a Coke—be right back. Want something?"

*Jill:* "Yeah, I want you for once in your life to sit still for more than thirty consecutive seconds and do what you said you would do—I've just been sitting here for over an hour waiting, and you finally get here and ten minutes later you're taking off again!"

*Perry:* Relax—I'll just be a minute." (Disappears.)

*Jill:* (Censored)

Jill is a **judger** and Perry is a **perceiver**.<sup>\*</sup> Judgers tend to be organized and decisive: they like to set and keep agendas and reach closure on issues. Perceivers tend to be spontaneous, flexible, and open-minded; they like to keep their options open as long as possible and postpone decision-making until they feel sure they have all the relevant information.

Judgers plan ahead for most things. As students they budget their time for homework and study so they don't have to do it all at the last minute, and they can usually be relied on to turn in assignments on time. However, they tend to jump to conclusions, make decisions prematurely, and doggedly adhere to agendas that may no longer be appropriate. In their classes, judging students want clearly defined expectations, assignments, and grading criteria, and they don't like rambling lectures or class discussions that seem to have little point.

Perceivers do as little planning as possible, preferring to remain flexible in case something

better comes up. They tend to work in fits and starts, alternating between periods of unfocused activity and frantic races to meet deadlines. They have trouble sticking to agendas, tend to start many more projects at one time than they can possibly finish, and are often in danger of missing assignments and doing poorly on tests due to insufficient study time. However, they are more likely than judgers to be aware of facts or data that don't fit their mental picture of a situation and in fact may go out of their way to look for such contradictions. When they don't fully understand something they tend to keep it open, gathering more information or simply waiting for inspiration to strike rather than accepting the first plausible explanation that occurs. Their flexibility and tolerance of ambiguity will make some of them superb researchers.

While students of both types may become excellent engineers and managers, the working habits of strong perceivers may make getting through school a major challenge for them, and anything that can be done to help them survive is worth attempting. They benefit from opportunities to follow their curiosity and work best on tasks that they have chosen themselves. They are not helped much by advice to work at a steady pace and not leave things for the last moment, which may be too radical a departure from their natural style to be manageable; however, it might help to ask them to figure out how late they can start to work on the assignment or study for the test and still do everything else they have to do. Perceivers rarely look at the holes they are digging themselves into through lack of planning. If they can be persuaded to itemize the things they *intend* to do, they might be convinced that without some planning they don't have a prayer of doing the things they *have* to do.

### **Epilogue: Ten years later**

Jill and Perry got married shortly after graduation, managing (barely) to survive Perry's twenty-minute late arrival at the church and Jill's insistence on laying out an hour-by-hour schedule for their honeymoon. Jill got a job in a design and construction firm, eventually became a highly successful project manager, and is now in line for a vice-presidency. Perry went on to graduate school, got a PhD, and is now an eminent researcher at a national laboratory. It took years, but they finally figured out a good way to get along with each other.\* □

\* Unfortunately, I haven't been able to figure out what it might be.

\* The degree to which one favors one or the other of these types can be determined with the *Myers-Briggs Type Indicator*, a personality inventory based on Jung's theory of psychological types that has been administered to over one million people including many engineering students and professors.<sup>[1,2]</sup> Jill and Perry are illustrative of the two types, but not all judgers are just like Jill and not all perceivers are just like Perry. The two categories represent preferences, not mutually exclusive categories: the preferences may be strong or weak, and all people exhibit characteristics of both types to different degrees.

#### REFERENCES

1. Lawrence, *People Types and Tiger Stripes*, 2nd Ed., Center for Applications of Psychological Type, Gainesville, FL (1982)
2. McCaulley, M.H., E.S. Godleski, C.F. Yokomoto, L. Harrisberger, and E.D. Sloan, "Applications of Psychological Type in Engineering Education," *Eng. Ed.*, **73**(5), 394-400 (1983)