Teaching, writing, advising.

Securing grants, conducting research, keeping professionally current.

Where does an educator find the time to meet all of these responsibilities?

Experienced faculty discuss how they have learned to stretch the clock.

By Virginia Myers Kelly
It's 6:15 a.m. You resist the morning light that creeps through the window, and try to fool your body back into sleep before the alarm sounds at 6:30. A full day looms ahead, one big lump of responsibility that you can't possibly swallow within the confines of the clock.

There's the class you must teach—it's a new one, and you'll have to do some research before the next lecture. Then there are the 100 tests you need to grade, piled somewhere among the new lab schedules, grant applications, current research data, and unopened mail that litter your desk and also need attention. The head of the department has asked you to organize a search committee for a new professor. One of your students has been out with mono and needs to meet with you concerning some make-up work. Another doesn't have the first clue about how to organize a research project...

There is no doubt that managing all the responsibilities of an engineering educator can be overwhelming. Sometimes it feels as though you'd have to be a "magician" to get it all done, says Yatish T. Shah, engineering dean at Drexel University.

"Numerous researchers indicate that the tensions produced by the conflicting demands of professional tasks—teaching, writing, staying current in one's field, advising, securing grants, and serving the university and the profession—are a principal source of stress for new faculty," writes Mary Deane Sorcinelli in Developing New and Junior Faculty. "Research also suggests that efforts to balance the demands of professional work and personal life—being a spouse, a parent, a child of aging parents, an involved citizen—may compound new faculty stress."

Sorcinelli also points out that professors get mixed messages about prioritizing that long list of things to do: "You might hear from the university level that undergraduate learning is critical; while at the same time, you're getting the message that doing research is absolutely crucial."

All faculty face this basic dilemma: too much work with too little time, says Martin Pike, associate professor of mechanical engineering technology at Purdue University-Kokomo. While there's no magic formula that lets you add hours to crowded schedules and hectic days, most seasoned professors have learned a few tricks of the trade. Following is some of their advice on ways engineering educators can make the most of their time and balance their responsibilities.

Set Goals
One of the first steps to managing your time more effectively is to set goals. "You need to sit down and figure out what's important to you, where you want to go, and how you want to get there," Martin Pike advises. He suggests setting a mix of long-term and short-term goals—both professional and personal.

Long-term goals might be general—improving social stature and respect among colleagues, for example. In the short term, goals should be more specific—perhaps publishing two articles in refereed journals within one year or securing grant money for a favored project by a certain date. Because long-term goals...
tend to get pushed aside by short-term goals, Pike suggests breaking long-term goals into a series of short-term ones that will eventually get you where you want to be. Be specific, and be realistic, he adds.

For every goal you set, make a “to do” list of all the activities that will help you reach the goal, says Phillip Wankat, head of freshman engineering at Purdue University and co-author of *Teaching Engineering*. For example, if one of your goals is to get a paper published in a journal, your activities will include deciding on a topic for the paper and writing a rough draft.

A canopy of lifetime goals set over daily activities can help keep you on track. “Frankly, some of the things we do are not fun,” Wankat says. His pet complaint is proposal writing, but, he says, if he can see that writing proposals will help him meet a long-term goal, “it makes it more palatable.”

**Prioritize**

Once you’ve listed your goals and activities, it’s time to prioritize. Without some parameters of what comes first, “you can spend a lot of time putting out fires,” explains Douglas Ludlow, professor and chair of chemical engineering at the University of North Dakota and vice-chair of ASEE’s New Engineering Educator’s Division.

To organize his tasks, Ludlow assigns letters of priority to his various activities—A for the most important, and B for those that aren’t as essential. About 90 percent of the items on his “A” list are things that have to get done, he says, such as grading exams or preparing for a committee meeting. The other 10 percent are activities that work toward his long-term goals, writing a research proposal, for example. Before he started his prioritizing system, Ludlow found himself completing lots of quick-and-easy tasks, but postponing the difficult tasks that were more important. Now the “A” list always comes first.

**Just Say No**

Sometimes, prioritizing means saying no up front. Pike suggests evaluating any project or activity that comes along and asking yourself if it works toward your goals. “If it does not,” he says, “you have to have enough discipline and guts to say, ‘I’m not gonna do it.’”

For example, Wankat points out that, “There is no law that says you must open junk mail.” Just say no, and dump it in the trash. Departmental events are not always essential, either. Nancy Denton, an associate professor of mechanical engineering at Purdue University, used to try to attend every honors reception and awards ceremony her department hosted. Now, with two small children and a tenure position with all its associated responsibilities, she says, “I’m happy if I can make it to one or two.”

It helps to narrow the field of activities clamoring for attention, Denton notes. Focusing on just a few areas is less overwhelming and, in the end, more practical.

**Set Time Limits**

Allot a specific amount of time for each task, otherwise one item may engulf your schedule. Lecture preparation, for example, is one task that seems to swallow an inordinate amount of time for new faculty members. Robert Boice says in his book, *The New Faculty Member*. Boice recommends limiting preparation to about two hours—depending on whether the material is new or old—and then proceeding to the next activity. To keep you on track, Wankat suggests scheduling tasks into time slots on a desk calendar.

When setting time limits, remember that some tasks take more time than others. For example, many people feel they need a big chunk of time for writing. “My biggest problem is finding the time to be creative or to think,” Ludlow says. Sometimes it takes him an hour just “to get into the groove.”

For each task, err on the side of scheduling more time rather than less, advise Sorcinelli and Pike. If you have extra minutes, tackle some of the secondary tasks you’ve been postponing, or work on one of those long-term goals you set for yourself.

To help you complete your tasks within your time limits, Wankat suggests keeping interruptions to a minimum. One technique is to work with a closed door, but open access. If the door is open, people will come in just to chat, Wankat says. If it is closed, but your posted office hours indicate that you are available, people will come in only if they have an important matter to discuss. Pike recommends limiting phone calls to certain times of the day and screening them through a secretary or an answering machine the rest of the time.

**Use Your Prime Time**

Every person has a particular time of day during which he or she is most efficient and enthusiastic, what Wankat calls a “period of peak efficiency,” and what Sorcinelli labels “prime time.” For Ludlow, this means rising early and opening the office door at 6:30 a.m., giving him almost three hours of quiet working time before the first official visitor crashes into his lair. For Ted Jacobsen, a physics professor at the University of Maryland, prime time comes after the children are asleep and a second wind blows through the door, around 2 a.m.

Use your prime time for priority projects, Sorcinelli suggests. There’s no point in mindlessly grading quizzes during a time that you have the energy to brainstorm on a new research project.

**Avoid Perfectionism**

Just as you can get caught up in a time-eating project, you can spend hours perfecting a job that really does not merit the attention. “Manuscripts can be revised forever, and the reader will never think they are perfect,” says Wankat and Frank Oreovicz in *Teaching Engineering*. “At some point you have to let go and put out a less than perfect, but not sloppy, manuscript.” The same is true for lec-
tures, which new faculty members typically dote on far too long. "My own tendency is to perfect things," Sorcinelli admits, "and that slows you down."

**Piggyback Items**

Combining tasks is another important strategy to employ when your time is tight. For example, you can reduce your lecture preparation time by teaching a course that is related to your research or that you've taught before.

You can also combine mundane tasks with other activities, Wankat suggests. For example, you can use the time waiting at the doctor's office or riding public transportation to read professional journals that keep you abreast of changes in your field.

**Go with the Flow**

It often seems that just as you've cleared your desk, in comes another flurry of papers to cover it up. Rather than shuffle these papers into different positions, try dealing with them right away. Wankat maintains that an immediate phone call, a fax, or an e-mail message are the most efficient ways to answer mail. Quick responses prevent the dreaded growth of paper piles to slog through later.

**Take a Break**

Don't forget to breathe. It's important when you're working on a full schedule to take time out to relax, to socialize, to stroll across campus. Such breaks will refresh you, allowing you to "return to work with renewed energy and focus," Sorcinelli says.

In academic careers, Sorcinelli says, it's hard to draw the line between work and personal life—especially now that there are computers and faxes at home. E-mail messages and voice mail can be accessed from anywhere, anytime, and it's tempting to do so. To get away from it all, set aside time to "physically remove yourself from the office, and from town if you can," Sorcinelli advises.

One way to get a breather and advance your career at the same time is to socialize with colleagues. Boice says that the most successful new professors spend at least two hours per week on social networking.

Also refreshing, Sorcinelli says, is a change of work space, or a few minutes of conscious relaxation, through deep breathing or visualization. And, when the pace gets too hectic, take a real break. At Drexel, for example, Dean Shah allows faculty members to rotate out of a heavy teaching load.

**Avoid Micromanaging**

Sometimes people can get so caught up in time management practices that following a strict schedule becomes more important than performing tasks well or responding to changing priorities or other unforeseen needs. Shah warns against micromanaging your time and insists that a time clock mentality is deadly for academe. "It just doesn't work that way," he says. "Advising, committees, teaching, and research sometimes take more time than you expect."

To avoid that trap, instead of concentrating on meeting every self-imposed deadline, focus on making steady progress toward your goals. Remember, you must be flexible. "You can't be that rigid with students coming in and out," notes Donna Michalek, assistant professor of mechanical engineering at Michigan Technological University and secretary of ASEE's New Engineering Educators Division.

"Life is unpredictable," Sorcinelli adds. "You don't want to have everything so locked up."

Even Martin Pike, who enthusiastically makes lists and appointments even with his young children, is flexible enough to dismiss his hourly planning approach during the summer, when time is naturally less structured. A rigid schedule doesn't work for everyone, Pike notes. Modify yours so that it's efficient but not binding.

**Setting the University Clock**

Institutions can do a lot to create environments that encourage and model balance for new faculty members. In *Junior Faculty Development: A Handbook*, Donald Jarvis suggests establishing a faculty development program made up of support systems such as:

1. A faculty development committee
2. A weekly noon seminar for new faculty, with sessions on campus orientation, the basics of college teaching, and research strategies
3. A mentoring program for junior faculty with mentors drawn from senior and retired faculty
4. An annual weekend retreat for new faculty members to which their deans invite them to discuss first-year experiences
5. A faculty handbook amended to balance responsibilities in both teaching and research
6. A summer research program that provides funding for new faculty
7. Support service from the campus research office, including editing of manuscripts
8. Monthly symposia ("potluck seminars") conducted at faculty members' homes where junior and senior faculty can interact as equals
9. Travel funds reserved specifically for junior faculty
10. Personal computers and network connections (for example, BITNET) for all junior faculty
11. A commitment to perpetuate the faculty development program by hiring a full-time director.

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