How can we best use time in the class-room? What can we do as well—or even better—online? What can we learn in the field, close to home or continents away, at the nexus of theory and practice? How can we connect to people and intellectual resources beyond our classroom to enhance what happens within it? In the first years of the Harvard Initiative for Learning and Teaching, and of edX and HarvardX, faculty and students have been passionately engaged, eager to shape these transformations. Through our campaign, Harvard seeks to set a standard for innovation in teaching and learning.

The future we face together will bring us closer than ever to people, ideas, and cultures around the globe. Harvard must bring the world to our campus and our students and faculty to the world. Harvard students and faculty must understand their lives and work within a global context, one enriched by the content of the curriculum, by a cosmopolitan campus, and by the opportunities available for significant international study, research, and engagement. Our

campaign must strengthen the bonds between Harvard and the wider world.

The future we face together calls for a campus that embodies and enables our ambitions for learning and discovery. In Cambridge, in Longwood and in Allston, what we can be depends fundamentally on the spaces we create, renew, and inhabit. We must shape our campus for the next century with spaces that encourage collaboration, spaces that spur experimentation, that foster connections between Harvard's boundlessly imaginative people and infinitely varied parts. New global and technological realities have challenged universities to examine the logic of physical campuses, to be far more intentional about how we design and use space. We at Harvard have no doubts about the special power of residential education, of what happens through the intensity and serendipity of our shared presence in Cambridge and Boston. That is why we are renewing our undergraduate Houses, where the educational power of being together has its most vivid and indelible expression. That is why we seek to bring our community together across its Schools and complex geography into common spaces like the new Plaza at the Science Center, or the envisioned campus center, steps from the Yard, where people can meet and talk, study and perform, and learn from one another in ways no less compelling than what happens in class.

This campaign will provide the momentum as well for further developing our Allston property as an integral part of Harvard. It will allow our School of Engineering and Applied Sciences—Harvard's newest School—room to grow in a stateof-the-art facility on Western Avenue. It will enhance collaborations across disciplines and Schools and encourage connections among the University, the community, and new partners in industry and research. No institution of higher education has a more exciting opportunity for innovative growth, in an intellectual and entrepreneurial environment as dynamic as we have in Boston and Cambridge. By the time we close this campaign, hundreds of thousands of square feet of new cam-

Arts and Sciences' Aims

DEAN MICHAEL D. SMITH invited *Harvard Magazine* to his University Hall office to discuss objectives for the Faculty of Arts and Sciences' (FAS) \$2.5-billion campaign, as outlined for colleagues in his annual report, released October 4, and detailed for supporters at month's end. He distinguished two groups of priorities: "What do we care about most?" (those core commitments that "strengthen the current, ongoing activities...critical to our mission of research and teaching here") and where "we need to *invest*" ("new things that the future *requires* us to look at").

Among the former, Smith emphasized:

Undergraduate financial aid. The past decade's increases in aid, and the College's commitment to sustain them as family need rose during the recession (and the faculty's long-term assets fell from \$16.6 billion to \$11.6 billion during fiscal year 2009), "have had nothing but upside," he said, referring to the student beneficiaries. The aid budget was never "put on the table during the financial crisis," he noted. But he worries about sustaining that situation "at the scale we have today": only about half of this year's aid budget of \$182 million is supported by endowed funds. Nearly a quarter of FAS's campaign goal, therefore, will focus on securing this core value, lest a future dean confront a crisis in assuring access to the College.

House renewal and the student experience. "Our commitment to residential education is as strong as it has ever been," Smith said; one-fifth of the campaign goal is focused on students' "learning across our campus," not just in classrooms. Most of those funds are for the multiyear, \$1-billion-plus House renovation and updating now under way (see page 46); Smith said much had already been

learned about design, procurement, and the phasing of construction. The program has evolved, too: student requests for social spaces have been realized, for example, in Quincy House, in Stone Hall's reclaimed lower level, along with music- and art-making rooms and a high-tech classroom where students can experiment with learning technologies.

According to the fiscal 2013 report by Leslie Kirwan, dean for administration and finance, FAS had spent \$51 million on House renewal (planning, construction, and student swing space) through last June 30; the Corporation had approved financing plans for \$209 million of construction; and donors had pledged \$140 million in support. The full project will require use of endowment funds, reserves, debt financing, other cash—and philanthropy. "This...is going to be successful," Smith declared, "because of the support of our alumni."

Faculty and the scholarly enterprise. Another 20 percent of the campaign will be dedicated to this category, in three ways. First is securing endowed chairs (two-thirds of FAS's tenured positions are endowed today) because, Smith said, professors are "worthy" of a career step beyond achieving tenure. (Endowments also relieve pressure on unrestricted funds. There will be "a little bit" of faculty growth as well, he said—but nothing like the 20-plus percent expansion during the last decade.) Second is supporting graduate-student fellowships—"the obvious way we grow that [scholarly] pipeline into the future," as Smith put it: all the more pressing as cuts in federal-research funding—an "imminent threat"—restrict the prevailing support for science graduate students. The third is underwriting new research. For example, he cited the Institute for Quantitative Social Science, which has pioneered techniques enabling many faculty members to work with



pus space will be taking shape across the Charles. And we can imagine Harvard, by its 400th anniversary, less as a campus of separate precincts and more as a unified campus with a river running through its center.

The future we face together, the future we shape, will depend perhaps most of all on who we are and who we will be. Attracting and supporting the most promising students and faculty are crucial to all we aspire to do. When we think of what Harvard has meant to the world, we inevitably find ourselves focusing on people: the extraordinary individuals who define our identity and embody our aims.

We must be a magnet for talent. Lady Ann (Radcliffe) Mowlson knew this in 1643 when she endowed Harvard's first scholarship. President Conant knew this nearly 300 years later when, in the shadow of the Great Depression, he created the Harvard National Scholarships program, drawing promising students from across the economic spectrum. We are proud to have nearly doubled our financial aid in-

vestment in the College since 2007. Six in ten of our undergraduates receive scholarship support; those who do pay an average of \$12,000 to attend Harvard College. This commitment makes Harvard more open and accessible, better able to draw a new generation of leaders from the widest pool of talent. It also creates a more vibrant educational environment for all our students. But we do this not just because it makes Harvard better; we do it because it is right. We must sustain our efforts in the College, and we must build support for financial aid across our Schools—especially Schools whose graduates look forward to careers in public service and who should not face a choice between repaying educational debt and pursuing their dreams.

Creating new knowledge, reimagining teaching and learning, engaging globally, re-

inventing the spaces where we learn and live, attracting and inspiring the best students and faculty: These are essential to our enduring strength. But the future requires something more.

Each moment in history, to those who live in it, may seem distinctive, pivotal. To us, at this moment, there can be no doubt that we live in a pivotal and transformative time for the future of knowledge and universities. For nearly four centuries, Harvard has recognized that colleges and universities are special institutions, with an irreplaceable role in society. Almost a millennium since their invention, they continue to challenge us to look beyond the here and now. They bring to bear the critical eye; they incite the imagination; they encourage the skepticism, the rigor, the intellectual adventure and unbounded curiosity that yield our deepest understandings. When I was privileged to be installed six years ago as Harvard's president, I reflected on what has always



large data sets and pursue new inquiries, "an area that is exploding." Securing endowed funding for the institute thus "ramifies throughout FAS's scholarly mission." (The annual report also cites brain science, energy and the environment, digital humanities, the arts, and understanding the origins of human behavior.)

The new emphases in FAS's campaign plan include:

Leading in learning. "This is a period of transformation...in higher education," Smith said: basic understanding of cognition has advanced, and effective technology has, finally, come to the classroom. He conveyed strong support for professors' experiments with the HarvardX platform, "flipped" formats (students view lectures before class, and then work together and with faculty on problems in class), and hands-on design in engineering courses, on a campus long focused on lectures. Endowment funds will be sought to update the Bok Center into a locus for helping professors understand and apply "new things that improve student learning" in demonstrable ways. Other funding will underwrite course development, reconfigured classrooms, and training—"to support not just individual faculty in their desire to improve teaching," Smith said, but "institutional change...so faculty and students can spend more time together in useful learning exercises" and "Harvard can show true leadership in higher education."

The School of Engineering and Applied Sciences (SEAS). Beyond SEAS's new Allston facility (a University campaign priority), Smith said, "We've always wanted to grow the school." Nearly one-fifth of FAS's goal focuses on scaling up the SEAS faculty significantly, securing research funds, and paying for graduate-student fellowships. (SEAS with a few dozen more faculty members would still be smaller than its Princeton or Caltech peers.) SEAS, he said, is "tightly tied to a liberal-arts education" in a university with un-

equaled professional schools and has already been notably successful in providing rigorous engineering concentrations; educating undergraduates generally; and building interdisciplinary collaborations "so we can tackle problems that have societal impact" involving law, regulation, medicine, and other fields. Smith said SEAS is poised for growth in computer science and applied math, both widely useful, and in bioengineering and environmental engineering, complementing other University expertise.

Decanal discretionary funds. Finally, unrestricted annual giving should total perhaps one-tenth of FAS's goal, providing "the flexible funds that enable us to adapt" in a "changed" world, Smith said—citing the past half-decade of financial shocks, shifts in public policy, and fast-emerging opportunities in research and information technology.

As structured, he concluded, FAS's campaign has been shaped both by "looking where our pressure points are today" and by "looking at where we want to invest so this institution can continue to be excellent" in the future.