

Institute-wide Task Force on the Future of MIT Education

Survey of MIT Faculty & Instructors

On February 6, 2013 President Reif announced the launch of an Institute-wide Task Force on the Future of MIT Education. In his letter to the community, President Reif described higher education as being at a crossroads, and asked for the community's help to "invent the residential research university of the future."

Since the perspective of faculty and instructors is so central to this process, the Task Force must have a better understanding of your resource needs, primarily time and space, in this shifting educational landscape. We also hope to gain a deeper appreciation for how you interact with your students and what impact, if any, new digital tools might have on those interactions. Your perspective will be essential as we begin to consider resource needs and allocation in the context of the infrastructure of the future.

The survey should take no more than 15 minutes. The survey is voluntary, and you may answer as few or as many questions as you wish. Thank you, in advance, for your willingness to participate in this important discussion.

Were you previously aware of the Institute-wide Task Force on the Future of MIT Education?

- Yes, and I am a member of one of the Working Groups. (1)
- Yes (2)
- No (3)

The MIT Community has shared a number of values and principles of an MIT education with the Task Force, with themes including:

- Commitment to excellence
- Commitment to technical depth
- Constant and widespread faculty/student interaction
- Learning by doing: hands-on experience
- Extensive curricular offerings
- Leadership training, fostering teamwork, and developing communication skills
- Respect for truth above all other authority
- Education in the service of pushing the boundaries of knowledge

If you could change up to three things about the way MIT educates its students, what would you change? Please list up to three.

What You've Taught

As the Task Force on the Future of MIT Education considers new models of delivering education, we need to understand our current teaching practices.

According to MIT records, these are subjects you have taught recently (Academic Years 2011-2012 and 2012-2013). Please confirm that you taught these subjects, and add any we may have missed.

Is this list correct?

Yes/No

Please make any corrections or additions to the list of subjects you taught in Academic Years 2011-2012 and 2012-2013.

Have you taught classes that HAVE BEEN converted into smaller units, e.g. 12-unit subjects that have been converted into units of six or fewer?

No (1) Yes, please provide the subject numbers: (2) _____

Have you taught classes that could benefit from being offered in smaller more discrete segments or modules?

No (1) Yes, please provide the subject numbers: (2) _____

Tell Us About a Specific Subject

You recently taught _____. With your most recent teaching experience for this subject in mind, please answer the following questions. If you would prefer to answer these questions about a different subject, please list the subject number, title and when you last taught the subject:

1. How is this subject taught to students, e.g., primarily lectures, lectures plus recitations, hands-on lab work? Please describe:

2. Have you taught this subject more than once or plan to teach it again in Academic Year 2013-2014? Yes/No

3. Tell us about the features of this subject:

	Yes	No	N/A or Not sure
Is this subject a gateway subject for students in your department? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you manage the subject using MIT Stellar? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does this subject include a project-based or hands-on learning component? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you have external speakers in this subject? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you use an internet-connected computer in this subject for your teaching? (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you interact with students enrolled in the subject using online interaction tools, other than email? (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is some of this subject taught as "modules" with discrete curricula that could be taught relatively independently? (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you think this subject is potentially suitable for MITx/edX? (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does this subject have a required textbook(s) (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does this subject have a required course packet(s)? (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are students encouraged to review any online materials before coming to class? (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does this subject require students to use laptops during class? (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is class attendance factored into the student's grade? (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does student participation in class discussions factor into the student's final grade? (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does this subject require/recommend students work in groups on projects? (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do students enrolled in this subject need to access working space (e.g., research or computing labs, experimental space, libraries, collaborative work spaces) outside of scheduled class hours? (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please describe the space(s) and the open hours for accessing the space. If there is a web page describing the space, please enter the URL.

4. In addition to any online tools you may have said were features of this subject, have you made other changes to incorporate online educational tools? Do you plan to incorporate any online educational tools in the future?

- I have made changes to incorporate online educational tools. (1)
- I plan to make changes to incorporate online educational tools. (2)
- I have not and do not plan to incorporate online educational tools. (3)

4a. Please describe which online educational tools you have incorporated or plan to incorporate into this subject and how you use them.

5. Potential student benefits:

	Yes (1)	No, and students in the subject WOULD benefit from this feature (2)	No, and students in the subject WOULD NOT benefit from this feature (3)	N/A or Not sure (4)
Do students in this subject participate in internships? (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do students in this subject participate in field experiences? (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do students in this subject participate in MISTI? (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does an additional external audience participate in discussions and forums in this subject? (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. In general, do you ask your students to prepare in any way before coming to class?

No (1) Yes: pre-reading (2) Yes: a self-paced quiz (3) Yes: watching videos before lecture (4)
 Yes, other: (5) _____

7. In general, do you test students to check if they have done the preparatory work assigned to them before class (e.g., questions about assigned readings or videos)?

No (1) Yes: reading-material quizzes (2) Yes: pre-lecture or beginning of class quizzes (3)
 Yes, other: (4) _____

8. Thinking about this subject, generally, how much time do you spend on subject development as distinct from subject delivery?

- I spend A LOT MORE time on subject development than subject delivery. (1)
- I spend A LITTLE MORE time on subject development than subject delivery. (2)
- I spend ABOUT THE SAME amount of time on subject development and delivery. (3)
- I spend A LITTLE LESS time on subject development than subject delivery. (4)
- I spend A LOT LESS time on subject development than subject delivery. (5)

Answer If 6. Have you taught this subject more than once, or plan t... Yes Is Selected

8a. What percent of the curricula and materials do you revise each time you teach this subject? Please make your best estimate.

	None (0%) (0)	41-50% (45)
Lectures (1)	1-5% (3)	51-60% (55)
Problem sets (2)	6-10% (8)	61-70% (65)
Lab assignments (3)	11-20% (15)	71-80% (75)
Exams (4)	21-30% (25)	81-90% (85)
Other (5)	31-40% (35)	91-100% (95)
Other (6)		N/A (99)

9. Are there any pedagogical innovations you would institute in this subject (e.g., new content, modularity, pre-class assignments, practical examples, more discussion, project-based learning, blended learning, active learning)?

9a. You indicated this subject might be appropriate for MITx/edX. Please describe why you think it is a good candidate, and how you envision the subject could be delivered.

10. Do you have any other comments about this subject?

11. Would you like to provide the same details for another subject you recently taught?

- No (1)
- Yes (2)

Your Use of Educational Technology

1. During the last academic year (2012-2013), about how often did you use the following educational technologies, in any context? Do you plan to use any of this technology in the future? If you are not aware of the listed technology, please select "Not aware of this technology."

Subject & Course Technologies (1)	How often did you use this technology in the last academic year?	Do you plan to use this as you teach in the future?
Course management systems (e.g., Stellar, WebCT, Blackboard) (2)	Not aware of this technology (1) Never (2) Sometimes (3) Often (4) Very often (5)	Yes (1) No (2) Not sure (3)
MIT OpenCourseWare (OCW) (3)		
Student response systems (e.g., clickers, wireless learning calculator systems) (4)		
Online portfolios (5)		
Online textbooks (6)		
Plagiarism detection tools (e.g., Turnitin, DOC Cop) (7)		
Forums; please specify which one(s): (8)		
Other (18)		

Collaborative & Virtual Technologies (1)	How often did you use this technology in the last academic year?	Do you plan to use this as you teach in the future?
Collaborative editing software (e.g., Wikis, Google Docs) (10)	Not aware of this technology (1) Never (2) Sometimes (3) Often (4) Very often (5)	Yes (1) No (2) Not sure (3)
Online survey tools (e.g., Qualtrics, SurveyMonkey, Zoomerang) (11)		
Videoconferencing or Internet phone chat (e.g., Skype, TeamSpeak) (12)		
Social media (e.g., Facebook, Twitter) (13)		
Blogs; please specify which blog platforms (e.g., Blogger, WordPress) (14)		
Online video projects (e.g., using YouTube, Google Video, MIT World) (15)		
Video games, simulations, or virtual worlds (e.g., Ayiti, EleMental, Second Life, Civilization) (17)		
Other (18)		
Other (19)		

2. Have you found any of the tools or technologies listed above particularly useful? Please describe.

3. For any subjects you have taught, have you stored the subject materials in a repository (online or physical) that could be accessed by other instructors, including current and future lecturers, recitation instructors and teaching assistants?

- No (1)
- Yes. Please describe the repository or repositories: (2) _____

4. Thinking about how you plan to teach in the future, what 1-2 technologies, tools or methods could MIT provide that you would find most useful?

Where You Work

The MIT learning experience involves several modes of interaction: lectures, recitations, labs, projects, internships, study groups, individual study and so on. It also features signature educational approaches such as UROP and MISTI (MIT International Science and Technology Internship program), and intensive project-based hands-on learning in many fields.

1. During a typical work week at MIT, do any of the following apply to how you work?

	Yes (1)	No (2)	N/A (3)
I work from home (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I work on my commute (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I set my own hours (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have formal meetings with my academic or research advisees in my office or lab (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I "run into" my academic or research advisees outside the classroom, my office or lab (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I interact with students using "virtual tools" (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I communicate with students, colleagues and staff by mobile phone or online voice communicator, e.g., Skype (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I communicate with students over weekends or after hours (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I "run into" students enrolled in my classes outside the classroom, my office or lab (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I interact with colleagues and staff using "virtual tools" (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I communicate with colleagues and staff over weekends or after hours (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Task Force recognizes education can occur in a variety of physical settings. We hope to understand how you use space now and how you feel those needs may change as modes of MIT education delivery evolve.

2. During a typical work week in Spring Term 2013 (February-June 2013), what were the top 1-3 locations where you conducted the following activities?

	Teaching (including preparing materials for class, lecturing) (1)	Meeting or communicating with students outside of class (office hours, advising, supervising research, writing letters of recommendation) (2)	Scholarship, conducting research, creating or performing artistic work (including writing, attending professional meetings, writing and administering grants) (3)	Administrative responsibilities and university service (committee work, mentoring) (4)	Service external to the university (to one's discipline, outreach or extension activities) (5)	Other work-related activities, including paid consulting (6)
In my office at MIT (1)						
In my lab at MIT (2)						
In a classroom at MIT (3)						
In conference rooms at MIT (4)						
In common space around my department/MIT (5)						
Using "virtual" technology (6)						
At home (7)						
Off-site, away from home and campus (8)						
Other (please describe) (9)						

3. Thinking about how you teach, how are your needs for future classroom and teaching space changing, if at all?

Interacting with Students

1. How many of each of the following types of formal advisees (enrolled in degree programs) do you currently have?

	None (0)	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6-7 (7)	8-10 (9)	11-15 (13)	16-20 (18)	21-25 (23)	more than 25 (28)
MIT freshmen (1)	<input type="radio"/>											
MIT undergraduate upperclassmen (2)	<input type="radio"/>											
MIT graduate/professional students (3)	<input type="radio"/>											

2. Do you have any suggestions for how MIT can increase opportunities for faculty and student interaction?

Closing Thoughts

1. What one thing could MIT reasonably do to better support your teaching?

2. Do you have other comments you'd like to share about the future of education at MIT?

3. Would you be willing to participate in focus groups for more in-depth discussions on the Future of MIT Education and educational technologies?

- Yes. Please enter the best email address to reach you: (1) _____
- No (2)

If you wish to review your responses, please use the navigation buttons below to go back, or select Next to save your survey. You will be able to print or download a copy of your responses on the next page.