

Students and Faculty in the Information Age

Harvard runs on its computer network to a degree that amazes even those of us who have spent our careers as footsoldiers in the information technology revolution. Hundreds of undergraduate courses have Web pages; some of the finest have not only lecture schedules and summaries and readings, but videos of the lectures themselves, segments from movies and other visual media, and links to Web sites with a variety of other "publications" of relevance to the course material. Online discussion groups and use of email for Q&A between teachers and students are considered the norm, not innovations. Section discussions are livelier when they have been preceded by a bit of on-line warmup. The availability of publications, prepublications, and library materials on-line has had an astonishing democratizing effect in the research realm. Only a few years ago I would return from scientific meetings with precious conference proceedings in hand; my graduate students and research undergraduates would eagerly make copies for our reading group. Today it is more likely that my freshman advisees will point me to new results that have been published on a web site somewhere far from Harvard.

Not just our academic education, but the entire nature of student life has changed as a result. Team practice schedules that used to be distributed by a phone tree or a central posting point are now sent by e-mail. Notices of meetings of student groups, announcements of entryway study breaks, and bulletins about fellowship opportunities, all go by e-mail. Young lovers exchange sweet nothings by e-mail. E-mail has been a boon for communication with parents. It is free, a particular advantage for families abroad; it resolves the mismatch of sleeping-and-waking cycles of parents and their children; it enables each side of the conversation independently to control the level of intimacy and immediacy; and in some families at least, it has restored the practice of writing long, thoughtful, introspective letters, which was largely lost decades ago when long-distance phone calls became cheap.

When I speak with alumni/ae on this topic, no question is asked more often than this: Is Harvard producing a generation of socially isolated students who are spending all their time in their rooms staring at computer screens? Are we becoming an institution where the students and the faculty could be anywhere, since everything educational is happening on the network anyway?

I have few worries on these grounds. So much of the computer use is for communication that the technology revolution has enhanced, not diminished, the levels of interaction among people at Harvard. Indeed, I would be more worried about a complementary problem: that communication has now become so easy that rapid social interaction, at all hours, may be displacing quiet contemplation. When I was in college, pretty much all I could do at 4 AM was to sleep or to sit by myself and read Kierkegaard; I couldn't even try to find out who else was awake without waking those who were asleep. No more — the electronic library never closes, and email provides a noninvasive way of getting in touch with other sleepless souls.

Most importantly, the structure of Harvard as a residential college, where students live with each other and learn from their interactions in the dining halls, on the athletic fields, in their community service projects, and in the laboratories and classrooms, is not in jeopardy. The House system with its faculty masters and resident tutors is stronger than

ever. The primary teaching modality remains faculty and students in face to face contact. In fact, academic interactions between faculty and students are enhanced by technology.

There are many traditional ways to help students get to know faculty — students should make a point of signing up for seminars or small courses, for example. The faculty dinners in the Houses provide a special opportunity for students to invite faculty to talk over a meal, but many faculty welcome simple lunch invitations from students.

Students should also make use of faculty office hours. But office hours can be an awkward setting for a conversation between an undergraduate and the distinguished professor whose course she is taking. How should she start the conversation? “So, Professor Aardvark, tell me a little bit about your research,” however cheerfully delivered, isn’t likely to get the ball rolling when the student could have read any of Aardvark’s fifteen books if that was what she really wanted to know. “I didn’t understand the footnote on page 432” doesn’t work very well either — Aardvark might make the mistake of actually answering the question and then being puzzled about why that seems insufficient to satisfy the student. “How did you first get interested in weevils?” is a good question, but works better over hamburgers or dessert than on a cold call of a student on a professor in her office.

I encourage students to use an e-mail warmup. “I’m trying to understand whether what you said about zyzzyvas has anything to do with what Dr. Aardwolf had to say about zebra bugs in the course I took from him last term. Could I come talk to you about that?” Students find it much less intimidating to make such an approach than to stride into the professor’s office. From Aardvark’s standpoint, it is easier for her to be helpful if she is given a bit of advance notice about the question, and perhaps she can suggest a thing or two for the student to look at before they meet. This is a pretty low-tech suggestion on how to break the ice, but it usually works; most professors answer their e-mail.

Information technology is not an unmixed blessing in our environment. A distressingly large number of students and faculty are afflicted with repetitive strain injuries, and attention is being focussed on education, prevention, and response. As the keyboard and the computer screen become fundamental to the way courses and research are conducted, accommodating the needs of students who have visual or motor disabilities becomes more important.

What about using technology to extend the benefits of a Harvard education to parents, alumni/ae, or others in the world outside the Harvard campus? This “distance learning” issue is a complicated subject. On the one hand a great many course websites, including syllabi and reading lists, are accessible through the college web page right now. (Though some of the best, which contain copyrighted material we are under contractual agreements to protect, are available only to our students.) On the other hand we want our faculty to pay attention to our undergraduates, and to cut the psychic distance separating them — not to spread their attentions to others at a greater distance from Harvard. Harvard is changing, but it remains a residential college first and foremost.