

MIT Faculty Newsletter

<http://web.mit.edu/fnl>

in this issue we offer continuing commentary on MIT 2030 (see Editorial) and related graduate student housing concerns (page 6); two perspectives on MITx and edX (below); reports from both the Dean for Undergraduate Education (page 8) and the Dean for Graduate Education (page 9); and the results of last spring's Faculty and Staff Quality of Life Survey (page 17).



Sidney-Pacific

edX: Hostile Takeover or Helping Hand?

Woodie Flowers

IN THIS NEWSLETTER LAST January, I speculated that we had stumbled in our effort to help education take advantage of digital technologies. OpenCourseWare (OCW) offers users a chance to sort through an unfiltered and unorganized pile of stuff we generated while doing what we do. The missed opportunity, I argued, involved recognition that education and training are different and that training could be dramatically improved through use of well structured, high quality modules that would help students train themselves so person-to-person time could be used for education. Essentially the strategy would outsource training and nonjudgmental grading to digital systems, and thereby free instructors to serve as mentors.

Such a system could serve K-death and be versatile in the extreme. It could have

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HumanitiesX

Ruth Perry

THE ANNOUNCEMENT OF MITX and edX last spring set the Institute buzzing. Everywhere people were talking about how to do online education in their discipline and whether it was a good idea and what had already been planned and even implemented. MIT metamorphosed overnight into one big educational think tank for...well, whomever is going to profit from online education in the long run. I suppose most readers of this *Newsletter* think that media-based education is inevitable and that we may as well get in there early and do it intelligently. But sometimes it feels like a solution for which we are being asked to develop a problem.

Some humanists at MIT have eagerly joined this race to someone else's finish line; some are skeptical about whether there are platforms sophisticated enough

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Editorial

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I. Addressing Graduate Student Housing Difficulties

THE EDUCATION, RESEARCH training, and instructional experience of graduate students are at the core of research universities. The MIT graduate community, engaged directly in the research enterprise, interacting intimately with its members, with faculty and with undergraduates, is a major force in MIT's creative engine. The quality and dedication of our graduate students form the foundation of MIT's productivity.

Given their importance, it is deeply disturbing to learn of the difficulties that graduate students face to secure affordable, decent housing. Last June, the Faculty Newsletter published an informative article describing the acute housing shortage off campus. On page 6 of this issue we carry an article by several gradu-

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Editorial

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ate students who are very familiar, as residents and as office holders, with the state of on-campus housing. They note the increasingly untenable costs to graduate students of on-campus housing, despite the importance of such accommodation to graduate student life and work.

MIT has taken some important steps in ensuring on-campus housing for first-year graduate students, through construction of residences such as Sidney-Pacific. However, beyond the first year, the Institute appears to have no overall policy for protecting and enhancing the ability of our graduate students to secure affordable on-campus housing. The Graduate Student Council should not have to negotiate with housing managers. These costs should be set by MIT as institutional policy.

Graduate students involved in hands-on research need to live close to the campus, a requirement that sharply limits their housing options. The failure of the MIT 2030 and MITIMCo proposals to address this acute problem is one of the reasons those proposals need to be carefully scrutinized. New housing may need to be built, for example in the East Campus, or off-campus housing costs subsidized from Institute resources.

Clearly we need to develop a coherent policy to ensure adequate and affordable housing for our graduate students. The administration needs to create a task force – one that includes significant representation of the Graduate Student Council – to develop a comprehensive graduate housing policy. It may turn out that the MITIMCo proposal needs to be revised, so as to include adequate graduate housing on the East Campus.

II. The New Administration Responds to MIT 2030 Concerns

Faculty Chair Sam Allen's article on page 4 describes the establishing of the Provost's Task Force on Community Engagement in 2030 Planning. This necessary and healthy step to re-examines MIT 2030 and the MITIMCo up-zoning proposals for the East Campus. We commend the President and the Provost for responding to the widespread faculty and graduate student concerns (see for example the May/June issue of the *Faculty Newsletter*, Vol. 24, No. 5).

III. edX Front and Center

The implementation of edX will represent a significant transformation in higher education. The front-page articles by Woodie Flowers and Ruth Perry raise a variety of questions about how to proceed. edX will be a continuing theme in the *Faculty Newsletter* over this next year. We need to explore not only faculty roles but the identity, training, and compensation of the teaching assistants required to service courses with tens of thousands of potential students. Our graduate student community has not yet been included in this discussion. In addition to printing articles relevant to edX, we plan to organize forums for direct exchange and debate. We welcome letters, articles, and participation at the forums.

IV. 25th Anniversary of the FNL

This year is the 25th anniversary of the launching – by Prof. Vera Kistiakowsky and other faculty – of the *MIT Faculty Newsletter*, in response to events that made clear the acute need for an inde-

pendent vehicle for faculty communication and discourse. (See “20th Anniversary of FNL: A Brief History of its Founding” at: web.mit.edu/fnl/volume/201/abs.html.) During the ensuing years, the FNL has provided a forum for expression of faculty concerns and views, a major channel of communication among the faculty, and a means for candid debate on difficult issues. Areas where the independence of the *Newsletter* have been important include exploration of the status of women faculty; undergraduate curricula; health insurance, pension, and retirement issues; compacts with foreign governments; minority recruitment and promotion; graduate housing and campus planning.

We believe the lessons are clear and increasingly relevant: Faculty need a means for independent expression and exchange of views. The resulting increase in communication and transparency results in improved decision making and policy formulation.

The FNL is edited and published by a faculty Editorial Board that is directly elected by the faculty. We hope to continue the tradition begun by Prof. Kistiakowsky and her colleagues. (See that first issue of the *Faculty Newsletter* at: <https://mit.edu/fnl/vol/archives/fnl00.pdf>.) We plan to host a number of special lectures and forums to mark this milestone 25th anniversary, review key issues at MIT, and discuss the role of research universities in American life. ■

Editorial Subcommittee

From The Faculty Chair Comings and Goings

Samuel M. Allen

WELCOME BACK FROM WHAT I hope has been a restorative summer! This semester promises to be particularly interesting, as our new President and Provost begin to make their mark on MIT. Since his appointment was announced in May, President Reif has had several conversations with faculty members on the Search Committee in which he has expressed keen interest in the attitudes and concerns voiced by the MIT community during the search.

A lot has happened at the Institute since my column in the May/June issue of the *Faculty Newsletter* when the search for a new President was not yet complete, and this is a good opportunity to summarize some of the most significant occurrences.

The Search for MIT's Seventeenth President – Conclusion

Spring semester 2012 was especially momentous for MIT because of President Hockfield's unanticipated announcement that she would step down, and the subsequent formation of the Search Committee that would seek her successor. A significant portion of the MIT community provided thoughtful input to the search process and the Search Committee worked tirelessly and efficiently over a three-month period, ultimately selecting then-Provost Rafael Reif as MIT's seventeenth president.

Many people were astonished at the speedy conclusion of the search. *The Boston Globe* opined erroneously that the Search Committee focused on internal candidates from the outset. In fact, both internal and external candidates were in the running throughout the search. From

my perspective, three factors helped accelerate the Committee's work: First, John Reed (chair of the MIT Corporation) immediately initiated a process to determine membership of the Search Committee. Second, John named

extremely valuable. Many people have told me how much they valued the opportunity to speak directly to members of the Search Committee as the search proceeded, and leaders from the Undergraduate Association and Graduate

During the search two themes arose that seem to have resonated beyond the search itself. During several meetings with SHASS faculty the phrase *One MIT* was used. To me it represents the desire and capacity for the community to pull together toward common mission-oriented goals. It could also be applied to the synergies between our research and teaching. . . . Subsequent to the conclusion of the Presidential search, the new administration took further shape when President-elect Reif named Professor Chris Kaiser as Provost. I am looking forward to working with these new leaders in the coming academic year as priorities are set and ongoing initiatives are nurtured.

Corporation member Jim Champy as chair of the Search Committee. Jim had been chair of the committee that led to Susan Hockfield's selection as MIT's sixteenth president in 2004, so he brought prior experience and excellent management skills to the search process. Finally, the members of the Search Committee quickly established the requisite degree of trust with each other necessary to work efficiently throughout the search process.

The Search Committee sought and received very useful advice from the key stakeholder groups of faculty, students, and staff. The process of getting student input via the Student Advisory Group was

Student Council related that they were very satisfied with the process. This is significant, because so often students feel isolated from important decisions on issues that have major consequences for them.

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Committee's work. It is a particularly cogent image as decisions that affect students are being made, and in planning for the future of the MIT campus.

Winston. (Five of us were on the Presidential Search Committee, and thereby gained a broad sense of the MIT community's views.) The Task Force

In mid-July we held a Faculty Forum on the MIT 2030/Kendall Square planning. Presentations by Associate Provost Marty Schmidt and Professor Jonathan King (with several other colleagues) preceded a general discussion. A significant outcome of the Forum was the formation of an ad hoc Task Force on Community Engagement in 2030 Planning, announced by Provost Kaiser in August. The Task Force is charged with "advising the Provost about decisions related specifically to the development of MIT property in Kendall Square and about the most effective ways to engage the MIT community in the 2030 decision process generally, going forward."

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Developments Over the Summer

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began weekly meetings on August 7, and will be meeting with a number of stakeholder groups during the course of its initial work.

Late in July, Provost Kaiser and Chancellor Grimson announced developments relating to edX and MITx. The University of California at Berkeley has joined MIT and Harvard University as a partner in edX. Fall semester 2012 will see seven subjects offered through edX: Harvard will offer PH207x, "Health in Numbers: Quantitative Methods in Clinical and Public Health Research," and CS50x, "Introduction to Computer Science I." MIT will again offer 6.002x, "Introduction to Computer Science and Programming," and will also add two classes: 3.091x, "Introduction to Solid State Chemistry" and 6.00x, "Circuits and Electronics." UC Berkeley will contribute CS169.1x, "Software as a Service," and CS188.1, "Artificial Intelligence." More details about edX and these offerings are available at: edx.org/.

With the rapid expansion of MITx there are faculty governance questions to be considered by the Committee on the Undergraduate Program and the Committee on Curricula. For instance, will MIT students be eligible to receive

credit for MITx offerings? Can MIT students use MITx subjects to prepare for Advanced Standing examinations? Will students (especially freshmen) be tempted to take one or more MITx offerings while also enrolled for a full load of regular MIT subjects? These and other questions are already under discussion, but significant time will need to be devoted this fall to more thorough and conclusive consideration of the role that MITx offerings will play in our students' educational experience.

In August, the News Office announced "that MIT and 13 other universities filed an amicus brief with the United States Supreme Court in the case of Fisher v. University of Texas, a case that challenges the constitutionality of the consideration of race in university admissions decisions." I highly recommend reading the brief, available via the link from web.mit.edu/newsoffice/2012/amicus-brief-fisher-u-texas-0814.html. Not only does the brief inform you about details of the legal case, but it also elaborates on the values of diversity within and beyond a university community. It is easy to align oneself with activities and initiatives that promote diversity, but a greater challenge is to be able to speak convincingly about it to someone more skeptical. Reading the brief will help enable you to do that. I expect that reading the brief will also increase your sense of pride in being part of the MIT community – it certainly did for me.

So, a lot has been happening in recent months, and the fall semester should be very interesting. I urge you all to participate in President Reif's inauguration and related events on Friday, September 21. It represents a great opportunity for the MIT community to gather as *One MIT* and join with distinguished guests for a celebration that anticipates the Institute's evolution in sync with a world filled with technical, social, and political challenges and opportunities. ■

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Concerns Over Affordability of On-Campus Housing

Heather Murdoch
Andrea Dubin
Amy Bilton
Pierre-Olivier Lepage
Anders and Anna Haggman
Alan Richardson

RENT IS THE LARGEST expense of graduate students, consuming over half of pretax income. Each year, the rising cost of rent is the largest factor in the graduate student stipend adjustment calculated and recommended by the Graduate Student Council (GSC) to the senior administration. For the past five years, the rates for on-campus rents have been capped at a maximum 3.5% yearly increase. This agreement between the GSC and the Dean of Student Life expires this year, bringing the future of affordable on-campus housing into question. Higher rents will affect MIT's competitiveness as a research institution by pushing current students further away from their work on campus, deterring potential students, and straining research budgets as stipends adjust to escalating living expenses.

The problems are twofold. First, Cambridge off-campus housing will continue to grow scarcer and less affordable as area development continues. This is a long-term crisis that requires measured attention. Second, and what we as current and past leaders in the on-campus residences wish to bring to your attention, is the untenable rising cost of on-campus housing. For students already at MIT, high on-campus rents cause them to seek lower-cost options elsewhere. According to the recent Graduate Student Survey, approximately 60% of off-campus students cited on-campus housing cost as a major factor contributing to their decision to move. Given the escalating housing prices in Cambridge, students are often forced far from campus to find affordable options. Being located far from campus limits the students' access to the

lab, especially for those students who may need to work after hours. For those students whose research is not laboratory group based, living far from the campus

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community may contribute to further isolation. Additionally, transportation to areas far from campus is often inadequate, making it difficult and more time consuming for students living further away to commute to their research environments. Some students are also forced to live in areas with higher crime rates as the cost of off-campus housing increases.

High on-campus rents present a barrier to attracting talented students and to maintaining a satisfactory quality of life once students are here. Boston has the third most expensive rental market in the country. Many graduate students come from areas with a different rental environment and paying more than \$1100 a month (the current rate per person for a two-bedroom apartment in Ashdown House, Edgerton, or Sidney-Pacific) for an on-campus housing spot is difficult to justify. Additionally, finding off-campus housing is a challenging prospect, especially for the international students who comprise approximately 37% of the graduate student population. Affordable on-campus housing

is an appealing option that helps ease the transition into life at MIT.

On-campus housing also impacts student life on campus. Graduate dorms

are one of the locations where students are able to build community in a non-academic setting. They are the center of student life for many graduate students, and provide resources for student wellness. Graduate dorms also provide an opportunity for students to gain leadership experience within a graduate community. These experiences should be open to all students regardless of their savings or income. Increasing rents may rob students of these experiences by driving them off campus.

As graduate students who have benefited from the on-campus housing experience, we want to hold MIT Housing to the same standards to which our advisors hold us. We would like to understand the nature of rent increases by looking at the calculation and reviewing the contributing costs. Off-campus renters are able to track their own utilities usage, and are informed by their landlord of increases in rent due to market value; as on-campus residents, we have simply received rising rental charges. A survey of local utility

rates shows that electricity rates have fallen in the past four years, with over a 20% drop in mid-2009. Water and sewer rates have remained constant for the past three years and MIT's voluntary payments in

making a profit on its students' research-funded stipends. On-campus rent increases prior to the 3.5% agreement have been as high as 6.5% in the past 10 years; undergraduate rent increases have been as

sources of rising on-campus rent and involved in the future assessment of housing increases. ■

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lieu of property taxes to the city of Cambridge (as buildings classified as academic, which includes residences, are not subject to tax) has decreased in the last five years. Market value should absolutely not be a factor, as MIT Housing should not be

high as 8% per year. It is unclear what these variable and unpredictable increases stem from, but it is clear that future rent increases will affect students and the Institute alike. We therefore ask that students and faculty be informed as to the

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Alumni Association Seeks Traveling Faculty

Louis Alexander

AMONG THE MOST FREQUENTLY received requests from alumni to the Alumni Association are for opportunities to hear presentations from MIT faculty. Knowing of the pressures on your time, we are always grateful when it is possible for faculty in the course of their travels to speak with MIT alumni groups about their research.

If you do have time in your travels to talk about your work, we can offer you an audience of lively and curious people full of intelligent questions. But, we need to know if you are interested and where you would be travelling.

The first step is to fill out the Faculty Travel Form! This will take less than a minute to complete. Normally, we need

about a six-week lead time to make an event happen.

To start, visit <https://alum.mit.edu/learn/lectures/faculty-speaker-resources> and click on the link to the Faculty Travel Form at the bottom of the page. ■

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From the Dean for Undergraduate Education New Strategic Directions for DUE

Dan Hastings

IN SPRING 2011, THE Office of the Dean for Undergraduate Education (DUE) began a review of our 2006 Strategic Plan. The primary goal was to lay out new and refreshed strategic directions that advance DUE's mission to "enroll, educate, and inspire some of the brightest students in the world with a passion for learning so they become the next generation of creative thinkers and leaders in a global society."

Since the 2006 plan was developed, the higher education environment and the nation as a whole has changed greatly, marked by extreme economic turmoil, demographic shifts, and continued pressure for efficiency and accountability. Internally, several new units were added to DUE at the request of members of Academic Council or senior officers; there have been changes in Institute leadership; the growth of several large international ventures; and new issues and priorities, such as the development of MITx. These factors pointed to the timeliness of renewing our strategic plan.

We engaged our mission partners in the review, notably the Division of Student Life, Office of the Dean for Graduate Education, Information Services and Technology, and the faculty, through the DUE Faculty Advisory Committee. While the process reaffirmed many things we said in 2006, new themes, emphases, and needs emerged. For example, the DUE Faculty Advisory Committee emphasized the importance of improvements in the advising process while they and others suggested an increased emphasis in the role DUE plays in educational innovation.

DUE Vision

Serving at the nexus of MIT, we enrich the educational experience and ensure enduring value that transforms the future.

DUE Core Values

These values form the foundation on which we strive for excellence in realizing our vision and fulfilling our mission:

- Educational Excellence
- Integrity
- Diversity and Inclusion
- Visionary Thinking
- Students at the Core

With this as background, we developed a sharpened set of six strategic themes, each with an associated set of metrics and deliverables on a five-year timescale:

- **Transforming Learning** through Research, Best Practices, and Innovations in Pedagogy, Curricular Materials, and Assessment
- **Catalyzing the Undergraduate Educational Commons:** Maintaining Excellence, Increasing Innovation, Improving Communication
- **Valuing and Leveraging Diversity,** Benefitting from a True Meritocracy
- **Leveraging Educational Technology** for Educational Effectiveness and Change
- **Empowering Students** to Leverage their Experiences and Maximize their Confidence to Become Creative, Innovative, and Global-ready Leaders

- **Evolving the Student Information System** to Support a Dynamic Educational Experience for our Faculty, Students, and Staff.

These crosscutting strategic emphases allow DUE to focus our resources in the areas most critical to advancing education at MIT. As we move forward in developing effective strategies that support our themes, it is imperative that we work closely with the faculty. The faculty and students are the key stakeholders in the delivery of effective education. DUE is here to help enable us all to do the best for our students in giving them a great education, both the curricular and co-curricular pieces. We look forward to continuing to work with you.

I encourage you to view the DUE strategic plan on our Website (due.mit.edu/about-due/strategic-plan) where you will find the full description, key goals and metrics, and current initiatives for each of the themes. ■

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From the Dean for Graduate Education
**From Imagination to Impact: Empowering
Graduate Students to Create the Future**

Christine Ortiz

A Five-Year Strategic Plan

AS I JOINED THE Office of the Dean for Graduate Education (ODGE) in August 2010 and began to appreciate the extent and significance of its ongoing work, it was important to me to hear directly from the constituencies that the office serves while developing strategic priorities. I therefore carried out an extensive “listening tour” during which my admiration for our students, faculty, and staff grew ever deeper. Both individually and collectively, the quality, diversity, and spirit of our community are truly awe-inspiring.

In the past two years, I have observed the optimism of the Society of Energy Fellows for contributing to the future health of our planet; the momentum of Graduate Women at MIT’s leadership conference; the Goodwin Medal awardees’ remarkable talent and passion for teaching; the creativity of multidisciplinary student teams impacting underserved communities in the Ideas Global Challenge; and the startling silence of the MIT Electric Vehicle Team’s converted 1976 Porsche battery electric vehicle. I have read fellowship nominations detailing graduate students who are redefining paradigms, solving fundamental decades-old problems, creating artistic beauty, and pushing forward the frontiers of their fields in bold new directions. I have witnessed the dedication of our staff in supporting, listening, and comforting many in our community during times of tragedy. Clearly, graduate education at MIT is thriving like never before; it is central to the mission of MIT and vital to maintaining our leadership status as a world-class research university. Together with the ODGE team, I embraced the

work of defining a strategic plan to support this enterprise.

What We Heard

During the strategic planning process, faculty raised the interrelated issues of competitiveness in graduate student recruitment, in the context of increasing global competition; the need for additional and flexible graduate fellowships; the cost of research assistantships charged to grants; current and expected reductions in federal funding; as well as a desire for improved diversity and an inclusive campus climate. Graduate students expressed a desire for increased interdisciplinary interactions; a need for multi-use, 24-hour campus spaces; enhanced mentoring/advising and interactions with faculty; increased and greater awareness of personal support resources; an acceptable standard of living and affordable housing; as well as the ability to live a balanced and healthy lifestyle in a time where productivity expectations continue to increase. All constituencies, in particular staff involved in graduate education, emphasized the detrimental effect of the numerous and inefficient graduate admissions platforms. Lastly, and more recently, *MITx* online education initiatives have stimulated conversations across the Institute on their impact and strategic potential to enhance residential education.

Our Mission and Vision

The ODGE team was pleased to use the large amount of information collected during the listening tour to inform our strategic plan. Our mission involves *service to individual graduate students, pro-*

grams, and Schools in order to make graduate education at MIT empowering, exciting, holistic, and transformative. Our vision represents an evolution beyond the classical isolated apprentice model to *a graduate community of scholars whose members are ever more intellectually and socially engaged, valued, interactive, and rapidly connected to resources, information, each other, the Institute, the nation, and the world.* While our final strategic plan comprises five distinct themes, I will describe three broad areas most relevant to faculty, as well as some progress to date in each of these areas.

Our Priorities and Activities

Promoting Educational Innovation and Excellence

As a key priority, ODGE is creating a robust support infrastructure for graduate programs and students with the goal of increasing and diversifying fellowship support. These efforts will include dedicated staff; outreach to granting organizations; identification and dissemination of information on new funding sources; development of a comprehensive electronic database; personalized guidance for graduate student fellowship applications; as well as collation and distribution of departmental best practices. Over the past few years, ODGE has contributed to the acquisition of a diverse set of new graduate fellowships and this initiative will further amplify these efforts.

Programmatically, ODGE will support and develop new mechanisms to promote educational innovation and enhance cross-departmental and cross-School

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From Imagination to Impact

Ortiz, from preceding page

graduate student interactions. Current examples of support include the Ideas Global Challenge, Systems and Computational Approaches to Life Sciences (SCALeS) Seminars, and the MIT-China Innovation and Entrepreneurship Forum.

Administratively, the ODGE will strive to ensure that all graduate students participate in Responsible Conduct of Research training in collaboration with the Office of the Vice President for Research. A Committee on Student Entrepreneurship has been formed to examine current activities, best practices, and policy considerations for students engaging in entrepreneurship activities, co-sponsored by the Office of the Vice President for Research and the Office of the Dean for Undergraduate Education. Additionally, the ODGE Website (odg.mit.edu) has been dramatically upgraded to highlight graduate student accomplishments in articles and video profiles called “Student Snapshots” which will grow to encompass students from each department over the next few years.

Given the extreme urgency of the systems-based issues identified with graduate admissions and their importance to graduate recruitment, aggressive and early action was taken, driven by faculty task forces and committees. Currently, we are in year two of a three-year transition plan to the new, more efficient online platform “GradApply” developed by Electrical Engineering and Computer Science Professors Frans Kaashoek and Robert Morris; enormous improvements have already been realized.

Supporting the Whole Graduate Student

This second broad theme area focuses on graduate student personal support and professional development. Over the past several years, requests to the ODGE for outreach, advice, referral, or other assistance related to personal and academic matters have increased significantly from students, faculty, and administrators, and

we have been hard-pressed to meet the need. Happily, in July 2011, staffing for graduate student personal support was increased with the addition of an assistant dean for graduate education, which has allowed us to more efficiently and effectively manage the increased volume, reduce waiting, and spend the time needed to be most helpful to those who seek advice and assistance. Our priorities in the area of personal support include compiling a detailed needs assessment from survey and focus group data, creating new mechanisms to connect graduate students to resources, and increasing outreach and resource awareness to academic departments. We will work in collaboration with various groups, such as Community Wellness at MIT Medical and Student Outreach and Support under the Dean for Student Life, to focus on areas of conflict resolution, cultural sensitivity, and mental and physical wellness. To support our efforts internally, we are implementing an electronic student case database for improved tracking and administration of support, advising, and leaves of absence.

In addition to creating original knowledge at the frontiers of the field, today’s graduates also need the ability to recognize its meaning in a broader context, and to possess a more extensive skillset in order to act on this new knowledge for the benefit of society. Hence, it is becoming important to provide professional development opportunities in order to prepare students for a range of career paths. Our activities in this area have included co-sponsoring the new “MIT-Imperial Global Fellows Program” with the Office of the Dean for Undergraduate Education; the launch of a new Professional Development Video Portal, or PRO-DEPOT; and the formation of a Task Force on Graduate Student Professional Development. The Task Force is reviewing desirable skillsets in various disciplines and employment sectors and identifying core competency areas, and will provide recommendations for formulating a comprehensive and coherent set of offerings to all MIT graduate students.

Creating a Diverse and Inclusive Campus Climate

MIT is incredibly rich in its diversity. We have students hailing from every state in the nation and 101 different countries, from a broad range of economic and cultural backgrounds. In the last five years, MIT has experienced encouraging increases in the domestic diversity of its graduate population in terms of gender and ethnicity, due to collective efforts across the Institute at every level. We must continue to amplify our recruitment efforts to increase the applicant pool and yield of under-represented minority (URM) students.

Accordingly, we have begun to deepen our engagement with partners in minority serving institutions. This past winter the ODGE hosted a “Deeper Engagement” workshop at MIT which generated new ideas and strengthened connections with our partners that will move us closer to our diversity goals. We are expanding the reach of our “Grad School Clinic” to include an online version that supports undergraduates in planning their academic trajectories in order to be strong graduate school candidates, thereby strengthening our pipeline. We have increased Institute-level fellowship support with the goal of enhancing diversity, and garnered financial support for the MIT Summer Research Program (MSRP) for another five years.

Simultaneously, it is imperative that we foster a nurturing, caring, and inclusive campus environment in order that all graduate students are able to excel and achieve their academic personal and professional goals; climate is a critical factor in retention, time-to-degree, and academic excellence. We have formulated a tri-level approach to climate which includes: 1) cohort and community building through a series called “Critical Conversations” which facilitates the understanding, articulation, and exploration of multiple backgrounds and experiences; 2) “bridging activities” more closely connect students with their labs, departments and the Institute; and 3) institutional-level activities, for example,

celebrating accomplishments, emphasizing the positive correlation between diversity and excellence, and promoting student engagement at the Institute level.

The Changing Path Ahead

Now is one of the most exciting times in history for graduate education at MIT. Higher education stands at a historical moment in time where dramatic advances in computation, communication, and instrumentation are opening up transformative possibilities in education that could not have been imagined even a decade ago. The majority of our initiatives above involve online components integrated with physical programs and activities, and I am optimistic that *MITx* will provide further opportunities to enhance residential graduate education in the areas of recruitment; building intellectual, col-

laborative and cross-disciplinary networks; graduate student engagement with alumni; innovations in teaching and research; professional development; and support of preparation and academic milestones (e.g., qualifying exams, laboratory training, etc.). The ODGE strategic plan will surely evolve over the coming years in response. MIT is taking a leadership role in all of these emerging areas in graduate education to maintain its status as a world-class research institution. Clearly it will be an exciting, challenging, and, ultimately, rewarding journey ahead.

I would like to extend my gratitude to all who participated in the listening tour; to the ODGE Faculty Advisory Board; and to Chancellor Eric Grimson and President Rafael Reif for their great intellectual contributions and financial support, both of which were critical in the development of

the strategic plan and new initiatives. I would like to acknowledge President Emerita Susan Hockfield and former Chancellor Phillip L. Clay for their input, support, and guidance. I would also like to thank the Graduate Student Council for their participation and collaboration, and ODGE Communications Officer Heather Konar for contributions to this article. Lastly, I would like to acknowledge the Office of Institutional Research for their extensive work in compilation and analysis of relevant data used in the development and presentation of the strategic plan. Our full strategic plan is available online (odge.mit.edu/about/strategy/). I would be happy to receive comments and suggestions via e-mail. ■

Christine Ortiz is the Dean for Graduate Education and Professor of Materials Science and Engineering (cortiz@mit.edu).

Teaching this fall? You should know ...

the faculty regulates examinations and assignments for all subjects.

Check the Web at web.mit.edu/faculty/termregs.html for the complete regulations.
Questions: Contact Faculty Chair Sam Allen at x3-6939 or smallen@mit.edu.

No required classes, examinations, exercises, or assignments of any kind may be scheduled after the last regularly scheduled class in a subject, except for final examinations scheduled through the Schedules Office.

First and Third Week of the Term

By the end of the **first week** of classes, you must provide:

- a clear and complete description of required work, including the number and kinds of assignments;
- the approximate schedule of tests and due dates for major projects;
- an indication of whether or not there will be a final examination; and
- the grading criteria and procedures to be used.

By the end of the **third week**, you must provide a precise schedule of tests and major assignments.

Undergraduate Subject Tests Outside Scheduled Class Times Shall:

- not exceed two hours in length;
- be scheduled through the Schedules Office; and
- begin no earlier than 7:30 PM when held in the evening.

Tests, required reviews, and other academic exercises outside scheduled class times shall not be held on Monday evenings.

End-of-Term Tests and Assignments

In all undergraduate subjects, there shall be no tests after Friday, December 7, 2012. Unit tests may be scheduled during the final examination period.

For each graduate subject with a final examination, no other test may be given and no assignment may fall due after Friday, December 7, 2012. For each graduate subject without a final examination, at most, either one in-class test may be given, or one assignment, term paper, or oral presentation may fall due between December 7 and the end of the last regularly scheduled class in the subject.

Collaboration Policy and Expectations for Academic Conduct

Due to varying faculty attitudes towards collaboration and diverse cultural values and priorities regarding academic honesty, students are often confused about expectations regarding permissible academic conduct. It is important to clarify, in writing, expectations regarding collaboration and academic conduct at the beginning of each semester. This could include a reference to the MIT Academic Integrity Handbook web.mit.edu/academicintegrity/.

edX: Hostile Takeover or Helping Hand?
Flowers, from page 1

direct dramatic positive influence on MIT residential programs and leverage the thousands of dedicated teachers who need help.

I repeat here a version of those arguments and a plea that more of us get involved in making sure that MIT's education strategy is carefully crafted and not quickly copied from others. Risking our reputation and \$30,000,000 is a big deal. To date, we have partnered with two other prestigious institutions. That is more reason to be careful.

In edX's MOOCs (Massive Open Online Courses), I believe we have a product without a strategy. We should design products that help *us* improve while also helping schools everywhere. MOOCs do neither.

MOOCs replace complete courses. They remove important options from competent faculties we should help. MOOCs again put MIT's brand equity at risk by chasing a sweet-sounding but badly flawed dream of "free education." Free education is nonsense! Good education is strongly linked to personal interaction and that will never be free. Improved education is a far more sensible goal.

edX should not be a me-too copy of Coursera (coursera.org) and/or Udacity (udacity.com). They were first and had momentum before we started. As a source of MOOCs, edX is lagging in overall participation. We may be the slow starter in a race that has no winners.

For good reasons, a MOOC is viewed as a hostile takeover of a course. Since the MITx announcement, I have given presentations on education reform in Spain, Australia, and the U.S. A paraphrased reaction I have heard from other faculties is, "Those big-endowment elitists are trying to undermine our institution." The MOOC model is an arrogant statement about what a course should be. Educators do not react favorably to being taken out of that decision process and potentially out of the picture altogether.

Even for ad hoc learning and continuing education, a whole course is an over-

size bite that is not likely to fit users' needs. In very few instances will the starting point, coverage, and end point designed for MIT be right for other schools.

I believe MOOCs are a fad. Right now, their purveyors are preoccupied by a race

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to volume. Coursera's home page banner features an enrollment counter that recently passed one million. (Current completion rates for MOOCs is about 10%.) MOOCs, however, lack versatility and are alien to the existing infrastructure. While they may work well in the "training" part of highly codified subjects, their potential contribution to education on the whole is quite limited. In my opinion, they will do little to help MIT improve our own educational productivity.

While I am enthusiastic about reducing costs, improving efficiency, and thinning the ranks of ineffective educators, I believe leading institutions should focus on helping the good teachers without destabilizing the system.

Think about the end game of successful MOOC competition among Coursera, Udacity, and edX. Will we have succeeded if, for a degree, students everywhere pick one of these three for each course until they graduate? Should those students ever meet a professor or visit a campus? Or maybe, to preserve the variety now available, we would have many MOOCs. (They would have to become Not-So-MOOCs.) How many versions of 6.002x would the English-speaking world need? Would we have hundreds of copycat MOOC players or would we decay into oligarchies where SuperMOOCs reign? Since the MOOC model would follow a scripted lecture, why would professors be

the presenters? Would it not make sense to recruit Morgan Freeman or Katy Perry to deliver the monster MOOC? The producers could replace PowerPoint slides and demonstrations with movie-quality special effects. Would budget-strapped community colleges just go away? I think

we should be careful about joining a movement that may produce chaos rather than improve education.

Collections of inexpensive "course badges" could undermine the value of a diploma and society would realize too late that critical thinking, creativity, and professionalism are not easily adopted or evaluated via a screen. Imagine what state legislatures might do to their state's college budgets. What would happen to the symbiotic relationship between education and research?

There are many nondestructive and exciting paths that take advantage of digital technology. Let's pick one of those. For example, we could learn from history. Using textbooks for a few centuries has taught us a lot. They keep the local instructor in the educational process. I believe that "new media texts" are a much better model for helping education. One of the "sweet spots" includes materials that are beautifully produced, feedback enabled, and modular. Think of short, elegant textbook chapters that include automatic homework and quiz grading coupled to analytical data tools. Such a format could continuously improve and morph with the digital world. Successful modules would be the product of a coordinated effort so that they embody a logical progression and use consistent nomenclature. **ee**

Leadership in organizing those bite-size building blocks could be an important service from a leading educational institution like MIT. Such modules would provide freedom to customize courses and free faculty to use “lecture” time for more inspirational and experiential purposes. (MIT would have a strong comparative advantage given our *Mens et Manus* tradition.) A successful system would allow others to add “apps” or plugins. Offloading training time to students might allow university residence time to be reduced without harming the overall efficacy of a degree.

Sustainability is essential. Especially for commodity subjects, elegant and connected digital texts would easily justify usage fees and probably be seen as a blessing and a bargain. For those who could not afford fees, use could be free since the marginal cost of additional users would be very low. You do not have to be an Ayn Rand disciple to see that rewarding those who create materials that support education is good. Without royalty payments, would we have great textbooks?

My presentation in Australia was sponsored by Smart Sparrow, a company partially funded by The University of New South Wales. It offers an educational software system derived from one of their doctoral theses. Smart Sparrow’s three principles are: Promote Learning by Doing, Be Intelligent and Adaptive, and

Empower the Teacher. Maybe those ideas offer a good role model for us.

MOOCs are about telepresence. However, real presence is essential. Imagine a letter of recommendation

winner Daniel Kahneman’s *Thinking Fast and Slow* and Lenord Mlodinow’s *Subliminal*. Both books are rich with evidence that we are unlikely to learn to know students or truly educate them

Collections of inexpensive “course badges” could undermine the value of a diploma and society would realize too late that critical thinking, creativity, and professionalism are not easily adopted or evaluated via a screen. . . . I believe that “new media texts” are a much better model for helping education. One of the “sweet spots” includes materials that are beautifully produced, feedback enabled, and modular. Think of short, elegant textbook chapters that include automatic homework and quiz grading coupled to analytical data tools.

written by a faculty member in charge of a MOOC: “Although I have never met Jane Doe, I think she would be a great contributor to your research program/company. In the on-line chat rooms that support my course, she often rose to the top of the answer-quality index. Her answers to other students’ questions were clear and concise. . . .” I would not write nor trust a letter like that.

Direct human interaction is complex. Experimental psychologists are teaching us volumes about the importance of non-verbal communications. Most of our brain activity is devoted to processes we do not even notice. Read Nobel Prize

without meeting them. Without our being with them, students can learn only a low-bandwidth version of us and of their classmates.

MOOCs are not likely to lead MIT to understand which parts of education require time together. I believe the answer to that question is important and answering it should be a central part of our strategy. It is more important than software development.

I hope it is not too late to reboot or at least redirect. ■

Woodie Flowers is Pappalardo Professor Emeritus in the Department of Mechanical Engineering (flowers@mit.edu).

Nominate a Colleague for the MacVicar Faculty Fellows Program

THE MACVICAR FACULTY FELLOWS Program recognizes MIT faculty who have made exemplary and sustained contributions to the teaching and education of undergraduates at the Institute. Together the Fellows form a small academy of scholars committed to exceptional instruction and innovation in education.

MacVicar Faculty Fellows are selected through a competitive nomination process, appointed for 10-year terms, and receive \$10,000 per year of discretionary funds for educational activities, research, travel, and other scholarly expenses.

For more information and the nomination process, visit web.mit.edu/macvicar/ or contact the Office of Faculty Support at x3-6776 or macvicarprogram@mit.edu.

Nominations are due on Thursday, November 15. ■

HumanitiesX

Perry, from page 1

to carry what we do. Some of us wonder whether the originators of these X initiatives even thought about liberal education in the humanities at all, or if it was added as an afterthought – although we will be allowed in to join the party if we choose to adapt our methods and our subjects to the needs and plans of teachers of science and engineering.

Setting aside the enormous question of assessment – which will be an issue for any narrative question or any complex synthesis in any field – just asking whether what we humanists do can be done online is, I suppose, an opportunity to clarify what we teach. Why does it seem so intractable to transmit humanistic learning to the thousands around the world hungry for education? We, too, have lecture classes in which we model the intellectual processes we value. We teach students how to think; but surely, you say, they learn to think in their science and engineering classes too.

Is the difficulty in translating humanistic thought to online modules as simple as the distinction between passive learning and active learning, as obvious as the difference between rote learning – memorization – learning facts and sequences – and learning how to frame questions without answers or to strike out obliquely in new directions? Is it, as my philosopher friends say, the difference between knowing *that* (water is wet or gravity pulls) and knowing *how* (to ride a bike or make a pie)? Certain labs will be a problem in online education, learning “how” to interact with the material world. Already the pioneering MITx team has seen that students prefer to watch problems being worked out on screen rather than being given finished solutions – a preference for access to the process rather than final answers.

Jane Austen described her heroine’s education in *Mansfield Park* this way: “. . . he recommended the books which charmed her leisure hours, he encouraged

her taste, and corrected her judgment: he made reading useful by talking to her of what she read, and heightened its attraction by judicious praise.” To fully comprehend this passage, one wants to dissect what Austen meant in 1814 by “taste,” “judgment,” and best of all, “useful.” But even reading superficially, one can see that she is describing a personal interactive process geared to a specific mind. And indeed, teachers of literary texts must take into account where the student is coming from – intellectually, culturally, develop-

Setting aside the enormous question of assessment . . . just asking whether what we humanists do can be done online is, I suppose, an opportunity to clarify what we teach. . . . Literary texts suggest ways to think about . . . things by means of images, analogies, metaphors, juxtaposition, vocabularies, diction, style, pace, tone, and so on, in addition to plot and character. But interpretations of these formal characteristics are made by particular people with particular histories. Our materials do not have the same uniformity as those of science. One cannot transpose the materials so easily. They are context, author, and interpreter sensitive.

mentally, philosophically – in order to help move that student forward in his or her thinking. The social practices in humanities classrooms resist standardization because in order to help their students progress, teachers have to know them as intellectuals clearly enough to help them to articulate their opinions, refine their critical skills, and guide their thinking into new paths. They must help students formulate their ideas so that they are recognizable to others. It is slow work and requires sustained and individualized – and above all interactive – *attention*. We do not so much transmit information as teach our students how to relate to the world, to their own experience, and to language in new and sophisticated ways.

The subject I teach – literature – is not entertainment for leisure hours. It alters and expands what one knows about life and the world, offering new ways to think about meaning, another vocabulary for responding to the significant questions of

life. Stories and poems expand one’s experience and understanding about what is important and why. What matters ultimately in human life? What does one value and why? What do others value? How does age (or gender or race, etc.) change what one values and why? What is the nature of happiness, satisfaction, fulfillment? Such questions have no universal answers and their specific content varies with history and cultural context – although there are continuities that transcend time and place. Literary texts

suggest ways to think about these things by means of images, analogies, metaphors, juxtaposition, vocabularies, diction, style, pace, tone, and so on, in addition to plot and character. But interpretations of these formal characteristics are made by particular people with particular histories. Our materials do not have the same uniformity as those of science. One cannot transpose the materials so easily. They are context, author, and interpreter sensitive.

In our classes, group discussion often opens up what we have read together and adds layers to it. Students see that by engaging one another’s minds, they can turn up the general illumination, move the conversation forward and get somewhere new. In literature classrooms, I have often had to restrain my MIT undergraduates trained to eliminate false premises, and reorient them to listen to one another for what is true or at least heading in the right direction. We generally do not try to

I suppose we ought to begin by asking what education is for. Increasingly it is for credentialing, although not long ago we talked of educating people to be informed citizens in a genuine democracy and for enriching their lives. Neither purpose appears to be on the table anymore.

take apart one another's reactions, but rather try to appreciate the complexity of resonance and suggestion, and to build upon one another's insights. After multiple interpretations to unpack the connotations of key words and articulate the nuances of meaning, what emerges is more than the original text; indeed, what the class creates is a new work. Class discussion provides the opportunity for each to go beyond the initial experience of reading and the multiplicity of association in the room permits a creativity not available to any student alone with a text. This kind of communal discussion, this immersion in the meanings of a text, can be transformative because it shows students what is possible in reading deeply, not just what is in a particular text.

Nor do we yet understand the physics of learning – why one learns from some people and not others (regardless of who is a “better” teacher); how we humans communicate with our eyes and expressions and gestures and posture and body language, our decibel levels and intonations, as much as with our words. Learning happens differently in relationships than it does alone in front of a screen. Groups assembled online are not as fully participatory as in face-to-face exchanges in real time. The forms of sociality promoted by online interactions permit the projections of personas without the same authenticity of response that one is held to in live conversation. Everyone can feel the difference between a live performance and listening to a recording. As a performer, I am aware of the alchemy of presence – how different it is to play for real people rather than to perform in a studio. One can put so much more across when one is in the same room; and how flexibly and creatively one thinks when students are listening!

I suppose we ought to begin by asking what education is for. Increasingly it is for credentialing, although not long ago we talked of educating people to be informed citizens in a genuine democracy and for enriching their lives. Neither purpose appears to be on the table anymore. I also fear that this initiative will alter our residential practice willy nilly in the name of

edX may not be a simple add-on option – at least not in the Humanities. The question of resource allocation in such subjects has not been considered. Subjects in literature and culture taught in the Open University in the U.K., the global pioneer in “distance learning” for nearly half a century, place huge demands on their tutors. They not only grade and comment extensively on individual papers but, thanks to the University's asynchronous online tutorial system, are available more or less around the clock to guide, counsel and conduct dialogue with actively-learning students No professor at MIT or Harvard is going to commit that kind of effort to individual tutorials, nor is it feasible given the numbers involved.

teaching the hungry millions. Online education will be used here on campus for remedial purposes or to convey core concepts that some students may take longer to grasp. And so we cudgel our brains to think of online modules that might make sense for literary education. One of my colleagues suggested that we might teach punctuation this way – an excellent idea. But what will it mean for those forms of teaching and kinds of content not intrinsically suited to such an approach? Will they be valued more or less?

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“best practice” be ignored in the stampede to quickly think up ways to use online teaching? And what might we lose if we commit ourselves, our time, and our resources to online education without considering these basic questions?

1. What happens in face-to-face classroom experience that cannot be duplicated online and is worth preserving?
2. For whose benefit are we developing online modules in the Humanities and why?
3. Will this effort change what we try to teach?
4. What are the real costs of adequately personalized interactive teaching online and of its assessment? ■

Ruth Perry is a Professor in the Literature Section (rperry@mit.edu).

Request for Preliminary Proposals for Innovative Curricular Projects

The Alex and Brit d'Arbeloff Fund for Excellence in Education

THE OFFICE OF FACULTY Support seeks preliminary proposals for faculty-led projects to enhance the educational experience of MIT undergraduates. Projects that involve faculty-student direct interaction, cross-disciplinary boundaries, or aspire to provide dynamic and effective teaching are all appropriate. Projects can be focused at any level of undergraduate education. The d'Arbeloff Fund Review Committee is particularly interested in initiatives affecting large numbers of students over time, or subjects that transcend specific departmental curricula.

This year with the advent of MITx, the Committee welcomes proposals for projects that will explore ways in which online learning experiments can help MIT faculty teach in the MIT residential educational system. Projects that span multiple subjects are encouraged, as is the development of modules to be used within a subject or across subjects.

Special attention will be accorded to enhancements of subjects offered in the first-year and in the General Institute Requirements (GIRs). The Committee is interested in proposals aimed at fostering

faculty participation in the educational experiences of undergraduates beyond the classroom, such as mentoring and advising, especially of freshmen.

For guidelines and more information, visit web.mit.edu/darbeloff/ or contact the Office of Faculty Support at x3-6776 or darbeloff-fund@mit.edu.

Preliminary proposals, with an estimated budget, are due by Friday, October 5. ■

letters

Thanks and some reflections

To The Faculty Newsletter:

I WANT TO THANK you for continuing to send the *Newsletter* to me. I retired from the Department of Biological Sciences (which was dismantled long ago) at age 65, and went over to the Boston University School of Medicine to teach pathology to medical students, and do research for another 10 or so years. I have enjoyed it all and after completing my doctoral work at the University of Missouri in 1958, never did another day of work – it was all fun! My only comment on contrasting the students at MIT and at BU is that MIT students know how to think; BU Medical students know how to memorize! Other than that they are all wonderful, stimulating, and delightful

slices of humanity, placed on this old rock to enjoy!

My major reason for this note is that a new President [of MIT] has been chosen and that offers some opportunities unavailable before, namely, engaging the entire faculty in the continuing progress of the Institute programs, the progress of which is not easily approached but, in my opinion, essential to the success of this great institution in meeting its obligations in a dangerous and ever-changing world.

The letter from the Editorial Board of the *Newsletter* to the Class of 2012 and Professor Reif's remarks to the MIT community illustrate much of the need for such action. However, what really brought the subject to mind was a comment made by one of my former faculty mates,

Professor Steven Tannenbaum, in one of your recent issues. After reading several demands by faculty members for the group to get on with some decisions, Steven said something like "here we go again, from the top down," indicating that the senior faculty is usually telling the others what to do – obviously not the way to move things ahead! It would be nice to be able to include the entire faculty, or appropriate interested persons, in important decisions for the Institute.

Once more, let me thank you and colleagues for the usually interesting and surely useful *Faculty Newsletter*. Best wishes to you "all." (I'm from below the Mason/Dixon line!)

Paul M. Newberne

Survey Says: Faculty Happy But Stressed

Highlights from the 2012 Faculty and Staff Quality of Life Survey

FACULTY AND STAFF APPEAR to be quite satisfied in their role at MIT. More than 90% of survey respondents said they were somewhat or very satisfied being an MIT employee (see Figure 1). Across all Schools, faculty posted higher satisfaction ratings in 2012 than in 2008 (see “MIT Numbers,” back page).

Early this year, then-Provost Rafael Reif and Executive Vice President and Treasurer Israel Ruiz invited MIT faculty and staff to participate in a quality of life survey. The Web-based survey was sponsored by the Council on Family and Work, Office of the Provost, and Chair of the Faculty. The purpose of the survey was to examine the work-life environment for faculty, other instructional staff, researchers, postdoctoral scholars, administrative staff, support staff, and service staff at MIT.

The survey closed in late February with more than 7,000 responses, achieving a 61% overall response rate. Two-thirds of faculty answered the survey, in line with the 69% of faculty who answered a similar survey in 2008.

Below is a summary of some of the broad-level campus results, organized by topic area.

Satisfaction

When asked about their satisfaction with life outside of MIT, most employee groups rated this item slightly higher than satisfaction with being an employee, except for faculty and postdoctoral scholars, who tended to report lower satisfaction with their life outside MIT. Faculty and postdoctoral scholars also tended to report lower levels of satisfaction with their ability to integrate the needs of their work with their personal/family life – 64% and 70%, respectively (see Figure 2). While

Figure 1: Satisfaction with being an employee of MIT

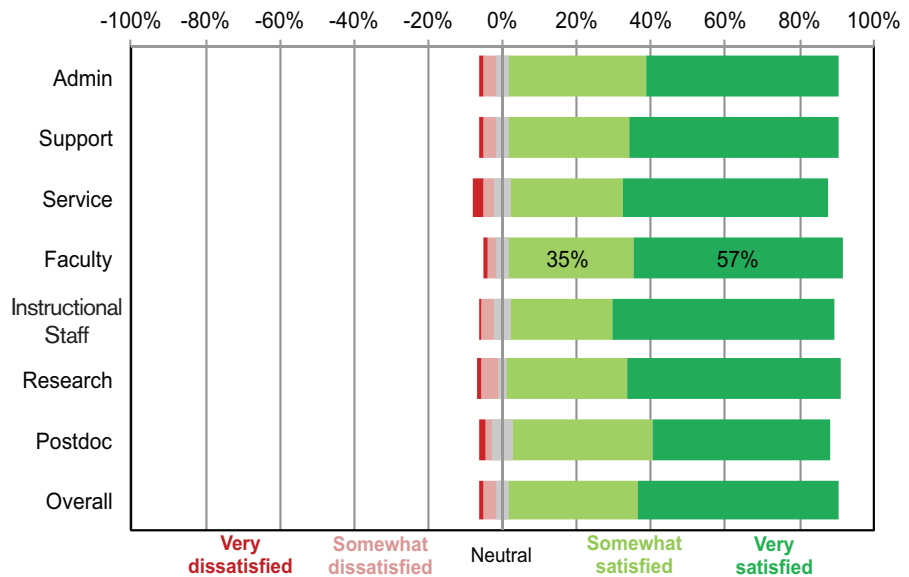
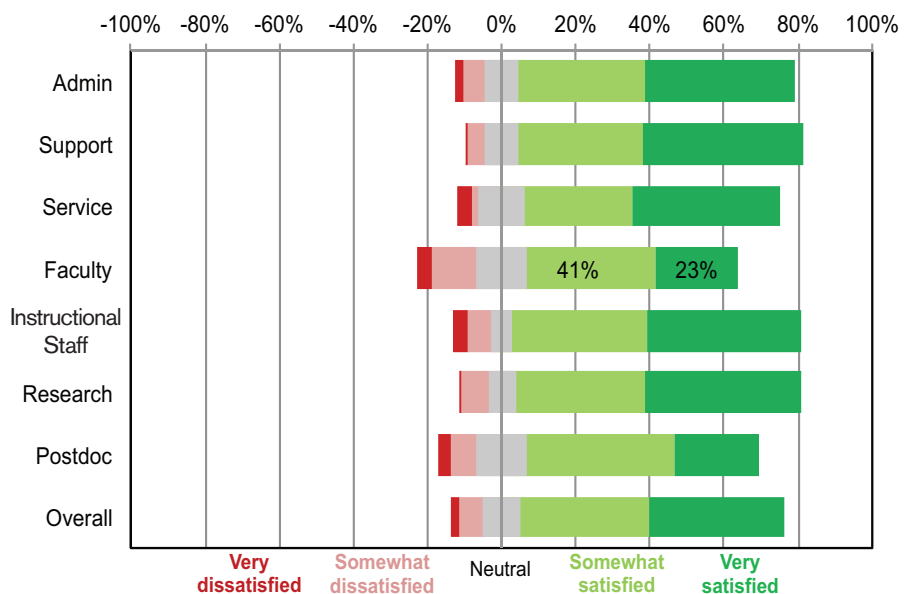


Figure 2: Satisfaction with ability to integrate the needs of work with personal/family life



continued on next page

Faculty Happy But Stressed

continued from preceding page

faculty, on average, were less satisfied with work-life integration than other groups, they saw a marked improvement in 2012 over 2008, when just 41% of faculty reported being somewhat or very satisfied.

Workload and Stress

On average, faculty and postdoctoral scholars reported working more hours per week than other employee types (see Figure 3). Faculty also tended to rate their workload heavier than other groups on campus; more than half of faculty said their workload was too heavy or much too heavy, while fewer than 1% said too light or much too light (see Figure 4). Faculty in 2012 reported heavier workloads than faculty in 2008 (64% too heavy or much too heavy in 2012, compared to 58% in 2008).

In tandem with the findings regarding workload, faculty were more likely than other groups to report being overwhelmed by all they had to do during the past year (see Figure 5).

Climate

The survey had a number of questions about department/unit climate. Among them was one that asked faculty and staff to rate their level of agreement or disagreement with: “My department/unit is a good fit for me.” 83-87% (depending on employee type) said they somewhat or strongly agreed with this statement. 86% of faculty agreed with the statement, up from 77% in 2008. See Figure 6 (next page) for a breakdown of faculty results by School.

The vast majority of respondents also expressed confidence in their work abilities; 90% or more of faculty and staff, regardless of type, somewhat or strongly agreed with “I am confident in my ability to do my job well.”

Mentoring

The survey asked several questions on mentoring, including one about whether or not faculty and staff felt as though they had received adequate mentoring while they were at MIT. More than half of service

Figure 3: Average number of hours in typical work week (full-time faculty and staff only)

Mean Work Hours Per Week	
Administrative	47
Support	39
Service	42
Faculty	63
Instructional Staff	50
Research	48
Postdoc	55
Overall	49

Figure 4: Overall reasonableness of workload

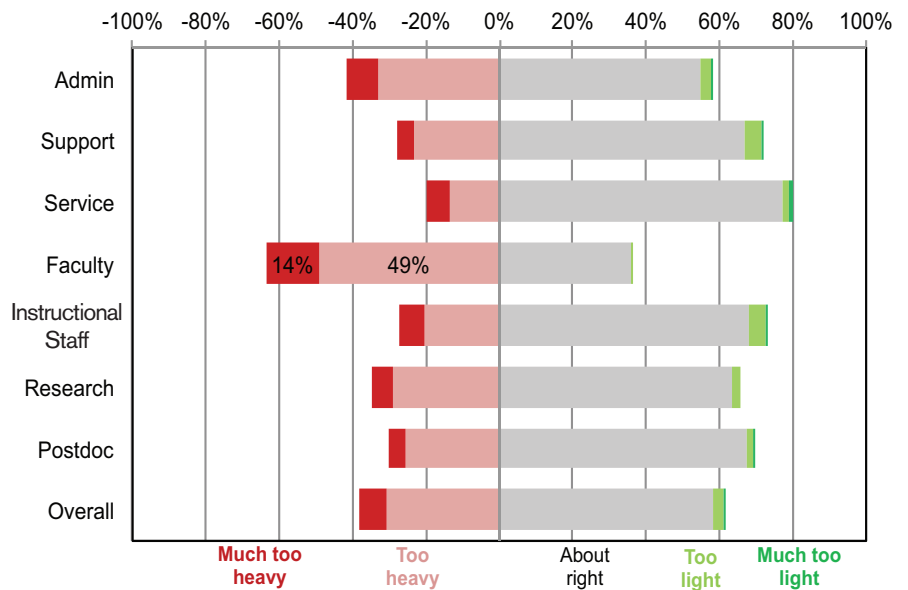


Figure 5: Felt overwhelmed during last year

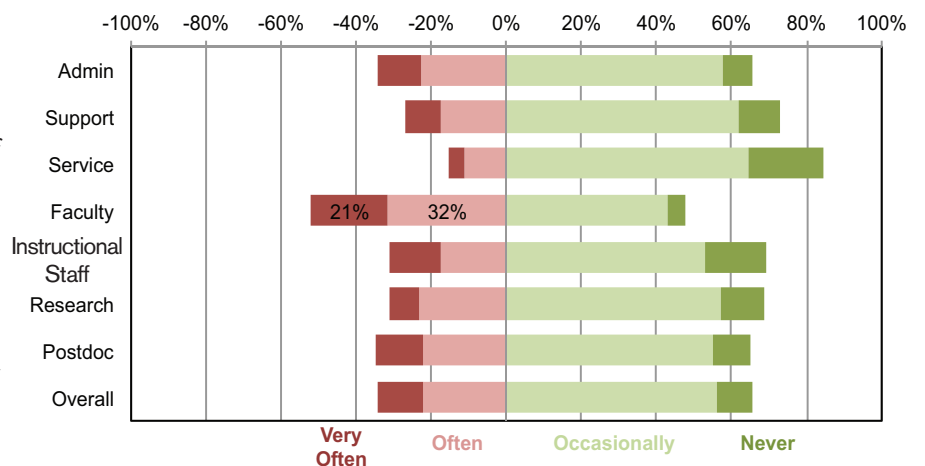


Figure 6: My department/unit is a good fit for me

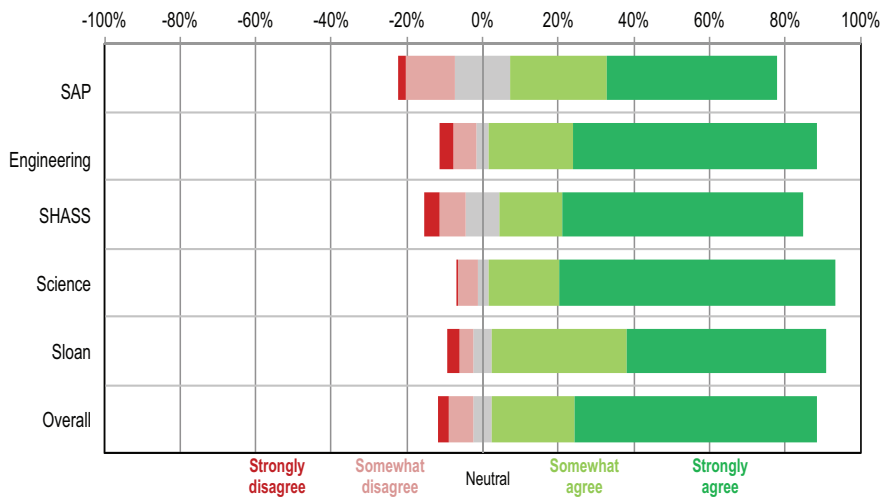
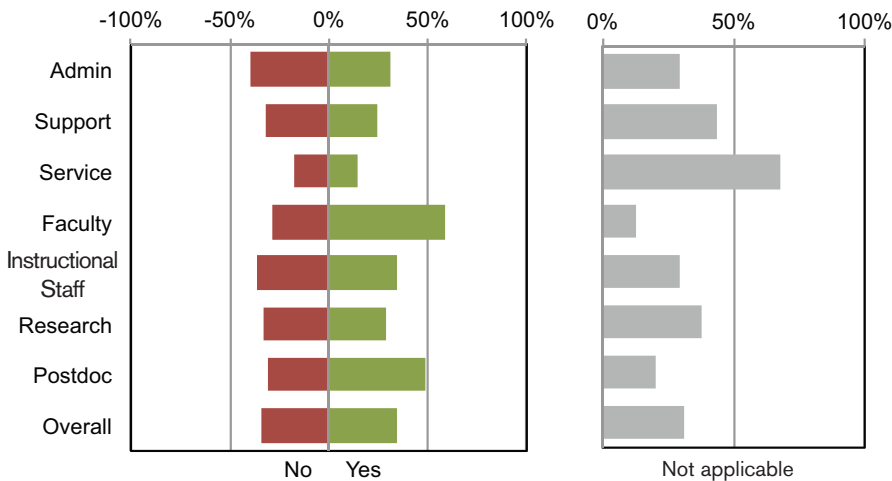


Figure 7: Received adequate mentoring



From Faculty Chair Sam Allen

The generally high measures of faculty satisfaction, and their increase since the 2008 survey, are very encouraging (see Figure 1, page 18, and “MIT Numbers,” back page). At the same time, a significant number of faculty report feeling overwhelmed either “often” or “very often.” 63% find the workload either “heavy” or “too heavy” (Figures 4 and 5, page 18), and compared with other groups at MIT, faculty find the integration of work with personal/family life to be a challenge (Figure 2, page 18). Apparently, a work environment that involves significant stress from pace and pressure can also provide a high level of job satisfaction – even with only 3.3 restful nights of sleep per week!

The data presented here, and additional data from earlier MIT surveys are available on the MIT Institutional Resources Website at web.mit.edu/ir/surveys/staffsurvey.html. 2012 MIT Faculty Survey results broken down by School and by department have been shared with deans and department heads, and should help to identify specific opportunities for improvements and ways to address them.

and support staff chose “Not applicable” for this question – compared to just 13% of faculty. Faculty were more likely than other groups to say they had received adequate mentoring (see Figure 7).

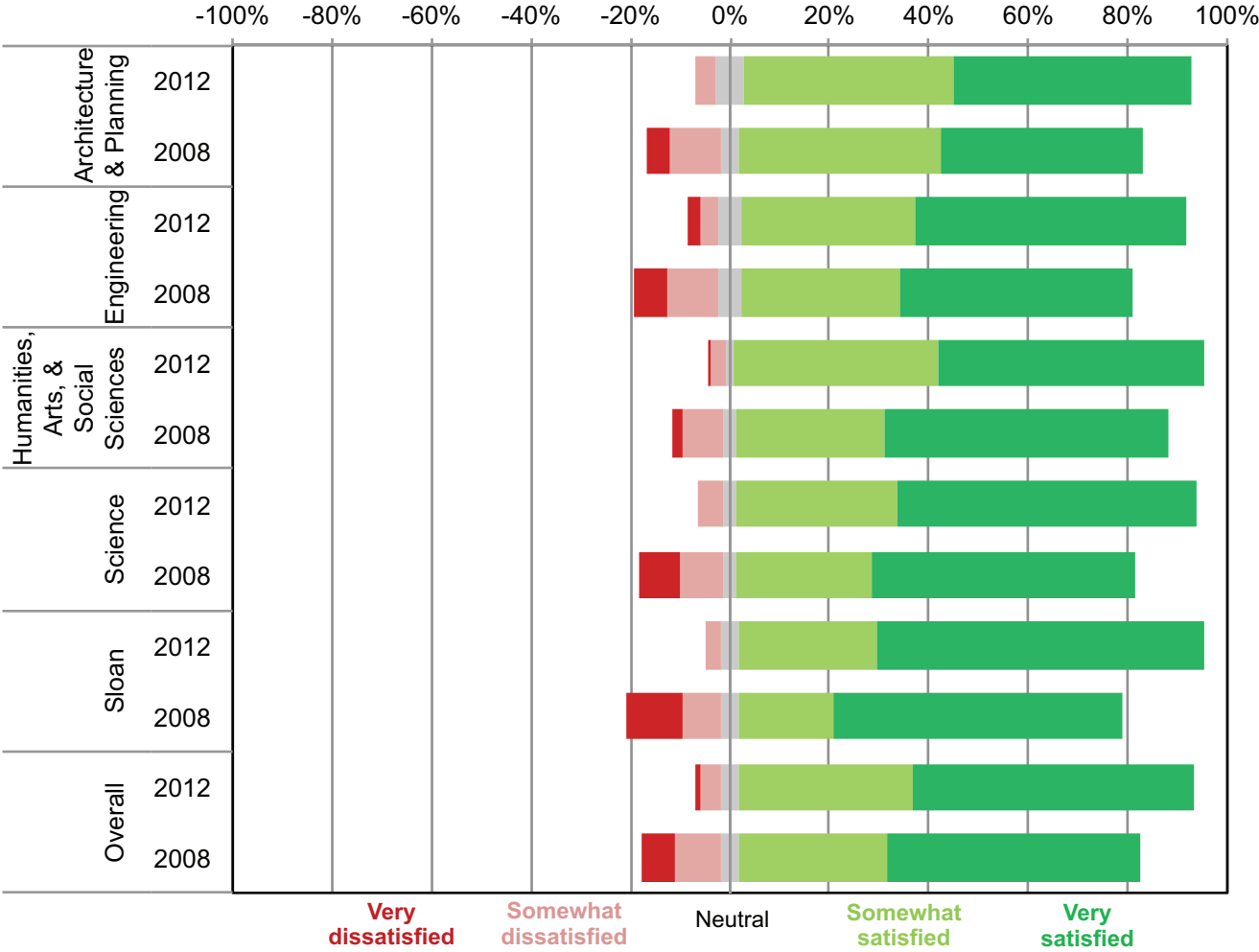
The data from the comprehensive survey will be the basis for the next phase of work for the Council on Work and

Family, which is to write a formal report and formulate recommendations that can improve the well-being of our community, helping to ensure MIT is a place where we have fulfilling and productive professional and personal lives. ■

Text and data for this article provided by the Office of the Provost/Institutional Research.

M.I.T. Numbers
From the 2008 and 2012 Faculty Survey

“Overall, how satisfied are you being a faculty member at MIT?”



Source: Office of the Provost/Institutional Research