



MIT in Transition

Student Perspectives on MIT's Legacy Strengths, Emerging Challenges, and Future Directions

Executive Summary April 2005

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In surveying the past and considering the future of MIT during this period of transition, three overarching themes emerged. The first of these is the central role of academics, research, and professional development - our principle reason for being at the Institute. Second, the powerful impact of our community experiences in shaping our growth as individuals outside of the lab and classroom. The final theme embraces the Institute as a whole - integrating the short and long term and connecting everyday action with the big picture.

I. Academics, Research and Professional Development

The role of the Institute, first and foremost, is to generate knowledge through research, provide students with an unparalleled scientific and engineering education, and to inspire service and contribution to society. In the areas of academics, research, and professional development, the following topics touch upon MIT's pursuit of its mission:

- 1. **Admissions** The notion of the "typical" MIT student, graduate or undergraduate, continues to evolve. The Institute must continue to recruit the most promising students and strive for an appropriate and well-considered balance in its student body in terms of demographics and academic interest. In addition to more closely involving current students in the admissions process, MIT would benefit from a more systematic and strategic approach to graduate admissions.
- 2. **Curriculum and Programs** MIT students pride themselves on fulfilling the intensity and dedication to their studies that the MIT demands. The Institute needs to rethink the role and content of core requirements, however, paying close attention to balancing quality and quantity of the student work-load. Furthermore, MIT should increase its emphasis on exploratory classes and offerings, which have a powerful role in allowing students to most fully develop their academic selves.
- 3. **Faculty Issues** Faculty are the conduit of knowledge between classroom learning and actual "hands-on" research. Students worry, however, that the Institute assesses and values faculty educational contributions rather less than their research output. Especially pressing is the need for caring mentors, inspiring educators, and a real commitment to bolstering the diversity and retention of promising up-and-coming faculty.
- 4. **Professional Development** In order to succeed in its mission, MIT must inspire and educate leaders and entrepreneurs, as well as scientists, engineers, and practitioners of the many creative arts and disciplines. More effective leadership programs must be put in place, perhaps building upon lessons learned from our most exploratory departments and schools. Career resources and advising are especially crucial for those interested in non-academic pursuits. Alumni remain a powerful and yet underappreciated potential resource for current and graduating students.
- 5. **Research** Mentoring and learning-by-doing experiences are the hallmarks of the MIT experience. MIT can still do more to encourage higher levels of excellence through better attention to the advising relationship, increased awareness of opportunities, and offering greater exploratory freedom to new students.
- 6. **Resources for Research and Education** The Institute cannot expect its creative output to be sustained without ongoing assessment of space allocations, size of support staff, and information sharing. MIT must more effectively use its resources, especially educational space and serendipitous extracurricular space, in order to meet the needs of our dynamic institution.

II. Extracurriculars and Community Life

The MIT community plays a fundamental role in the inspiration and development of students who will use their talents and knowledge to change the world for the better, acting as de facto ambassadors of the Institute's mission. MIT's living groups, student organizations, communal facilities, and student life programs all play a fundamental role in creating this rich educational environment. The following topics analyze the community's role in student life and suggest areas for future improvement:

- 1. Community Culture and Standards Institute culture shapes the lives and personalities of students, and is firmly tied to the living groups and organizations to which students belong. The scope and importance of students' choice in pursuing their own interests in each of these aspects, and the self-developed and self-owned nature of the culture that results, are the strengths that underlie MIT's school spirit and give us a unique creative intensity. MIT must be careful not to let organizational bureaucracy or "professionalization" diminish the powerful experiential learning and risk-taking that are crucial to forging and sharpening our innovative "MIT edge".
- 2. Extracurricular and Community Resources While student culture is largely shaped by students themselves, culture would not survive without the programs, financing, and general structure that the Institute provides. Given that these scarce resources are allocated for students, it only makes sense that students, both undergraduate and graduate, be involved in every step of the process and that transparency and accountability be the underpinnings of Institute expenditures. We are especially concerned by the "profitization" of the commons, the pricing of basic services, and the squeezing out of vibrant traditional providers.
- 3. **Orientation** The first few months at the Institute are the most formative ones for students, setting the stage for what they will be able to take away from their overall experience. Recent shifts in administration have greatly undercut undergraduate students' ability to shape the first-year experience for their successors. Graduate student orientation, run entirely by students at the Institute level, has thrived over the past years, but remains too disconnected at the departmental level and underappreciated as a whole, leaving students in some schools or departments underserved or isolated.
- 4. **Personal Development** Much of students' personal development takes place informally through daily interactions, and is also facilitated by MIT's "ownership culture," in which students assume responsibility for managing their own lives. Strong support is needed for the self-governance structures that support students' personal development outside of the classroom. The Institute would benefit from re-examining its formal mentorship programs and adding to those that act as building blocks to foster mentorship of and among students in a manner that effectively supplements their informal training.
- 5. **Balance** Achieving a balance between work and life is essential to personal and professional success anywhere, and the Institute is no exception. MIT students oftentimes lose perspective of lifestyle balance when consumed by the intensity of their work and activities. Student-families can find it particularly difficult to balance their commitments. Our community needs further and ongoing efforts to promote the development of balanced lifestyles to breed responsible graduates and global citizens.

III. Global Connections, the Long Term, and Strategic Planning

Students care deeply about the Institute's long term future, our sustained viability and the enduring pursuit of our founder's inspirational MIT Mission. Specifically, we are concerned by and seek to address the following domains:

- 1. **Bold Institute Actions** At key junctures in our past, Institute faculty and leadership have pursued transformative grand pursuits, inventions and acts which improve the world and make us proud of our MIT connections. The grand aspirations of today and tomorrow are tremendously important in that they will inspire future generations of students. Too often, however, the Institute's great story has remained practically hidden, as if we're too busy creating the future to celebrate our past successes or strategize about emerging directions. We urge MIT faculty and administrators at all levels to be more visible leaders, that is, to rally us and the world at large, to voice our core values, and to craft unifying Institute goals and directions.
- 2. **Expansion and Growth** For most of our history, the Institute has been in growth mode, expanding to accommodate emerging disciplines and future frontiers. And yet we face severe physical space and financial limitations on similar policies into the future. To properly fuel the MIT Innovation Pipeline, the Institute needs ever more creative mechanisms and moneys for engaging faculty and students in the creation and re-invention of disciplines and novel research areas. By exploring novel institutional structures, international engagements, and new kinds of interdisciplinary programs, MIT can maximize the odds of staying vital.
- 3. Connecting Strategy and Operations When everyday administrator action is at odds with overarching Institute strategy, confusion reigns in the student ranks. Local optimization in Institute decision-making is a root cause of a great deal of student frustration. Students desire transparency, accountability, and competence. We ought to strive for a well thought through and integrative total student experience, one that weaves together all the myriad elements of our time at MIT and beyond.
- 4. **Institute Economics** The Institute's cost-structure, tuition duties, deployment of endowment income, and capacity to deal with sponsor volatility all directly affect student life. MIT students are especially sensitive to perceived misallocations of money and too often believe that some part of MIT is wasting it. Perhaps this is in ignorance of the "full picture". Perhaps, however, it is a correct student perception. True transparency and accountability would allow us all to discern the difference.
- 5. **Positioning Locally and Globally** As global inter-connectedness becomes the new world order, the Institute must seize the opportunity, seek out tomorrow's talent and moneys, embody viable economic practices, and position ourselves for enduring success.

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