dustry, and its staff includes an "advanced technology team" of more than two dozen technical experts drawn from both academia and industry who can guide the transformation of technologies into materials and devices. Although faculty members at the Wyss will continue to solicit

grants and write scholarly papers, the goal will be to generate intellectual property, royalties, and investment opportunities.

A key innovation facilitating the Institute's work was the creation of a universal contract for all collaborations, streamlining the often onerous process of con-

necting people at multiple institutions, nonprofit and otherwise. To promote collaboration, the contract requires that work take place on site.

To further the applications it develops, the Wyss has actively courted partnerships with industry. In November 2010,

## Learning about Teaching

In "Tackling Teaching and Learning" (March-April, page 42), about the Faculty of Arts and Sciences' renewed focus on pedagogy and educational outcomes, we asked readers to share examples of teaching that had worked for them, and to suggest improvements that Harvard might consider. Here is an edited sampling of the responses; read the full conversation, and contribute to it, at http://harvardmag.com/teaching-and-learning. 

The Editors

In the late fifties, I was fortunate enough to enroll in Charlie Slack's and Sarnoff Mednick's experiential courses in psychological research and mental health. In the research course, we had a lab, human subjects, and equipment, and were expected to turn out a formal research paper a week. In the mental-health course, each student cared for a patient for an academic year. From there I went on to a research job at the Med School for which Harvard gave me a lot of academic credit. I learn best by doing things and tying book-learning to the enterprise at hand, and Harvard made that happen for me, getting my undying gratitude.

Jonathan Brown '57

Most Harvard faculty in my day (GSAS, 1970s) were either desperate to publish so they could get on a tenure track at some other university, or else well past the time they did their best work (also often at another university). One group had no time to focus on teaching, most of the other group lost whatever interest they had long ago. The best teaching experiences were with "prime of life" faculty working with their students to develop their most creative ideas. This very small number of faculty were excellent teach-

ers, regardless of teaching technique, because they were so intellectually alive in the classroom. If the same thing is true today, Harvard needs more faculty who are actually doing their best work while they are at Harvard and with the time to pay attention to teaching.

Gregory Miller, A.M. '76

Our learners no longer want to be told, they want to discover. Rather than lectures and sound bites, give them the tools they require to find answers on their own. The modern educator is more of a guide than an expert.

Steve Hearst '88

Harvard can enhance its teaching-learning process by relating the subject matter being taught—whenever possible—to present-day situations. Indeed, doing so will make the subject much easier to understand, and more relevant and effective as it relates to today's society.

A second way [to] enhance the educational process is by subdividing classes into groups of four or five students, with each group specializing in a critical area of the subject. After extensive research in a specific area, each group member can then present a 10- to 15-minute report to the entire class in an area [where] he or she has acquired exceptional knowledge.

A third way to enhance the learning process is for instructors to provide students with exams that require a great amount of critical thinking...rather than objective (or one-word) exams.

George Patsourakos

Looking back on my four-plus years as a Harvard graduate student, I see two courses that were outstanding in the amount of useful knowledge I learned. They were "Beginning Russian" (accelerated) and "Theory

of a Complex Variable." Each was an extremely concentrated learning experience; the amount of material covered and the expectation of mastery were in each case much greater that those in other courses. Each was taught by a tenured professor who was expert in the material and thoroughly organized the presentation and homework. However, in both, the lecture was only a small part of the educational process. In Russian, the homework, explanations by the teaching fellow, and pronunciation drills by a native speaker were by far the most important content. In the math course, almost all learning resulted from the challenge of the homework; we students met together and jointly puzzled out the challenging assignments. I'm convinced that a gram of example-a welltaught course experienced—is worth a kilogram of pedagogy training.

Lyle McBride, Ph.D.'64

During my senior year, I wrote a thesis on *The Tempest* and directed a production of the show on the Loeb mainstage. My thesis adviser (a Ph.D. candidate) spent hours talking with me about the play, about my struggles to bring the play to life, about how the production had turned out, about how much I hated the play at times, about how I missed it once the show was over, and about how what I had planned to say in my thesis had changed because

my understanding of the play was altered by the process of staging it. I thought I already knew a lot about Shakespeare, but I learned much more through directing the show and talking about

For coverage of faculty conversations about teaching in a global context and using University collections, see harvardmag.com/teaching-learning-conversations.

it during my senior tutorial than I could have imagined. I am now a law professor, and I try to offer my students that same kind of active learning experience that helped me so much as an undergraduate at Harvard.

Molly Shadel '91