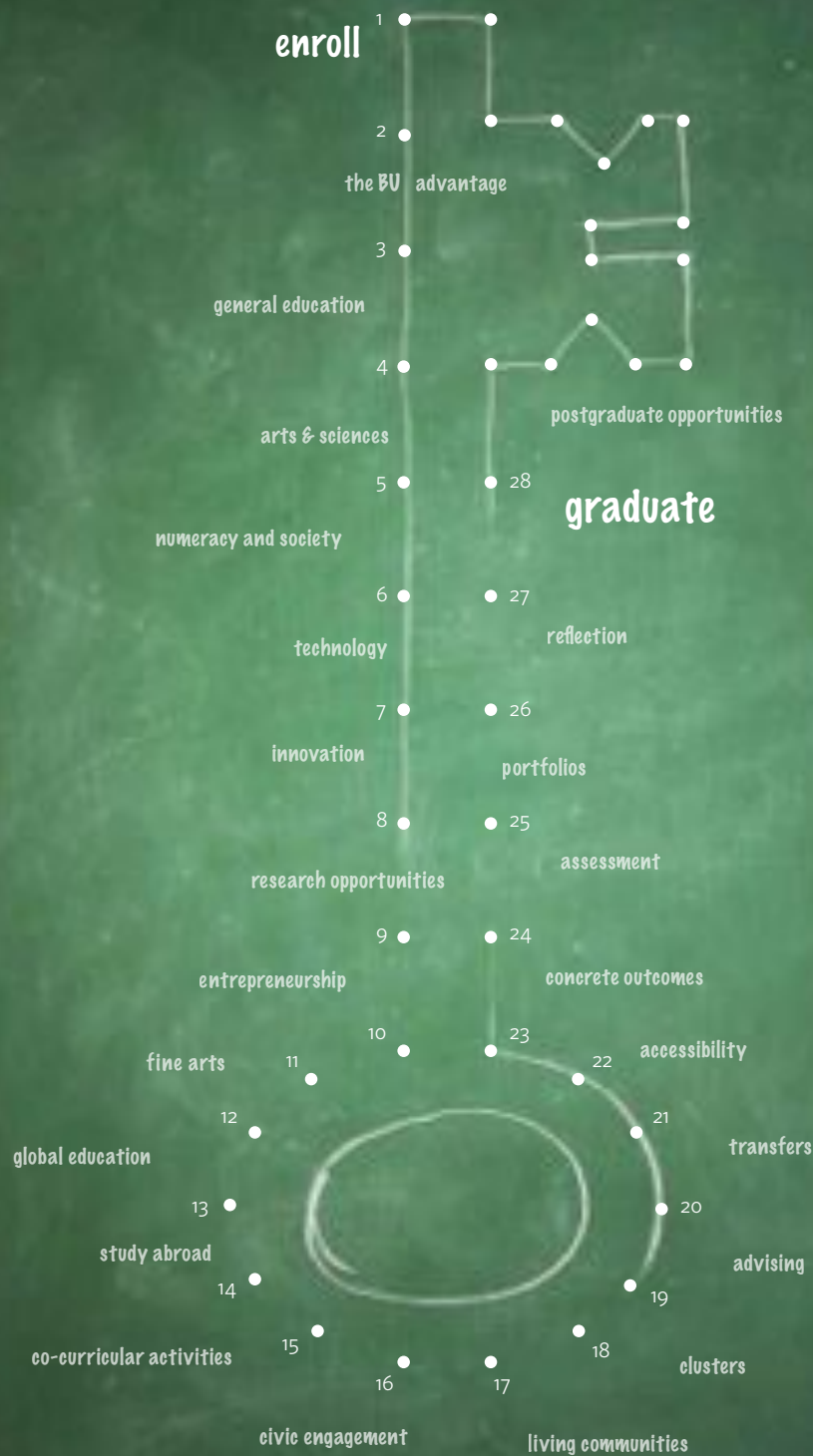
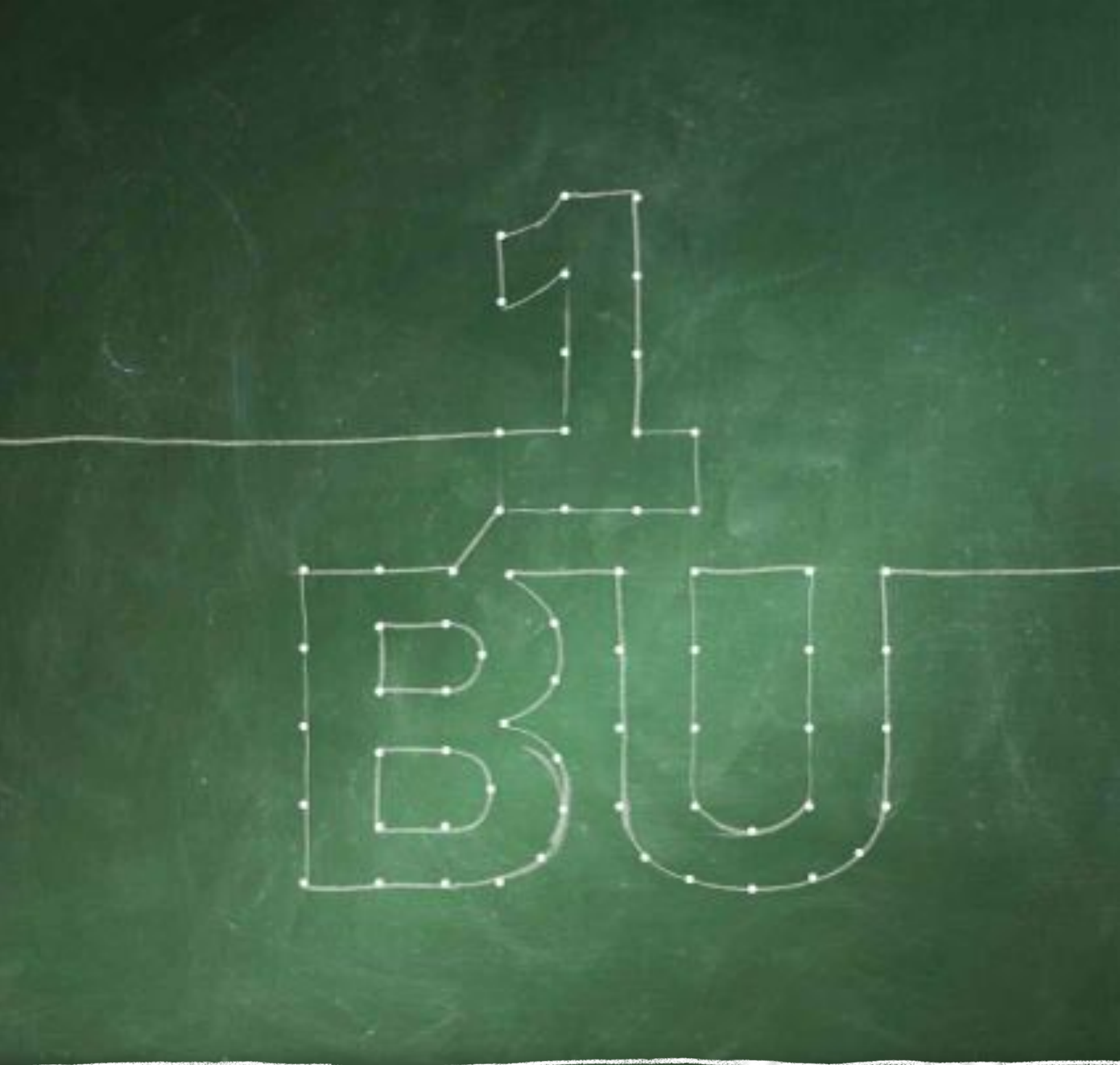


# One BU: Unlocking the Undergraduate Experience

Task Force Report





## Contents

- 3 Executive Summary**
- 5 Introduction: Designing a “One BU” Landscape**
- 7 Defining General Education at BU**
- 9 Enhancement: The BU Advantage**
  - 10 The Arts, Sciences, and Concrete Outcomes
  - 10 Numeracy and Society
  - 11 Technology
  - 12 Placing Primacy on Research at the Undergraduate Level
  - 13 Expanding Undergraduate Opportunities for Innovation and Entrepreneurial Studies
  - 14 Moving from Magnet to Radiant Model
  - 14 Accessing the Arts
  - 16 Achieving a Global Competency
  - 16 Global Education: Existing Resources
  - 20 Co-Curricular Education
  - 22 Living Communities and “Clusters”
- 24 Integration: Creating Paths, Removing Barriers**
  - 24 General Service Courses and Accessibility
  - 24 Transfers
  - 25 Locating Courses
  - 26 Uniting the Arts, Sciences, and Professional Schools: Cluster Courses
  - 27 Clusters’ Contribution to Faculty Development
  - 28 A Meaningful Curriculum
  - 29 Expanding Postgraduate Opportunities for Current Students
- 30 Navigation, Advising, and Compassing**
- 32 Assessment**
- 33 Accomplishing Our Goals**
- 33 A Call for Action**
- 34 Appendix 1: Electronic Portfolios**
- 35 Appendix 2: Summary of Recommendations**







## Committee Members

### **Victor Coelho**

*Associate Provost for Undergraduate Education; Professor of Music; Committee Chair*

### **Robert Bone**

*Professor, School of Law*

### **John Caradonna**

*Professor of Chemistry, College of Arts & Sciences*

### **Hardin Coleman**

*Dean, School of Education*

### **David Eckel**

*Professor of Religion; Director, Core Curriculum, College of Arts & Sciences*

### **Kenn Elmore**

*Dean of Students*

### **Robyn Fialkow**

*Class of '09, BA in Philosophy & Political Science, College of Arts & Sciences*

### **Janelle Heineke**

*Professor, School of Management; Director, Center for Excellence in Teaching*

### **Susan Jackson**

*Senior Associate Dean of Undergraduate Education, College of Arts & Sciences*

### **Ashley LaCross**

*Administrative Coordinator, Office of the Provost*

### **Joellen Masters**

*Senior Lecturer, Division of Humanities, College of General Studies*

### **Melanie Matthies**

*Associate Dean, College of Health & Rehabilitation Sciences: Sargent College*

### **Greg McDaniel**

*Associate Professor of Mechanical Engineering, College of Engineering*

### **Hugh O'Donnell**

*Professor of Painting, College of Fine Arts*

### **Patrice Opplinger**

*Assistant Professor of Mass Communications, Advertising & Public Relations, College of Communication*

### **Drew Phillips**

*Class of '09, BS in Business Administration, School of Management*

### **Laurie Pohl**

*Vice President for Enrollment & Student Affairs*

### **Nancy Smith-Hefner**









*Associate Professor of Anthropology, College of Arts & Sciences*









## Executive Summary

In June 2008, a Task Force was convened by University Provost David Campbell to find potential answers to the question, **“How can today’s liberal education provide all college students with the knowledge, skills, and historical and global perspectives they need to be effective and discriminating in everything they do—in higher education, in the workplace, in their communities and families, and as leaders, practitioners, and teachers?”** To achieve this goal, we agreed that the University and each school within the University will need to “unlock” undergraduate education at Boston University in two ways: through enhancement of the current strengths and opportunities at BU, and through the integration of curricular and co-curricular activities across schools and programs within the University.

At the most general level, the Task Force believed that **each University school and department must be charged with and held accountable for meeting this challenge.** More specifically, to **enhance** BU’s current strengths, we made recommendations related to:

-  The teaching of numeracy in a broader societal context with concrete outcomes
-  Utilizing technology more fully in the classroom and assuring technological competencies
-  Bringing research to the foreground of undergraduate education
-  Promoting the study of innovation and entrepreneurship in all fields
-  Improving students’ access to courses in the arts
-  Promoting students’ global awareness
-  Supporting and expanding co-curricular opportunities
-  Expanding residential clusters to foster community and a connection between curriculum and the broader student life

We also recognized the need to better **integrate** across our schools and colleges. Our recommendations in this area related to:

-  Enabling students to transfer between schools and colleges with greater facility and eliminating any and all barriers and inconsistencies that obstruct or compromise this movement
-  Expanding the number and variety of service courses and providing easy student access to them
-  Providing better and more readily accessed information about coursework options across the University
-  Developing interdisciplinary cluster courses as part of a BU General Education
-  Broadening postgraduate opportunities and combining undergraduate and graduate education in various ways
-  Making the curriculum of professional schools visible on the Arts & Sciences student's curricular map and providing opportunities for interaction between the professional schools and science/liberal arts

We were aware that without guidance and support, however, these changes could be overwhelming for both faculty and students, so we also made recommendations related to **navigating** the new, exciting learning environment and about providing strong **advising** and **compassing**—essentially, ways to better direct the highly mobile student of today—for our undergraduates. We also felt strongly that any changes in our undergraduate programs should be accompanied by a plan for assessment of both student learning and student satisfaction.

Finally, the Committee felt that several steps should be taken immediately to begin to implement consistent and uniform transfer requirements and proposes that this issue be taken up immediately by the Undergraduate Council (made up of the Associate Deans of the colleges, chaired by the Associate Provost for Undergraduate Education) as the first stage to bringing this to the college level.

This is not only a call for improvement and strategic change; it is a call for action. It is the beginning—for some, perhaps, even a continuation—of an important dialogue for the University community. The Strategic Plan outlined priorities; this document poses important questions regarding the possibilities for “unlocking” undergraduate education at Boston University. What can we do to make the most of all assets of the University to increase students’ participation in effective, highly meaningful educational practices? How can we eliminate all barriers and transfer inconsistencies in order to give students ease of transfer and movement between colleges, as well as full access to our International Programs? Which practices are distinctive to our campus, and how do we ensure that all students have a chance to participate in these high-impact experiences? We look forward to meaningful shared discussions, merging traditional success with new ideas, collaborative accountability for important goals, and actions that will matter.



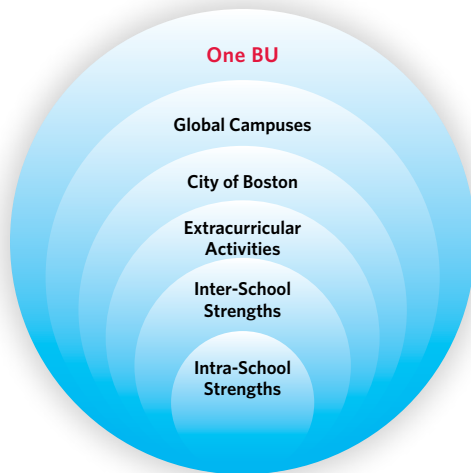
For “Give Students a Compass” AAC&U initiative, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)

# Introduction: Designing a “One BU” Landscape

One of the most important cornerstones of the BU Strategic Plan is the commitment to bringing an institutional cohesion to undergraduate education. Among the main commitments made in this document that plotted the direction of our discussions are the “[insistence] upon exceptional levels of collaboration across departmental boundaries,” the “promotion of research and scholarship within and across traditional disciplinary boundaries,” and the delivery of an education that combines the “rigorous immersion in the liberal arts and sciences *combined with* practical and powerful professional education” for all undergraduates.<sup>1</sup> Accordingly, in June 2008, a Task Force was convened by University Provost David Campbell with a name that also declared its charge: “One BU: Unlocking the Undergraduate Experience.” Chaired by the Associate Provost for Undergraduate Education, this Committee worked for twelve months to define a set of shared principles for what constitutes a BU undergraduate education.<sup>2</sup> The Task Force focused on a key question: **How can today’s liberal education provide all college students the knowledge, skills, and historical and global perspectives they need to be effective and discriminating in everything they do—in higher education, in the workplace, in their communities and families, and as leaders, practitioners, and teachers? In short, how do we ensure that a Boston University graduate, regardless of the college or major, will possess the tools, enthusiasm, and quest for lifelong learning?**<sup>3</sup>

The Task Force was charged with “unlocking” undergraduate education at BU in order to encourage students to take advantage of all facets of the University. To achieve this goal, the Task Force recognized the need to capitalize on BU’s current strengths in research, its world-class faculty and diversity of programs, research and arts opportunities, and our location within the vibrant City of Boston—in short, “The BU Advantage.” We also need to nurture collaboration and cooperation across organizational boundaries.

 For the BU Strategic Plan, link to [www.bu.edu/president](http://www.bu.edu/president)



*This diagram shows the potential elements of a Boston University education. They all currently exist, but we have an opportunity to inter-connect them to create a distinctive BU undergraduate experience.*

1 Emphasis ours.

2 Our meetings included individual discussions with the deans of all of the colleges that offer undergraduate programs, as well as with the Director of International Programs. At the midpoint in the year, the Committee formed four subcommittees, each issuing an interim report, in addition to a student report that was prepared by the two undergraduate members of the Committee, Robyn Fialkow and Drew Phillips. The final report was written by two subcommittees, and the final draft was circulated to the entire group for approval.

3 We define “Liberal Education” as does Carol Geary Schneider, President of the Association of American Colleges and Universities (AAC&U): “A philosophy of education that empowers individuals, liberates the mind, cultivates intellectual judgment, and fosters ethical and social responsibility.” We also acknowledge the similarity and indebtedness of our work to the learning outcomes of AAC&U’s influential *Liberal Education and America’s Promise* (LEAP) initiative. Finally, we accept the definition of “lifelong learning” as “Those novel forms of teaching and learning that equip students (learners, individuals) to encounter with competence and confidence, the full range of working, learning and life experiences” (*Improving Human Research Potential & the Socio-economic Knowledge Base*, The European Commission, Briefing Paper 20). Find link at [www.bu.edu/unlock](http://www.bu.edu/unlock).





For the Barriers Report, link to [www.bu.edu/undergrad](http://www.bu.edu/undergrad)

The Task Force viewed undergraduate education as the point of convergence of three key elements: 1) the principles of General Education, which includes the fulfillment of arts, humanities, science/math and natural/social science, writing, and professional-school competencies, along with a distinct global component; 2) the Co-curricular Experience, which instills values of leadership, service, community, and citizenship beyond the four walls of the classroom; and 3) Innovation, which includes not only technology but new pedagogical practices and the promotion of learning communities. These elements can converge only when administrative barriers and college-centric policies are eliminated, a point that is the main conclusion of the influential 2007 internal "Barriers Report," and which is both echoed and unequivocally endorsed by this report.<sup>4</sup> It is clear that new policies and procedures will have to be established to enact, institutionalize, and sustain systematic collaboration and integration of the undergraduate experience across all schools and programs.



For *New York Times* article on students' prospects and LEAP Report, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)

Finally, we need to ensure that students, half of whom are destined to work in a field that is different than the one in which they graduated, and of which almost two-thirds—business leaders believe—lack the skills to succeed in a global economy, will be trained to sustain a program of continuous learning so that they can understand the world in its changing physical, interpretive, historical, abstract, and relevant dimensions.<sup>5</sup> Indeed, a program for lifelong learning has been noted as essential for personal development, societal cohesion, and both personal and economic growth.

As we enter a new decade, we have the opportunity to define and realize the **One BU** experience. This document represents the Task Force's aspirational efforts to begin that definition, which, we hope, will be a starting point for discussion across the University, and more importantly, the beginning of an operational plan for positive change.

4 On the benefits and methods of instituting collaborative organizations, we have followed Lynda Gratton and Tamara J. Erickson, "Eight Ways to Build Collaborative Teams," *Harvard Business Review on Collaborating Across Silos* (Cambridge: Harvard Business Press, 2009), 24-25, et passim.

5 *College Learning for the New Global Century: Executive Summary with Employers' Views on Learning Outcomes and Assessment Approaches* (Washington, D.C.: AAC&U, 2008), 10.



# Defining General Education at BU

Defining the principles of General Education is the most complex and far-reaching of all of the issues we face, and it accordingly occupies the central position in this report. Our task was to construct a model in which the concept of **One BU** was embedded deeply and comprehensively as a foundation of General Education—a central point of reference—allowing the curricular opportunities presented by the colleges to be accessed by all. At the institutional level, these might include changes introduced by new strategic directions and/or academic priorities, administrative and departmental reorganizations, the aligning of programs with new accreditation standards or the opening up of new programs, such as the University Honors College, which places primacy on interdisciplinary thinking and undergraduate research/creation, the approval of new minors, and, to be sure, the considerable impact that General Education has on recruitment, enrollment, and retention, allowing us to remain competitive for the best students. At the student level, it is crucial that General Education continues to expose all students to both the traditional and the novel aspects of the liberal arts. General Education must recognize the enduring values of a liberal education, while also adapting to generational change and new capacities and new epistemologies in learning, embracing technological innovation, and responding to calls for timeliness and relevance to the contemporary world.<sup>6</sup>

Accordingly, the recommendations that follow extend from our definition of General Education as a program of learning that all undergraduate students in the University should experience to build a desired set of skills and competencies. General Education represents a *breadth* of knowledge that all students should achieve, in contrast to the particular *depth* of knowledge and specific skills acquired through the major. Moreover, as what constitutes General Education continues to be informed by new scholarship, new approaches, and new pedagogies, it should be seen not as an unchanging set of values, but as a dynamic curriculum that is continuously evolving.

At the most fundamental level, a Boston University General Education should produce graduates who are:

1. Skilled at solving open-ended problems in both quantitative and qualitative environments
2. Globally and culturally aware
3. Ethically and socially responsible

To achieve those capabilities, we agree that undergraduates must demonstrate the ability to:

- think quantitatively and critically
- express themselves through communicating effectively, critically, and with discernment, orally and in writing
- engage in an active ongoing learning process
- produce and create with imaginative spirit
- know a broad body of work in science, literature, and art
- command and employ technology with competence, creativity, and ease



For the Boston University Honors College, link to [www.bu.edu/uhc](http://www.bu.edu/uhc)

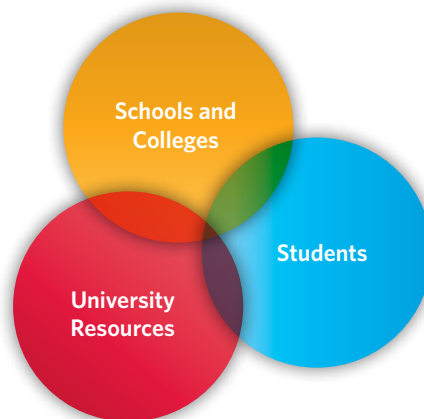
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<sup>6</sup> In stressing the need for “relevancy” we are not implying that undergraduate education should be market-driven or uncritically follow contemporary educational trends. Rather, we define “relevancy” as including the following: greater exposure to research and innovation; the ability to solve problems from different perspectives and to work collaboratively; the ability to access and analyze information produced from digital and printed sources, and to leverage the strength of an education in economically uncertain times; and the ability to forge a closer relationship between career services, advising, and the undergraduate student.

In order to bring this kind of cohesion to BU, the Committee confronted the following questions, ones specifically tailored to the BU landscape:

- What constitutes the foundation of a Boston University undergraduate education?
- What are the common curricular and co-curricular principles that would ideally define a BU undergraduate?
- How do we ensure competencies and concrete outcomes not only in science and math, but also in the arts and humanities?
- How can we ensure that both depth and breadth are achieved? Specifically, what is an academic design that could ensure that students graduate with both primary *and* secondary fields of interest?
- How can we build models to allow for increased collaboration between colleges and seize on points of convergence that can lead to interdisciplinary inquiry?
- How do we make the administrative walls of the colleges—particularly those of the professional schools—more porous, so that BU undergraduates have facile access to the curricular riches at BU? How can the doors open more widely to allow flexibility and collaboration across colleges and departments?
- How do we define what a “global perspective” means, and, once we do, how do we include it as part of a BU undergraduate itinerary?
- How can we embrace the best of what technology can offer us, and ensure that BU students are not only technologically ahead of the curve, but can use technology effectively and creatively?
- How can we lay the groundwork for a program of ongoing *assessment* (ability to track and quantify students’ progress over four years) and *evaluation* (ensuring that programs are relevant and meet their projected outcomes)?

We agreed that the University and each school within the University must answer these questions and that the answers, fundamentally, must be addressed in two ways: through **enhancement** of the current strengths of Boston University and through **integration** of activities across schools and programs within the University.



## Enhancement: The BU Advantage

How do we achieve enhancement and integration? There are many specific initiatives that could be undertaken, but at the big picture level, each school and University department must be charged with and held accountable for meeting the challenge.

- Each school and college must outline how it will enhance its own programs, curricula, and courses to better meet the needs of students in the 21st century, including a full range of BU undergraduates, and what steps it will take to enable students to take advantage of opportunities in and partnerships with other schools, including dual degrees, double majors, minors, and new course offerings.
- The University must eliminate any and all administrative barriers and GPA inconsistencies to enable students to transfer easily between schools and colleges, to move smoothly through programs, and to be able to graduate in four years.
- University leaders whose roles reach across school boundaries, such as the Associate Provost for Undergraduate Education and the Dean of Students, must outline how they will support schools, colleges, and students in their efforts.
- Finally, students must be encouraged to take control of their educational journey. Our strongest students have found ways to do this, despite challenges. When interdisciplinary courses and programs of study are made available to students and when they are advised and encouraged to take full advantage of these opportunities, students themselves can become co-creators of educational value.

The Task Force looked at many possibilities for leveraging BU's current strengths and promoting increased integration. Our existing strengths, which we call the **BU Advantage**, include our programs in the arts and sciences, the professional schools, a diverse student body and international programs, and a robust offering of co-curricular activities. We must encourage students to seize these existing opportunities as they complete their coursework in their chosen fields of study.



## The Arts, Sciences, and Concrete Outcomes

Emerging societal needs in energy and the environment have informed our plans to teach science and engineering at Boston University in a way that connects meaning and perspectives from the humanities and social policy, to technical knowledge. Problem solving and issues of numeracy, which are so critical to these disciplines, must be taught from the perspective of societal and cultural impact. New ideas of service learning, in which students actively learn as they address important problems in local and international communities in need, are being demanded by our best entering students and will be critical to the recruitment, retention, and timely graduation of our students in the future.



Accommodating these demands in a way that preserves the learning of classical knowledge in science and engineering is a serious challenge. Retaining the “learning” in service learning needs much more attention, as we attempt to connect our curricula with community and current needs of the day. If we succeed, students can benefit from concrete and authentic evidences of learning that are replete with immediate impact. In short, we look to the promise of a fruitful intersection between science and the humanities.<sup>7</sup> As President Carol Christ of Smith College has noted recently,

*Indeed, engineering must become part of a liberal education in the 21st century. We must determine not only how best to educate engineers in the traditional liberal arts but also what role engineering might play in the education of musicians, economists, political scientists, and philosophers. Just as the study of literature and art enriches and deepens the education of scientists and engineers, so the study of science and engineering should enrich and deepen the education of historians and poets.<sup>8</sup>*



For *Chronicle of Higher Education* article, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)

### Numeracy and Society

In a May 2008 article in *The Chronicle of Higher Education*, the President of the Association of American Colleges and Universities confirms that non-majors are not learning enough mathematics. The Task Force believes that General Education in mathematics for non-mathematics majors must be embedded in

<sup>7</sup> See, for example, a *Chronicle* article on Princeton's efforts in this direction: find link at [www.bu.edu/unlock](http://www.bu.edu/unlock)


<sup>8</sup> “Engineering and the Liberal Arts: Strangers No Longer.” Find link at [www.bu.edu/unlock](http://www.bu.edu/unlock)



meaning and context, and driven by important societal questions and issues. We see an opportunity here to pursue this belief by taking a University-wide approach that combines our strengths in mathematics, philosophy, and policy studies.

It is paramount that all Boston University students receive an education in numeracy that will allow them to reason in a quantitative fashion and to make decisions in statistical, mathematical, and social science environments. Present-day examples can be used to understand the ethical and moral constructs that surround and pervade every set of numbers used in society today. Technology can be used to generate and analyze data, employing recently developed “knowledge engines” such as Wolfram|Alpha. By combining Boston University’s strengths in teaching mathematics, computer science, and philosophy, we can use today’s technology to enliven and make relevant the connections between numeracy and classical philosophy.

### Recommendation for Numeracy and Society

 We propose the creation of a University-wide course that addresses the complex relationships between numeracy, technology, public policy, and ethics, teaching our students how statistical data is gathered, processed, and used to make important decisions in culture, society, and government. Two models can leverage existing strengths at BU: 1) the creation of a math/numeracy program analogous to the Writing Program, and 2) a wider extension of the successful joint course MA/CS 109, “The Art and Science of Quantitative Reasoning,” which already satisfies divisional requirements.

### Technology

Stimulated by concerns about costs, discussions about productivity and efficiency in higher education have turned increasingly to how new classroom technologies can be used for course delivery and archiving, research, and teaching innovation.<sup>9</sup> With every year, students and professors produce and transmit more digital course content, often using the easy informality of wikis, blogs, and a host of powerful Web 2.0 computing tools. Already, in fact, according to a recent report by *The Chronicle of Higher Education*, “Today’s high-school students, the so-called New Millennials, see their educational futures built almost entirely around technology.”<sup>10</sup>

Undergraduates travel—and continue to remap—a shared, collaborative world with a rapid and mobile access to information. They are able to collect, document, and reflect upon their learning with online portfolios, and they maintain ongoing discussions through the use of social networking tools, spinning longer and more interwoven threads of dialogue and exchange with informants known and unknown. They are excited by this world, which their technology has reduced to a community. In order for our



For Wolfram|Alpha  
link to  
[www.bu.edu/unlock](http://www.bu.edu/unlock)



For Writing Program  
and MA/CS 109  
link to  
[www.bu.edu/unlock](http://www.bu.edu/unlock)

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9 Deans visiting our Committee, and, to be sure, many others writing in the recent academic literature, have warned of a growing nationwide concern over the cost of university education, and suggested that one strategy for survival would lie in the use of technology, blended learning, or in learning modules. They are not alone in this concern, and there is persuasive data indicating that university education in the United States should be braced for a financial recalibration. As a recent *Chronicle* article has indicated,

- “... over the past 25 years, average college tuition and fees have risen by 440 percent—more than four times the rate of inflation and almost twice the rate of medical care.”
- “... enrollment at community colleges and other public institutions has risen by as much as 35 percent.”

The article concludes by recommending that universities consider technology as a cost-reduction measure, and cites an average 40-percent reduction in costs at universities that worked with the National Center for Academic Transformation to use instructional technology. The use of certain blended-learning modules could take the place of traditional prerequisites that often restrict students from taking courses in other colleges and outside their “comfort zone.” Indeed, learning modules will be used extensively as part of the curriculum of the new University Honors College, scheduled to accept its first class in Fall 2010. Find links at [www.bu.edu/unlock](http://www.bu.edu/unlock).

10 “The College of 2020: Students,” *Chronicle Research Services* (June 2009), 7.

teaching to be effective, we must understand how undergraduates obtain, share, analyze, problem-solve, save, and distribute these data and information.

To be sure, technology is increasingly transforming the once-hierarchical teacher/student relationship, in which the teacher now often assumes the role of a facilitator—“less an oracle and more an organizer and guide, someone who adds perspective and context, finds the best articles and research, and sweeps away misconceptions and bad information.”<sup>11</sup> As part of this community, then, we must gain a better understanding of changing student needs, given the new ways that students research, write, produce, and disseminate, or otherwise create, information. Clearly, we must be prepared to help our students look to the future and consider whether there are new methods of doing research and scholarship available to us and how the resulting information is saved, re-created, preserved, taught, and shared. As teachers, we must have meaningful conversations about our students’ digital creations and provide the proper rubrics for assessing them; we will need to be familiar and facile with the methods and technologies that are commonplace in our undergraduates’ culture and world.

### *Recommendations for Technology*

- Equip all classrooms to engage students with technology and tools.
- Ensure that students graduate with both the existing and projected technological competencies that are required by their field of study.
- Ensure that our classrooms enable the use of “lecture capture” technology, wireless devices, clickers and other hand-held response tools, podcast assignments, presentation software, and laptop computers.
- Prepare faculty to use technology at the same pace as our undergraduate students through faculty seminars, information, and training.
- Create online summary lectures, or modules, that will allow students to gain the foundational knowledge necessary to take a course in another college, outside their majors.

### **Placing Primacy on Research at the Undergraduate Level**

The new liberal education is defined as a combination of knowledge, skills, and practical applications, regardless of the field. Many students learn better in an environment that is built around a tangible research, or “inquiry-based,” outcome, exposing them to problem solving, real-time experiences, and the benefits of contributing to knowledge. Equally important is the positive effect that has been documented on recruitment, retention rates, and more campus interconnectedness among students who were engaged in a research partnership or a substantial research project during their undergraduate career. There is perhaps no better way to begin building learning networks and bridges across Boston University than to catalyze the process with the creation of exciting environments for research at the undergraduate level.

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<sup>11</sup> Ibid., 5.

### Recommendations for Research Primacy

- Foreground research, wherever possible, during the first year, along with a significant research capstone during the final year, taking advantage of funding opportunities that are provided by two internal and enhanced funding envelopes, UROP and GUTS, as well as making more extensive use of the University's vast primary-source collections, such as the materials housed in the Howard Gotlieb Archival Research Center.<sup>12</sup>
- Design a collection of research- and outcome-oriented group projects involving undergraduate students from different colleges across the University, ideally linked to co-curricular experiences. These students will receive credit in existing courses within their college that will count towards their degree; the projects will be jointly supervised by faculty members in their respective areas. They will be designed to attract students who want experiences in disciplines outside their majors, and who demonstrate the academic ability and creativity to support independent learning and intellectual discourse with diverse groups of individuals.<sup>13</sup> In executing this design, it is imperative that colleges find ways to surmount the outdated and largely artificial barriers—philosophical and administrative—between the liberal arts and the professional schools, and embrace a concept of inclusion and collaboration. It will be challenging, but it is imperative.



For UROP, GUTS, and  
Gotlieb Center, link to  
[www.bu.edu/unlock](http://www.bu.edu/unlock)

### Expanding Undergraduate Opportunities for Innovation and Entrepreneurial Studies

Entrepreneurship is not an autonomous discipline or a field unto itself. It is a behavior of learning—a set of principles, a mindset—crossing all disciplines that can be broadly defined as a *directed application of innovation*, in short, the method by which ideas receive a concrete reality. According to the Kauffman Foundation, “Entrepreneurship is ideal for general education because it is a practice that applies to many fields and because it provides a revealing lens for studying how cultural values, social institutions, economic policies, and legal practices interrelate to shape human behavior.”<sup>14</sup> For the past decade, Boston University has provided an award-winning undergraduate concentration in entrepreneurship for students enrolled at the School of Management. More recently, the School of Management has been partnering with the College of Engineering to develop a technology entrepreneurship track designed specifically for undergraduate engineering students. The University may now be poised to further integrate the principles of innovation and entrepreneurship into undergraduate programs across the campus as a way of training students to take ownership of and develop their ideas, regardless of the field, learn to assess risk, understand the economics and potential in any project, and build their fields of expertise on top of a sustainable model.

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12 This particular “key,” in fact, brings together three of the ten recommendations made in the highly influential Boyer Commission Report: *Reinventing Undergraduate Education* (1998): I. Make Research-Based Learning the Standard; II. Construct an Inquiry-Based Freshman Year; and VII. Culminate with a Capstone Experience. Find link at [www.bu.edu/unlock](http://www.bu.edu/unlock).

13 In order to provide a specific example of such a project, three members of the Committee (McDaniel, O'Donnell, Coelho) developed a project involving an art installation in the new Student Village that will combine the talents of art, engineering, and computer science students and faculty—to create a stunning interactive wave display. We are pleased to note that the project has been mostly funded through a large research grant to Margrit Betke, a professor in computer science who worked closely with the Committee in its formulation.

14 *Entrepreneurship in American Higher Education: A Report from the Kauffman Panel on Entrepreneurship Curriculum in Higher Education* (2006). Find link at [www.bu.edu/unlock](http://www.bu.edu/unlock).

### **Moving from Magnet to Radiant Model**

The School of Management at Boston University maintains a strong and dedicated commitment to providing entrepreneurial education to its undergraduate and graduate students through both curricular and co-curricular programs. All undergraduate students are introduced to the basic principles of entrepreneurship through their required Core (323), and each year about 25 percent of SMG juniors elect to concentrate in entrepreneurship. Clubs, business plan competitions, workshops, internships, and seminars provide co-curricular experiential opportunities. This program received the award for Outstanding Undergraduate Entrepreneurship Education from the Global Consortium of Entrepreneurship Centers (GCEC) in 2007.



For BU entrepreneurship award and ITEC, link to

[www.bu.edu/unlock](http://www.bu.edu/unlock)

The College of Engineering, in partnership with the Institute for Technology Entrepreneurship & Commercialization (ITEC), successfully competed for an initial grant from the Kern Foundation (now in its second year) to develop a program in technology entrepreneurship for undergraduate engineering students. Under this grant, a new SMG elective course, SI 480, was designed and is being offered to engineering juniors and seniors to provide an introduction to the principles of entrepreneurship that are specific to developing products, processes, and new ventures in a technology environment. These courses, along with the entrepreneurship module in the Senior Design Project course, selected electives, other experiential opportunities, and a capstone planning project, will eventually constitute the requirements for an undergraduate concentration in technology innovation and entrepreneurship at the College of Engineering.

A third initiative for introducing a cross-campus undergraduate experience in entrepreneurial studies is now emerging from the first BU Workshop on Undergraduate Entrepreneurship hosted by ITEC and the Associate Provost for Undergraduate Education in October 2009. Entrepreneurial studies as part of a liberal arts education share many core principles with management and technology-based programs, but also include elements that are specific and unique to learning objectives at the College of Fine Arts (as demonstrated by the CFA AR 521 course in Site-Specific Art), the College of Communication, and the College of Arts & Sciences. To integrate these learning objectives, the School of Management, through ITEC, is proposing to offer a new course to be called “The Creative Enterprise,” available without prerequisite to any BU junior outside of SMG interested in exploring the role of commerce and the creative arts in the emerging field of the Creative Economy.

### **Recommendation for Innovation and Entrepreneurial Studies**



Design a Minor or Certificate in Entrepreneurial Studies available to all undergraduates at Boston University. This would consolidate the strengths of our established expertise and experience in teaching entrepreneurship to SMG students, with a growing awareness and interest in entrepreneurial studies as they apply to students planning careers in diverse and interdisciplinary fields that all require skills in opportunity assessment, innovation, risk analysis, project planning, and team building. Artists, textbook authors, engineers, scientists, and business leaders can all benefit from including these principles, which can equip them to engage in activities that generate commercial and/or social value.

### **Accessing the Arts**

Boston University possesses world-class programs in the Fine Arts, with prestigious professional departments in Music Performance, Theatre, and the Visual Arts, along with nationally ranked programs on the academic side in Composition, Musicology/Ethnomusicology, and Art History. Our undergraduates' desire for arts courses, however, particularly those in the applied fields, has been difficult to satisfy due to traditional portfolio- and audition-based programs that are restricted to majors. For the arts to play the important role in General Education that we believe they should, certain steps will have to be taken to provide accessibility. We note that some progress in this area has already been achieved through the creation of a new Minor in Music Performance.



Let us look at the arts from the other side. The contemporary explosion of information is mandating a new kind of literacy that requires a bridge between tradition and modernity, a bridge that the arts cross on a regular basis. Thus, exposure to the arts can help our students to understand the lasting value of traditional core practices while also encouraging them to become polymath explorers who can cross borders that have traditionally been the protected domains of the specialist. To do this we not only need to provide more accessibility to existing arts courses; we will need to develop new interdisciplinary streams in which the arts can be used to help students prepare research, brainstorm (and understand the brain), visualize, create simulations and prototypes, develop business and action plans, and implement action, both on campus and in the civic life of the community. In short, the arts at BU should provide undergraduates with traditional creative and interpretive opportunities. At the same time, the arts can provide a new interdisciplinary context for dynamic societal involvement with concrete outcomes.

One path in the latter direction is through a deeper commitment to what is widely known as the Creative Economy, a concept first introduced by *BusinessWeek* in 2000, and since then defined as the convergence of artistic creativity, skill, and talent that has a potential for economic sustainability and job creation. In 2005, the Boston Redevelopment Authority Research Division reported that Boston is uniquely resourced to provide leadership in this emerging sector, and listed the following skills and



professions, almost all of which are represented at BU, as the components that make up the Creative Economy: written media, broadcasting, architecture, sound recording, film, performing arts, design, music publishing, crafts, visual arts, photography, museums, libraries, and galleries. It has been identified as one of the most significant growth sectors of the American economy comprising at least 30 million professionals. Preparing creative individuals to be players in this economy is a key method for how the arts can span—or, rather, connect—the disciplines at BU, bringing contemporary issues that affect everyone into the teaching of fine arts across the curriculum.

#### *Recommendations for Accessing the Arts at BU*

- 🔑 Through extending the concept of the Music Minor, increase the access for undergraduates of all colleges to applied courses in the Fine Arts, specifically through the creation of a Fine Arts Minor, comprising both theoretical and creative/performance/design courses from all three schools in the College of Fine Arts.

Such training would be critical to students wishing to enter arts-related or creative leadership fields from other colleges (Law, Management, Communication), as well as complement many majors in the humanities.

- 🔑 Create an introductory Fine Arts course (or series of them, ideally as 2-credit or P/F courses) open to all students, exploring the creative and cultural dimensions of the arts. Such a course would be preferably team-taught, and would expose students to new faculty creations, compositions, productions, and performances.
- 🔑 Create a workshop course in CFA open to all students in which participants build interdisciplinary and entrepreneurial projects related to the Creative Economy, drawing on the relationships among, for example, creative industries, tourism, education and knowledge creation, and information technology.<sup>15</sup> Participants seeking a position within the arts economy would learn how to implement knowledge gained from the course and apply it in concrete terms both on campus and in the cultural life of Boston.

### Achieving a Global Competency

There is widespread agreement in American colleges and universities about the need to place undergraduate education in a global context, so that students have the intellectual resources and the life experience to move imaginatively across cultures and compete effectively in a global marketplace. This view is reflected prominently in the BU Strategic Plan and it was one of the central topics of the One BU Task Force. In addition, global learning is threaded throughout the essential learning outcomes endorsed in the AAC&U's "Liberal Education and America's Promise" (LEAP) initiative. At the concrete level, almost 75 percent of business leaders surveyed feel that colleges must pay greater attention to global issues, with almost half of them expressing disappointment that college graduates do not possess the global knowledge necessary for advancement.<sup>16</sup> The challenge for the Committee was to distill this commitment to a global perspective into a series of recommendations to deepen, enrich, and integrate the global dimension of undergraduate education throughout the University.



For BU Strategic Plan and AAC&U report, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)

### Global Education: Existing Resources

It is important to begin by acknowledging the rich resources that already exist in departments, colleges, programs, student organizations, and co-curricular activities in all corners of the University. Even a brief survey of the different dimensions of international education at BU shows a wide array of possibilities. Many of these are the result of deliberate University policies from the highest levels of the administration, but others have been developed in response to student and faculty interest. International education at BU is as much a grassroots activity as it is a programmatic commitment of the University. In fact it is the convergence of interests on the part of administration, faculty, and students (to say nothing of the rest of American and global culture) that makes international education such a lively and essential part of the BU experience.

The number and diversity of courses and organizations with an international focus show that "globalization" is not a single, monolithic phenomenon. To be a good global citizen also requires the skill of a good local citizen, to be sensitive to the nuances of different cultures, to understand that people have different needs, customs, and traditions, and to adapt to their expectations without offense or

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<sup>15</sup> For an instructive fine arts example of the relationship between entrepreneurship and music, see *ibid.*, pp. 7-9.

<sup>16</sup> Kevin Hovland, "Global Learning: What is it? Who is Responsible for it? *Peer Review* ("Study Abroad and Global Learning") 11/4 (2009), 4. Find link at [www.bu.edu/unlock](http://www.bu.edu/unlock)



disruption. These are the skills of a tourist visiting a home in Japan, a platoon leader leading a squad of soldiers into an Afghan village, a marketing executive developing a new product for the Indian market, or an aid worker delivering health care to an African village. This practical understanding of “the local” is part of what we mean by a “global” education.

### *Study Abroad*

Boston University’s International Programs are among the most extensive in the nation. Described as “the premier study abroad provider in the country,” BUIP manages more than seventy-five programs in over thirty-three cities in more than twenty countries with programs in language, liberal arts, fine arts, engineering, and science. BU International Programs are well known for their internship programs in a wide range of potential career opportunities, including the arts, business, communications, journalism, advertising, marketing, law, international relations, NGOs, political science, psychology, and social policy. In a recent year more than 2,100 students from over 200 colleges and universities have chosen to study abroad with Boston University International Programs, and almost 45 percent of BU undergraduates currently take advantage of a study abroad program. For many of these students study abroad is a life-changing experience. “Life changes” do not lend themselves to statistical summary, but everyone who has worked with undergraduates at BU will have a favorite anecdote to illustrate this point.<sup>17</sup>

### *Towards a Global Curriculum*

Course offerings with an international dimension have grown substantially in recent years. Using the College of Arts & Sciences as an example, the newly created Department of Modern Languages & Comparative Literature is growing rapidly in the languages and cultures of East Asia and the Middle East, including not only Chinese, Japanese, Arabic, and Hebrew, but Persian and Turkish. The Department of International Relations has the largest number of undergraduate majors in CAS and continues



For BU International Programs, link to [www.bu.edu/abroad](http://www.bu.edu/abroad)

<sup>17</sup> One of the best examples is the career of Anastasia Pilyavsky, a Religion and Anthropology major who studied abroad during her junior year in Mongolia and India. She returned to BU, wrote a fine undergraduate thesis on a tribe of Indian thieves, and went on to win a Rhodes Scholarship. She is now completing her D.Phil. at Oxford and is planning a career in Anthropology.



For the Center for the Study of Asia, link to [www.bu.edu/asian](http://www.bu.edu/asian)

to expand course opportunities in all areas of international relations. Boston University's new Center for the Study of Asia provides a programmatic setting for fresh initiatives in the study of Asia, including an application for a major government program to support the study of Asian languages; there are many other examples in this vein within and beyond CAS. The largest course in the Religion Department, for example, is RN 103 ("The Religions of the World: East"). Each semester more than 150 students from almost all colleges in the University pursue their interests in the study of Asian culture and religion. Many of these programs have benefited from support by the administration. But the engine that drives them is student and faculty interest. Without engaged faculty and interested students, these courses and programs would not exist.



### *An International Student Body*

With a freshman student body of 4,100, of which almost 14 percent are international students, Boston University has one of the most diverse undergraduate cohorts in the country, as is indicated by the important metric of approved student organizations with an international dimension. A recent count numbered approximately ninety-five such organizations, ranging from the African Students Organization to the Vietnamese Students Organization and the World Affairs Forum. Stops along the way included the Bangladeshi Students Organization, the Cape Verdean Cultural Students Association, BU for Burma, Foundation of International Medical Relief of Children, the Model United Nations, the South Slavic Society, and JIVA (Jains in Voice and Action). The diversity of student organizations reminds us that the global dimension of a BU education is not limited to academic programs and curricular choices. It is deeply woven into the co-curricular fabric of University life as it is designed out of the interlaced threads of student organizations and interest groups. Indeed, students can have a rich encounter with "global perspectives" without even leaving Commonwealth Avenue.



### Recommendations for Achieving a Global Competency


- **Key** Integrate the study abroad experience more fully into the regular curriculum by:
  - Developing departmental courses and programs that are specifically linked to the study abroad experience. These might be optional 1- or 2-credit extensions to existing courses in which students travel with faculty to explore the issues of the course in an international setting.
  - Improving coordination between departments and International Programs. We recommend that each department designate a particular faculty member to serve as liaison with International Programs, attend orientation meetings, and assist with the development of new study abroad initiatives.
  - Increasing access to the study abroad programs. We recommend the elimination of the GPA requirement for access to study abroad—it currently stands at 3.0, which, if enforced unequivocally, restricts access to about half the student body—or lowering it, as well as the consideration of additional financial aid targeted specifically at foreign study.
  - Integrating life-changing study abroad experiences more fully into the continuing education of returned students and their peers, and showcasing this experience through, for example, the compilation or designing of a portfolio.
  - Continuing to prepare science and engineering majors for participation in the international scientific community (the Department of Physics is starting a program at CERN for junior physics majors in spring 2010).
  - Continuing to include language learning as a component of all (or nearly all) BU International Programs in non-Anglophone host countries.<sup>18</sup>
  
- **Key** Encourage courses that have a global component by:
  - Requiring students to incorporate a global perspective into their academic programs. This can be done in many ways: by incorporating a more pronounced global or comparative dimension wherever that makes sense in existing courses; by developing new courses, or making existing courses more well-known by branding them differently; or by clustering courses together so that contemporary and historical issues—religion, the arts, health, sustainability, power and politics, conflict and diplomacy, race, literary and philosophical texts, to name just a few topics—are studied in a global context. It also would be possible to institute a new requirement, in which students would be expected to demonstrate “global competency” through some combination of coursework, study abroad, or international service.
  
- **Key** Support student organizations and other co-curricular opportunities by:
  - Showcasing the diversity of the BU student body in new ways through a series of public events that draw attention to the wide array of international

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<sup>18</sup> In fact, nearly all BU International Programs at non-Anglophone sites do already include a significant language component. For example, ENG and CAS life sciences students in Dresden, Grenoble, and Guadalajara take German, French, or Spanish, respectively, along with the prescribed engineering and science courses that keep them on track in their majors. Pushing that one step further, physics majors going to CERN in spring 2010 (as mentioned above) will take even their physics courses in French, on an experimental basis, with advance preparation in Boston during the fall semester.

organizations, and incorporating their contributions more fully into the undergraduate experience.

- Developing language-specialty housing as centers for cultural events and programming, as well as living-learning communities for residents.
- Increasing global community service opportunities that are incorporated into classroom discussions and University-wide programs.

 Encourage greater curricular and co-curricular involvement with cultural and linguistic programming in the City of Boston and surrounding communities.

## Co-Curricular Education

Learning experiences that take place outside of classrooms contribute to a dynamic, complete student who can integrate functional relationships with his or her life. This section discusses ways to use the assets of the University to increase students' participation in effective, highly meaningful educational practices. In addition to culminating experiences during the final year of study, study abroad opportunities, and opportunities for quality undergraduate research, co-curricular experiences must include service learning and opportunities to live in learning communities.

Today's college applicants emphasize their commitment to service and volunteer work as a significant (and unique) part of their admission profiles. Given that BU's pedagogical mission emerged from a tradition of service and our alumni continue to dedicate themselves to compassionate industry, community vision, and vocational energy, we must expand this aspect of our undergraduate education. Co-curricular opportunities, traditionally defined as internships, research-related employment, directed volunteer work, membership in student clubs, and community service, stand as a significant means for the University to extend the learning community for substantial outcomes both within and beyond BU.

The significance of co-curricular, experiential learning, and volunteerism in today's undergraduate education has attracted considerable interest in recent years. The AAC&U's 2008 report, *College Learning for the New Global Century*, maintains that undergraduate liberal education must "engage the big questions" that not only introduce students to different cultures but actually involve them in issues like "global interdependence" and "human dignity and freedom." We note that in October 2009, an AAC&U conference entitled "Educating for Personal and Social Responsibility: Deepening Student and Campus Commitments," focused solely on this issue.

But, the frequent inertia at the Tier-1 institutional level to creating a "campus-wide culture of service and an infrastructure to maintain it" unfortunately widens the chasm rather than bridges the divide between academic work and student life/co-curricular involvement. To close that gap, more and more colleges now offer certificates for courses that encourage community involvement and service work.<sup>19</sup> In addition, an important report by the Nonprofit Academic Centers Council, "Curricular Guidelines for Undergraduate Study in Nonprofit Leadership, the Nonprofit Sector and Philanthropy" (2007) claims "community engagement as an essential element of undergraduate education" for students in all degree programs.

Boston University's extensive co-curricular and student activities resources invite our undergraduates to question their places and roles in the world. Campus organizations like the student-run Community Service Center or student orientation programs, such as BU's First-Year Student Outreach Project (FYSOP),



For reports on social responsibility and community engagement, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)

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<sup>19</sup> Arizona State University, for instance, broke ground with its American Humanics program which, since 1948, provides students an academic program in nonprofit administration as a professional path (*New York Times*, Section F, "Giving," 11/11/08).



which blends orientation with co-curricular and collaborative research work, are particularly strong means for our students to fulfill humanitarian service work in the immediate Boston community. With these programs, our students participate in a variety of leadership and civic-awareness opportunities.

By nurturing this pluralistic awareness, BU can extend the learning community via real and compassionate action, and, consequently, command a notable place and a competitive edge in the national sphere. As we have stressed earlier in this document, Boston University's liberal arts must work with the professional schools to prepare our undergraduates for their places as future citizens of a global community, and to encourage them to become responsible and ethically thoughtful individuals who apply the analytic skills from their education to the real problems in their communities.

Finally, we should continue to promote student participation in other effective, highly meaningful educational practices, such as first-year seminars and experiences, writing-intensive projects, internships, capstone projects and initiatives, and other collective learning and intellectual experiences.

One incentive toward a more socially aware and action-based BU undergraduate experience is the reward of a "civic engagement academic certificate." A certificate for leadership and/or civic action, for example, could validate 1- and 2-credit courses and invigorate new approaches within those classes. These certificates would honor our students' desires to effect change in their world.

#### *Recommendations for Promoting Co-Curricular and Civic Responsibility*

- 🔑 Consider awarding "certificates" for a leadership position and/or for a course sequence that demonstrates purposeful effort and social/civic contributions to a real-life situation or experience.
- 🔑 Establish a center (or dedicate part of an existing unit) for coordinating co-curricular opportunities.
- 🔑 Include orientation and mentoring programs like FY SOP in the "for-credit" package of the University's experiential and service opportunities, letting students earn 1-2 credits as an independent project.



For more about the civic engagement certificate, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)

- Promote 2-credit courses as flexible ways to incorporate co-curricular, cross-disciplinary, and volunteer work that stresses social awareness and civic activity, especially courses that include research-based and problem-solving assignments.
- Establish flexible criteria that allow students to tailor a course of service work to their majors and to their career aspirations and thus encourage students to combine individual elements of a degree program in a cohesive and more multifaceted portfolio of their work.

#### *Recommendations for Faculty Development with respect to Co-Curricular and Civic Responsibility*

- Working with the Associate Provost for Faculty Development, encourage faculty to adapt existing courses with more flexible assignments that stress applicability to real-life situations and thus lower the walls between the classroom and the community outside the classroom, between coursework and intern and volunteer experience.
- Create a virtual bulletin board for all University faculty to encourage discussion about co-curricular assignments and to foster an inclusive and ongoing dialogue between the various programs, schools, and colleges.
- Encourage innovative interdisciplinary assignments, course design, and grant-funded projects in areas that have commonalities and a “global reach.”

#### **Living Communities and “Clusters”**

Approximately 20 percent of University-owned student housing is a specialty residence: houses with particular programs that offer variety beyond the traditional, large-hall, dormitory-style living. Specialty floors’ and small houses’ goal to foster cohort identities depends on the construction of a close community, united in social, scholarly, and/or cultural interests, and nurtured through immediate access to faculty advisors and student mentors. Specialty residence floors (such as those for the Core Curriculum, Engineering, Sargent, or Common Ground), or specialty houses (like CGS’s Gilbane House, Hospitality Administration House, Community Service House, or any of the Language Houses) provide an environment that blends the academic with the social, intellectual, and proactive. In particular, the Harriet E. Richards Cooperative House stands as proof of the powerful impact housing can have on the undergraduate experience.<sup>20</sup> In all cases, BU’s specialty residency program allows service, community, and collaboration to become the literal and metaphoric space for the transformative effect of a general/liberal education.

These specialty residences are yet another way for a One BU undergraduate education to open the classroom into the world. Merging specialty housing with the cluster approach could fuse the academic and the communal, leading to a socially responsible action of co-curricular and service work. A means to implement this linked outcome is to enlarge the role of specialty residence housing and floors and/or to establish a pilot “cluster” housing project focused around a community service experience (whether a cause, an organization, a neighborhood, shelter, food drive, health drive, etc.). This pilot project’s focus could be affiliated with specific courses in different programs/colleges at the University to span all course levels and thus support students’ fulfillments of different requirements in their majors. This cluster pilot would move students from classroom knowledge and skills, through the shared experience with that information, to a concrete outcome. Clusters would allow a BU undergraduate education to become more interdisciplinary, collaborative, inventive, rigorous, and meaningful.<sup>21</sup>

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<sup>20</sup> It was established in 1928 for women undergraduates on financial aid and is the first cooperative college dormitory in the U.S.

<sup>21</sup> Consequently, while cluster houses, or cluster “floors,” can be for first-year BU students, they also could be living communities that foster student mentoring between upper- and lowerclassmen.

### *Recommendations for Residential Clusters and Community*

- Establish a pilot “cluster” housing project around a community service experience (whether a cause, an organization, a neighborhood, shelter, food drive, health drive, etc.).
- Affiliate this pilot project’s focus (encourage the same in current specialty on-campus residences) with specific courses at the University, spanning all course levels to support students’ fulfillments of different course requirements in their declared majors.
- Establish a Smartsearch site for the University’s volunteer and community-oriented opportunities to enhance advisors’ capacity to link the extracurricular and the experiential to existing BU courses.
- Advance the 2-credit course impact through collaborative assignments associated with the “cluster house,” such as capstone projects that would document student skills (academic and social), maturity, and knowledge at different stages of their BU experience.
- Emphasize the “cluster house” as a learning site for research methodologies and skills through regular contact with different faculty members via presentations, mentoring, and supervision for student projects.
- Promote UROP and GUTS as the mentoring and scholarly resources they are and urge students to explore the potential research and training possibilities in this kind of employment.
- Stress communal spirit and generosity in service work within the actual residency of the “cluster house” (housekeeping, desk duty, and so on) as well as volunteerism outside the residence’s walls.



# Integration: Creating Paths, Removing Barriers

## General Service Courses and Accessibility

One of the major categories identified in the 2007 “Barriers Report,” was entitled “Looking at the student’s perspective from recruitment to graduation: how did I get here, what am I going to do here, and how do I get out of here?” The Barriers Committee noted the high expectations among students and parents built during the extensive recruitment/orientation process, and it seems clear that we use the breadth and diversity of Boston University as part of our value proposition. Students are both disappointed and disadvantaged when they find that: 1) they cannot take courses outside of their major that are of interest to them, 2) many of these have highly restricted enrollments or stringent pre-requisites, 3) a particular minor program, approved by one college, has not been approved by their home college,<sup>22</sup> and 4) transfer requirements between colleges are not consistent.

Our recommendations aim to decrease the gap between the expectations that we raise and the reality that we deliver:

### *Recommendations for General Service Courses and Accessibility*

- Increase the number of general service courses offered by each school and college, including 2-credit and P/F courses. These are courses that offer an introductory treatment for non-majors that could serve as a way for students to gauge their level of interest in a subject area prior to transferring or to provide content that meets certain learning goals, such as critical thinking, the ability to conduct research, social responsibility, etc., but does so from the unique perspective of the offering school or college.<sup>23</sup>
- Encourage schools and colleges to develop one new service course each, without prerequisites, that showcases the unique aspects of their topic areas. Such courses, whose development should be informed as well by dialogue with students and faculty colleagues from outside the offering college, might be offered as 1- or 2-credit courses, or as P/F. In order to achieve a truly “One BU” culture, units that only offer graduate degrees (Law, Public Health, Theology, MED) should do the same, so that we fulfill the recruitment promises of the widest possible range of opportunities. BU schools and colleges should strive to develop new, high-quality, pedagogically innovative, general-service courses by the end of the 2010-11 academic year.

## Transfers

The Barriers Committee also flagged the many challenges confronting students who wish/need to transfer among the schools and colleges. The College of General Studies has given considerable thought to this problem, given that its success depends on the ability of students to transfer smoothly from CGS to their ultimate degree programs. But, in general, the wide range of GPA requirements


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22 A proposal to make the approval of a minor effective and unequivocal across BU has been endorsed by the Council of Deans and will be formally approved in 2010.

23 An example from Sargent College will illustrate this process. There is a longstanding introductory course in Nutrition (SAR HS251) that requires college-level biology but also assumes the chemistry preparation that generally accompanies CAS BI107/108 or BI105/106. As good nutrition is fundamental to good health, the faculty developed a new survey course, SAR HS201, which is open to all BU students. While both courses are concerned with the application of scientific information about nutrition on health, the introductory course considers daily life problems that can be prevented or ameliorated by improvements in nutrition, while the emphasis in HS251 is more on the details of the biochemical processes. The initial offering of HS201 was in Spring 2003, and it has grown steadily to around 200 students, which is the capacity of the largest lecture space in Sargent College.

summarized by the Barriers Committee poses a challenge to the **One BU** concept and the Task Force looked further into the issue. One approach has been to discuss the rationale for these GPA requirements with the academic leadership of the schools and colleges. A number of issues emerged:

- 1) Some schools and colleges have used GPA requirements to control enrollments so that they guard sufficient resources to meet the needs of their students.
- 2) Programs have set internal (and often different) GPA standards to meet the demands of combined undergraduate/graduate programs or internship placement when mandated by professional associations.




 We propose the creation of an “Integration & Accessibility Committee” that will be charged with finding solutions and developing policies to increase access to courses across the campus by qualified students who are currently barred by unnecessary or excessively specific prerequisites.<sup>24</sup>

 We propose that schools and colleges adopt consistent GPA requirements that promote the fluid movement of students throughout Boston University. The need for further resources to handle additional students must be carefully evaluated, but where there is no compelling internship-, curricular-, licensure-, or accreditation-related argument against it, **the minimum GPA required for intra-University transfer should be the same—2.0—as that for graduation.** The “no resources” argument should not be used aprioristically to exclude students.

## Locating Courses

Another issue noted by the Task Force was the difficulty that students face in identifying courses of interest to them. Course Description Search has become a powerful and heavily used site for finding related courses across colleges. Entering keywords from any course’s title produces an expansive list of other courses across the disciplines and the schools that address the same topic from different perspectives and with different goals.<sup>25</sup>

### Recommendations Related to Locating Courses

-  Course descriptions should be regularly updated in order to keep up with ongoing revision and refocusing. Titles of courses, too, should be more engaging and keywords should facilitate searches. Include the phrase “no pre-req” to further assist students seeking courses outside, or complementary to, their own disciplines; revise at least 50 percent of these online within the next 18 months and update the 2010-2011 Bulletin.
-  Courses with changing content using an omnibus title—“Selected Topics” or “Studies in...” etc.—should link to a description of the precise offering for that semester.
-  Both the disciplinary and cross-disciplinary aspects of a course should be reflected in the description through the periodic but regular addition or deletion of keywords when necessary.



For Course Description Search, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)

<sup>24</sup> Or for which they could be sufficiently prepared by means such as the blended modules described above under “Technology.”

<sup>25</sup> For instance, one writing course is entitled “Food as Sustenance and Symbol.” Typing “food” into Course Search brings up examples such as CAS AR 280 “Food, Diet, and Ancient People,” CAS AM367 “Material Culture (introduction to the theory and practice of the interdisciplinary study of material culture),” PDP NT103 “Vegetarian Nutrition,” SAR HS201 “Introduction to Nutrition,” SPH EH 765 “Survey of Environmental Health,” and CAS IR 242 “Globalization and World Poverty.” These range from 1- and 2-credit courses (PDP NT103; SPH EH765) to 4-credit. They demonstrate a twofold way to extend the learning community: the more flexible combinations of disciplines and approaches stimulate a student’s application of methods and knowledge; the thematic combination collapses boundaries between the liberal arts and professional programs.

## Uniting the Arts, Sciences, and Professional Schools: Cluster Courses



For collaborative methods and cluster programs, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)



For the UNC-Chapel Hill cluster site, link to [www.bu.edu/unlock](http://www.bu.edu/unlock)

A familiar ingredient in any recipe for institutional change is interdisciplinarity, a concept that has now become mainstream enough to make any extensive justification for its presence in higher education unnecessary. Interdisciplinarity extends the boundaries of disciplines into emerging fields and injects existing disciplines with new ideas and contemporary relevance. It speaks to the desire—and necessity—for students to possess a larger toolbox of perspectives, and it reinforces the collaborative methods that are frequently cited as best practices in how students learn. Yet it remains challenging to find curricular and administrative models to allow it to flourish.

As a connected and coordinated General Education route, we propose that students follow the thematic groupings of newly developed course “clusters” linking different fields, disciplines, and schools, that will emphasize shared pedagogical values, distinct skills and knowledge, and a broader relevance. The approach is already flourishing at many institutions. UNC-Chapel Hill’s cluster programs, introduced into its 2006 curriculum, let students satisfy some of their General Education requirements through an interdisciplinary approach, reinforcing that it is not just *what* a student learns but *how*. Taking this approach, which is already being put into practice by the new University Honors College program, further into BU’s curriculum and living communities would greatly augment the University’s ability to recruit and retain our best students.

According to a recent *Chronicle of Higher Education* report, and echoed in two BU documents—the 2008 Report of the Task Force on the First-Year Experience in the College of Arts & Sciences and the One BU Task Force Student Interim Report (2009)—students desire coursework that provides greater creativity and flexibility, more interdisciplinary and collaborative work, exposure to research and real-time experiences, routes that permit more individualized and customized streams of study, and meaningful relationships with peers and faculty.<sup>26</sup> Cluster courses and cluster living communities meet all these concerns, and they can encourage our students to pursue their curiosity and interest in courses outside their majors.

Most importantly, clusters can allow students to either choose pre-established clusters, or customize part of their General Education requirements by designing their own groupings, leading to more agency on the students’ part, ensuring that they “become the stewards of their own educational pathway within a liberal arts institution.”<sup>27</sup> Simply designing a cluster initiates the students into a new approach to their education, since they must not only make thematic connections but also theoretical links between approaches and disciplines, even when those may be, as UNC’s cluster site notes, the “very real disconnections that make such conversations both challenging and essential.”

A pool of some 5,000 undergraduate courses at BU provides a rich source for developing these clusters, and they can easily be built around a preexisting required course. For example, all BU freshmen must fulfill a writing requirement, and many do so through the thematic expository writing courses in CAS’s Writing Program.<sup>28</sup> These 100- and 150-level courses teach critical thinking and writing skills, research and analytic methodologies, and they are inclusive in the coverage of the literature, providing the valuable “writing-across-the-curriculum” service crucial for all areas of major concentration. Because the Writing Program’s courses concentrate on specific subject matter, they offer enormous potential to establish associations with other classes throughout the University, many of which satisfy General Education requirements. Students could complete those basic requirements while simultaneously pursuing topics they would enjoy studying but without detracting from the demands of their major. Generating course clusters through freshman writing courses would initiate students from the



For the CAS Writing Program, link to [www.bu.edu/cas/writing](http://www.bu.edu/cas/writing)

26 Martin Van Der Werf & Grant Sabatier, “The College of 2020: Students,” *Chronicle Research Services* (June 2009).

27 *Report of the Task Force on the First-Year Experience in the College of Arts & Sciences*, 23 April 2008, 6.

28 The College of General Studies students complete this requirement in their two-semester Rhetoric class, part of their freshman course of study and part of the College’s own “cluster” pedagogy.



beginning into the **One BU** culture of inquiry that teaches new and more powerful ways to think, to question, and to learn.

In short, cluster programs highlight a unique characteristic of Boston University and place into action one of the central points of the BU Strategic Plan that is being endorsed in the current report: the combination of a professional and a liberal arts education. Ideally, clusters will blend the interdisciplinary with service and the academic with social engagement, in a rigorous and stimulating format. As the chart above illustrates, clusters produce a range of outcomes: they lower barriers between faculty (and Faculties), encourage creative and collaborative projects, motivate informed and targeted advising, enhance mentoring and advising on all levels, foster global awareness, and cultivate ethical consciousness. Done well, and cooperatively, cluster programs will produce a lifelong learning experience.

### Clusters' Contribution to Faculty Development

While clusters offer opportunities for a team-taught approach, even without that merger of time and energy they suggest other ways to remove real and perceived barriers between faculty, divisions and departments, schools, and programs. CGS's recent decision to include the freshman elective in its fall semester brings this fluidity into its interdisciplinary team-structured curriculum. CAS's timeline for its First-Year Experience includes soliciting proposals for freshmen seminars and learning communities that link courses and that tie courses to residential programs. Deans and chairs throughout the University must encourage—even require—that faculty adapt existing courses to include flexible assignments that explore meaningful applicability to real-life situations and thus help dissolve the barriers between the classroom and the community outside the classroom, between coursework and intern and volunteer experience. As an additional and significant consequence, clusters would promote an invigorated academic advising, since advisors would know about and promote more across-the-discipline approaches to fulfill requirements within major areas of study.

## A Meaningful Curriculum

Consequently, we must highlight and reinforce the meaningful nature of our curriculum. Many existing courses at the University already incorporate this pedagogical strategy, linking graded “real projects” to “real-world” issues.<sup>29</sup> The cluster approach (as explained above) provides yet another flexible method, one reflecting existing interdisciplinary programs (like that of the College of General Studies) and compatible with goals set out by the College of Arts & Sciences’ First-Year Task Force Report.





For CAS Report,  
link to  
[www.bu.edu/unlock](http://www.bu.edu/unlock)

This emphasis on relevance and applicability can be accomplished by reorganizing existing courses in the liberal arts and in the professional schools that deal with global issues, including topics such as domestic violence, poverty, and race. Indeed, our students often pursue internships with non-profit and community-action organizations, and their popularity testifies to our students’ desire to link intern work and classroom expectations. BU students are active in national organizations that seek involved and socially aware students through on-campus groups. Some examples include Model United Nations, World Affairs Forum, and the Women’s Resource Center, as well as community service groups such as United Students for Africa, Alternative Spring Break, and the recently established chapter of Project Health. Because these groups also include deans, faculty, and staff, they collapse the boundaries between expert and novice, specialist and trainee, allowing a mutual exchange of learning, problem-solving, and contributive action.

An informed faculty can link class assignments, papers, and research projects to the service and volunteer work of their students to open the channels between the classroom and the real world. Permitting students more opportunities outside their major course of study lets them integrate their specific disciplines into service work, internships, and research. Such opportunities also offer students the rewards that are found in taking risks with what they know and what they can do with that knowledge.

Examples like the art installation project in footnote 13 were formulated by the interactions of faculty and students across disciplines. The result was widely viewed as appealing to a broad spectrum of students across art, engineering, and computer science. It leverages Boston University’s research strengths and involves students in the discovery process. Its successful completion will likely lead to a more visible showcasing of undergraduate research at BU and will have a positive impact on recruiting.

### Recommendations for Clusters

-  We recommend that all BU undergraduates combine and consolidate knowledge from at least three courses taught by different colleges or departments in order to impart knowledge of a single topic through varied approaches, and to understand the strengths and limitations of disciplinary approaches to big questions and complex problems. The creation of these clusters will be part of the agenda of the newly created Integration & Accessibility Committee.
-  Design a campus-wide Cluster Course environment as part of a BU General Education, anchored, if possible, to the Writing Program.

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<sup>29</sup> For instance COM 321 (Spring 2009), a course in research methodologies, required students to design a new and more effective donation volunteer campaign for The Greater Boston Food Bank. Students “experienced” more than the strict abstractions of scholarship, since an additional requirement stipulated they use a week’s worth of food stamps to feed themselves. Professors Malley-Morrison (Psychology) and Corgan (International Relations) team-teach a class in which students confront different societies’ definitions of concepts like “human rights,” “criminality,” and “punishments,” all of which may register on different scales depending on the culture. Malley-Morrison and Corgan describe their classes as world-peace projects; their goals depend on designing new definitions (for information and for action).





## Expanding Postgraduate Opportunities for Current Students

Recent surveys of current and prospective students indicate that most undergraduates will pursue further university programs (including a second undergraduate degree, or specialized diplomas, credentials, or other post-bachelor programs); only 3 percent of prospective students (2008 survey) and 10 percent of current students (2009 survey) indicated that their highest level of education would be the bachelor's degree. Students expect to pursue multiple degrees and, for those entering with substantial AP credits as well as through careful planning and advising, are able to pursue multiple degrees while at BU. Indeed, a distinct advantage that BU holds over other universities and colleges is the presence of both strong liberal arts and sciences colleges, and strong professional schools, which makes pursuing multiple degrees possible.

### *Recommendations for Expanding Postgraduate Opportunities*

- 🔑 In addition to traditional "3 + 1" bachelor's and master's degrees within a discipline (such as the BA/MA in Economics), create similar "3 + 1" or "3 + 2" opportunities that cross disciplinary and school/college boundaries—especially those that combine the creative with the practical.
- 🔑 Along the lines of existing, accelerated, BS/MPH, BA/MPH degrees, create pathways for similar accelerated degrees, combining undergraduate and graduate education in various ways, such as common courses, integrated curricula, and mentoring.
- 🔑 Adopt reasonable guaranteed admission policies for graduates (and recent alumni) who wish to continue their education in their discipline at BU.

## Navigation, Advising, and Compassing

Among the often-conflicting goals of an undergraduate education is the desire to expose students to many disciplines and ways of thinking while also presenting an educational experience that is coherent and understandable. Students at BU can explore a wide range of ideas, disciplines, and approaches to knowledge. Yet, unless thoughtfully approached, this “wide range” may lead to aimless wandering among many attractive offerings. When we are asking students to diversify their interests and synthesize learning from various disciplines, we must help them make informed, thoughtful choices about their education framed by a vision of a BU education.

At the core of BU’s Strategic Plan is a conviction that the diversity of BU’s intellectual enterprise is a central strength and mark of distinction. The One BU Task Force discussed undergraduate education, and ways in which undergraduates could take full advantage of all that BU offers. This report details ideas from these discussions: multidisciplinary course clusters, integrated living-learning environments, and more uniform class schedules. If we take a premise that these strategies—in some combination, over time—will add a critical dimension to undergraduate education that will enable, even demand, that students are competent in multiple fields and that such students are ready to meet whatever the world demands of them as a result of their time at BU, then a number of questions arise. From the student’s perspective, one might ask:

- How can I navigate through BU? How do I find my way?
- Beyond my transcript, how do I synthesize and demonstrate my capabilities?
- How will I know that I am getting the most out of my BU experience?

From the faculty member’s perspective, one might ask:

- Are students benefiting from their exposure to and participation in multidisciplinary educational opportunities? If so, how?
- How can I follow and assess students’ progress?
- What are the leading practices for effective multidisciplinary teaching or for utilizing multiple learning pedagogies within a course or program?

Finally, the University might ask:

- What are students gaining from their undergraduate experience? (from these investments in undergraduate education?)
- Are these initiatives effective? Do they accomplish what we said they would? Are there any unintended consequences or unanticipated benefits?
- What are the most effective ways to implement and sustain these ideas?

Moving forward, our approach to the undergraduate educational experience at BU must address not only the content of that experience but also questions such as these. This section encapsulates our research, discussion, and thinking about these issues in relation to the themes within this report.



### *Recommendations for Navigating, Advising, and Compassing*

- 🔑 Add professionally trained academic advisors—a process already begun by the College of Arts & Sciences—as complements to faculty advising and mentoring. Advising entails both: 1) **form**, the nuts and bolts of registration and degree completion, and 2) **substance**, the conceptual/intellectual give-and-take about aspirations, strengths and weaknesses, and opportunities. Given the complexity of the University's undergraduate system, the degree of exploration we encourage in our students, and increasing demands on faculty time, can we continue to rely solely—or principally—on faculty advising? We say, emphatically, “No!”
- 🔑 Expand advising to include more across-the-discipline approaches to fulfill requirements within major areas of study and to remove real and perceived barriers that inhibit a student's intellectual and socially responsible curiosity.
- 🔑 Encourage advisors to recommend that students pursue leadership positions, whether through on-campus positions, extra-curricular responsibilities, or community and civic service, to illustrate the vital links between the actual classes they take and these volunteer or work-study roles.
- 🔑 Provide for co-curricular advising and mentoring, especially around service and its relationship to academic and postgraduate goals. As the University makes investments in career services and academic support, and as those functions begin to work more closely together, we begin to create a “home base” for students' co- and extra-curricular experiences. The Task Force suggests that this home base should provide room for students to explore and receive guidance on how their lives outside the classroom can complement their academic goals and develop habits of civic engagement and leadership.
- 🔑 Add capacity within the Center for Excellence & Innovation in Teaching to support, through grants and workshops, the integration of novel teaching, systemic change, and assessment modalities into courses and programs.
- 🔑 Provide additional support for expanded use of technologies such as Blackboard™ in assessment of student engagement and progress across the curriculum.

# Assessment

Assessment is a goal-driven process. When piloting or launching new initiatives, it is important to set outcome-related goals and establish means to assess the initiative. Assessment begins with a clear articulation of what one is attempting to accomplish, convey, or demonstrate. A goal can be a hypothesis or description about what should be the result of a particular approach to a subject; and it can also be prescriptive, setting forth specific items of knowledge that will be gained. The assessment itself is informed by the nature of the goal and the use and audience for the results. Typical methods include portfolio review, surveys, and focus groups. An example drawn from this report might go as follows: in designing a cluster course group, the professors plan syllabi that include not only lectures and reading assignments, but also experiences and evaluations that force students to engage with and synthesize material from each of the disciplines covered within the cluster.

Students leave most universities with classroom notes, textbooks, and a diploma. There is strong evidence that suggests this state of affairs is changing dramatically, and the strongest piece of evidence is the rapid growth in popularity of electronic portfolios. These are electronic collections of work—curricular and reflective—collected over time, that are showcased by students during the course of their university education. They may include text, photos, video, and audio, completed work as well as drafts and sketches. Many believe that the ePortfolio will replace the traditional résumé in just a few years, as employers seek students with a breadth of experience and tangible evidence of success in writing, creating, performing, designing, and engaging (Appendix 1).

## Recommendations for Assessment

- Add capacity in institutional research to support learning outcomes assessment, especially for assessment across the curriculum.
- Encourage the use of ePortfolios as a self-appraising instrument for students to cultivate responsibility for their education and an appreciation for their BU education's relevance to their communities (campus, national, global) during and after their completion of the undergraduate degree.
- Encourage the use of ePortfolios as a virtual forum for students to describe, to comment on, and to mentor each other regarding co-curricular and academic experiences at BU that incorporate volunteer and/or intern work into course requirements and that encourage interdisciplinary study.



## Accomplishing Our Goals

The recommendations contained in this report demand much of faculty members' time and talents: to work together across disciplinary boundaries, to integrate different learning experiences into their coursework, and to take an assertive role in guiding students' progress. By providing relevant tools, support, and incentives, we can both ease these demands and stimulate increased levels of innovation.

Any call for change will require energy to achieve results: energy to overcome resistance and barriers to change; energy to begin moving in new directions; and, most importantly, energy to sustain that momentum over time. The suggestions below address each of these areas, but they focus most on ensuring systemic or structural change.

### *Recommendations for Accomplishing Our Goals*

- 🔑 Address structural and policy issues related to course scheduling, and require courses in all colleges to adhere to the block system. Recommendations include adopting yearlong scheduling and implementing course schedule distribution requirements.
  - 🔑 Drawing on existing programs in Engineering, create a faculty teaching fellows program to seed innovation, with the expectation that the results of fellows' work can be adopted and scaled for use in other disciplines.
  - 🔑 Expand upon current initiatives and courses that align with the recommendations in this report. Through our discussions with deans and others, we uncovered many existing activities and new initiatives that fit well with our recommended course of action. We must provide formal forums or workshops where new approaches to undergraduate education can be critiqued, expanded, and adapted.
  - 🔑 Utilize assessment results and budget and planning processes to direct resources towards successful adoption of agreed-upon recommendations.
- 

## A Call for Action

This is not only a call for improvement and strategic change; it is the beginning—for some, perhaps, even a continuation—of an important dialogue for the University community. The Strategic Plan outlined priorities; this document poses important questions regarding the possibilities for “unlocking” undergraduate education at Boston University. What can we do to utilize all assets of the University to increase students' participation in effective, highly meaningful educational practices? How can we eliminate all barriers and transfer inconsistencies in order to give students ease of movement between colleges and full access to our International Programs? Which practices are distinctive to our campus, and how do we ensure that all students have a chance to participate in these high-impact experiences? We look forward to meaningful shared discussions, merging traditional success with new ideas, collaborative accountability for important goals, and actions that will matter.



## Electronic Portfolios

Electronic Portfolios, or ePortfolios, are electronic collections—curricular and reflective—accumulated over time, that showcase a student’s work during the course of his or her University education.



For BU ePortfolios,  
link to  
[www.bu.edu/unlock](http://www.bu.edu/unlock)

Thus, ePortfolios can document evidence of learning over the course of a student’s personal development, and are effective at charting intellectual growth (given that at a university like BU a student is exposed to multiple measures of assessment in courses, in co- and extra-curricular experiences, in internships, and in a variety of learning communities and social networks). Simply put, an entire BU experience can be captured in an ePortfolio to make learning visible on a website with multimedia collections of a student’s academic, emotional, and social development over his or her career. Beyond giving this “new sense of accomplishment,” ePortfolios can be effective at helping to unite a university. At present, several ongoing ePortfolio projects at BU have demonstrated the effectiveness of this pedagogy.

ePortfolios available to the entire Boston University community create several immediate benefits:

- Instructors could explore pedagogical approaches at the disciplinary and interdisciplinary levels to make teaching (not just learning) visible. The ePortfolio holds great potential for faculty to design collaborative projects and to make connections between courses.
- Accreditation processes for our professional schools, as well as the University, benefit greatly from an electronic archive of student work that can be sorted and indexed to support educational goals. Currently, such work is collected and sorted by each professor by hand.
- A student deciding on a major would be able to access ePortfolios of seniors in that major, providing detailed information that is invaluable in the decision process. Similarly, a student considering a course outside of the major could access the ePortfolio sections of former students, providing an array of perspectives on the material in the course and on the specific learning outcomes. For example, an engineering student interested in religion could access work by past students or view videos of their presentations in the course.
- ePortfolios encourage technical competency in all members of the University’s community, advancing a fluency in this area that is necessary in our technological and global world.
- Advisors could use ePortfolios in tracking students’ academic progress, guiding students’ professional interests, and determining and encouraging students’ choices in study abroad programs and internships. For advisors, the ePortfolios could be a significant, and visible, illustration of a BU undergraduate’s maturation during his or her years at the University.
- During the University’s Admissions Open Houses period, current students could access and exhibit ePortfolios as a way of showcasing to new students the breadth and diversity of experiences and education available at Boston University.

# Summary of Recommendations

## General Recommendations

- Each school and college must outline how it will enhance its own programs, curricula, and courses to better meet the needs of students in the 21st century, including a full range of BU undergraduates, and what steps it will take to enable students to take advantage of opportunities in and partnerships with other schools, including dual degrees, double majors, minors, and new course offerings.
- The University must eliminate any and all administrative barriers and GPA inconsistencies to enable students to transfer easily between schools and colleges, to move smoothly through programs, and to be able to graduate in four years.
- University leaders whose roles reach across school boundaries, such as the Associate Provost for Undergraduate Education and the Dean of Students, must outline how they will support schools, colleges, and students in their efforts.
- Finally, students must be encouraged to take control of their educational journey. Our strongest students have found ways to do this, despite challenges. When interdisciplinary courses and programs of study are made available to students and when they are advised and encouraged to take full advantage of these opportunities, students themselves can become co-creators of educational value.

## Enhancement of Current Boston University Strengths

### Numeracy and Society

- We propose the creation of a University-wide course that addresses the complex relationships between numeracy, technology, public policy, and ethics, teaching our students how statistical data is gathered, processed, and used to make important decisions in culture, society, and government. Two models can leverage existing strengths at BU: 1) the creation of a math/numeracy program analogous to the Writing Program, and 2) a wider extension of the successful joint course MA/CS 109, "The Art and Science of Quantitative Reasoning," which already satisfies divisional requirements.

### Technology

- Equip all classrooms to engage students with technology and tools.
- Ensure that students graduate with both the existing and projected technological competencies that are required by their field of study.
- Ensure that our classrooms enable the use of "lecture capture" technology, wireless devices, clickers and other hand-held response tools, podcast assignments, presentation software, and laptop computers.
- Prepare faculty to use technology at the same pace as our undergraduate students through faculty seminars, information, and training.
- Create online summary lectures, or modules, that will allow students to gain the foundational knowledge necessary to take a course in another college, outside their majors.



For Writing Program  
and MA/CS 109  
link to  
[www.bu.edu/unlock](http://www.bu.edu/unlock)



For UROP, GUTS, and  
Gotlieb Center, link to  
[www.bu.edu/unlock](http://www.bu.edu/unlock)

### *Research Primacy*

- Foreground research, wherever possible, during the first year, along with a significant research capstone during the final year, taking advantage of funding opportunities that are provided by two internal and enhanced funding envelopes, UROP and GUTS, as well as making more extensive use of the University's vast primary-source collections, such as the materials housed in the Howard Gotlieb Archival Research Center.
- Design a collection of research- and outcome-oriented group projects involving undergraduate students from different colleges across the University, ideally linked to co-curricular experiences.

### *Innovation and Entrepreneurial Studies*

- Design a Minor or Certificate in Entrepreneurial Studies available to all undergraduates at Boston University. This would consolidate the strengths of our established expertise and experience in teaching entrepreneurship to SMG students, with a growing awareness and interest in entrepreneurial studies as they apply to students planning careers in diverse and interdisciplinary fields that all require skills in opportunity assessment, innovation, risk analysis, project planning, and team building. Artists, textbook authors, engineers, scientists, and business leaders can all benefit from including these principles, which can equip them to engage in activities that generate commercial and/or social value.

### *Accessing the Arts at BU*

- Through extending the concept of the Music Minor, increase the access for undergraduates of all colleges to applied courses in the fine arts, specifically through the creation of a Fine Arts Minor, comprising both theoretical and creative/performance/design courses from all three schools in the College of Fine Arts. Such training would be critical to students wishing to enter arts-related or creative leadership fields from other colleges (Law, Management, Communication), as well as complement many majors in the humanities.
- Create an introductory Fine Arts course (or series of them, ideally as 2-credit or P/F courses) open to all students, exploring the creative and cultural dimensions of the arts. Such a course would be preferably team-taught, and would expose students to new faculty creations, compositions, productions, and performances.
- Create a workshop course in CFA open to all students in which participants build interdisciplinary projects related to the Creative Economy, drawing on the relationships among, for example, creative industries, tourism, education and knowledge creation, and information technology. Participants seeking a position within the arts economy would learn how to implement knowledge gained from the course and apply it in concrete terms both on campus and in the cultural life of Boston.

## Global Competency

- Integrate the study abroad experience more fully into the regular curriculum by:
  - Developing departmental courses and programs that are specifically linked to the study abroad experience. These might be optional 1- or 2-credit extensions to existing courses in which students travel with faculty to explore the issues of the course in an international setting.
  - Improving coordination between departments and International Programs. We recommend that each department designate a particular faculty member to serve as liaison with International Programs, attend orientation meetings, and assist with the development of new study abroad initiatives.
  - Increasing access to the study abroad programs. We recommend the elimination of the GPA requirement for access to study abroad—it currently stands at 3.0, which, if enforced unequivocally, restricts access to about half the student body—or lowering it, as well as the consideration of additional financial aid targeted specifically at foreign study.
  - Integrating life-changing study abroad experiences more fully into the continuing education of returned students and their peers, and showcasing this experience through, for example, the compilation or designing of a portfolio.
  - Continuing to prepare science and engineering majors for participation in the international scientific community (the Department of Physics is starting a program at CERN for junior physics majors in spring 2010).
  - Continuing to include language learning as a component of all (or nearly all) BU International Programs in non-Anglophone host countries.

- Encourage courses that have a global component by:
  - Requiring students to incorporate a global perspective into their academic programs. This can be done in many ways: by incorporating a more pronounced global or comparative dimension wherever that makes sense in existing courses; by developing new courses, or making existing courses more well-known by branding them differently; or by clustering courses together so that contemporary and historical issues—religion, the arts, health, sustainability, power and politics, conflict and diplomacy, race, literary and philosophical texts, to name just a few topics—are studied in a global context. It also would be possible to institute a new requirement, in which students would be expected to demonstrate “global competency” through some combination of coursework, study abroad, or international service.

- Support student organizations and other co-curricular opportunities by:
  - Showcasing the diversity of the BU student body in new ways through a series of public events that draw attention to the wide array of international organizations, and incorporating their contributions more fully into the undergraduate experience.
  - Developing language-specialty housing as centers for cultural events and programming, as well as living-learning communities for residents.

- Increasing global community service opportunities that are incorporated into classroom discussions and University-wide programs.

🔑 Encourage greater curricular and co-curricular involvement with cultural and linguistic programming in the City of Boston and surrounding communities.

### *Co-Curricular Education*

🔑 Consider awarding “certificates” for a leadership position and/or for a course sequence that demonstrates purposeful effort and social/civic contributions to a real-life situation or experience.

🔑 Establish a center (or dedicate part of an existing unit) for coordinating co-curricular opportunities.

🔑 Include orientation and mentoring programs like FY SOP in the “for-credit” package of the University’s experiential and service opportunities, letting students earn 1-2 credits as an independent project.

🔑 Promote 2-credit courses as flexible ways to incorporate co-curricular, cross-disciplinary, and volunteer work that stress social awareness and civic activity, especially those courses that include research-based and problem-solving assignments.

🔑 Establish flexible criteria that allow students to tailor a course of service work to their majors and to their career aspirations and thus encourage students to combine individual elements of a degree program in a cohesive and more multifaceted portfolio of their work.

### *Faculty Development with respect to Co-Curricular and Civic Responsibility*

🔑 Working with the Associate Provost for Faculty Development, encourage faculty to adapt existing courses with more flexible assignments that stress applicability to real-life situations and thus lower the walls between the classroom and the community outside the classroom, between coursework and intern and volunteer experience.

🔑 Create a virtual bulletin board for all University faculty to encourage discussion about co-curricular assignments and to foster an inclusive and ongoing dialogue between the various programs, schools, and colleges.






🔑 Encourage innovative interdisciplinary assignments, course design, and grant-funded projects in areas that have commonalities and a “global reach.”

### *Residential Clusters*

🔑 Establish a pilot “cluster” housing project focused around a community service experience (whether a cause, an organization, a neighborhood, shelter, food drive, health drive, etc.).



🔑 Affiliate this pilot project’s focus (encourage the same in current specialty on-campus residences) with specific courses at the University, spanning all course levels to support students’ fulfillments of different course requirements in their declared majors.





-  Establish a Smartsearch site for the University's volunteer and community-oriented opportunities to enhance advisors' capacity to link the extracurricular and the experiential to existing BU courses.
-  Advance the 2-credit course impact through collaborative assignments associated with the "cluster house," such as capstone projects that would document student skills (academic and social), maturity, and knowledge at different stages of their BU experience.
-  Emphasize the "cluster house" as a learning site for research methodologies and skills through regular contact with different faculty members via presentations, mentoring, and supervision for student projects.
-  Promote UROP and GUTS as the mentoring and scholarly resources they are and urge students to explore the potential research and training possibilities in this kind of employment.
-  Stress communal spirit and generosity in service work within the actual residency of the "cluster house" (housekeeping, desk duty, and so on) as well as volunteerism outside the residence's walls.

## Integration

### *Service Courses and Accessibility*

-  Increase the number of general service courses offered by each school and college, including 2-credit and P/F courses. These are courses that offer an introductory treatment for non-majors that could serve as a way for the student to gauge their level of interest in a subject area prior to transferring or to provide content that meets certain learning goals, such as critical thinking, the ability to conduct research, social responsibility, etc., but does so from the unique perspective of the offering school or college.
-  Encourage schools and colleges to develop one new service course each, without prerequisites, that showcases the unique aspects of their topic areas. Such courses, whose development should be informed as well by dialogue with students and faculty colleagues from outside the offering college, might be offered as 1- or 2-credit courses, or as P/F. In order to achieve a truly "One BU" culture, units that only offer graduate degrees (Law, Public Health, Theology, MED) should do the same, so that we fulfill the recruitment promises of the widest possible range of opportunities. BU schools and colleges should strive to develop new, high-quality, pedagogically innovative, general-service courses by the end of the 2010-11 academic year.

### *Transfers*

-  We propose the creation of an "Integration & Accessibility Committee" that will be charged with finding solutions and developing policies to increase access across the campus by qualified students who are currently barred by unnecessary or excessively specific prerequisites.
-  We propose that schools and colleges adopt consistent GPA requirements that promote the fluid movement of students throughout Boston University. The need

for further resources to handle additional students must be carefully evaluated, but where there is no compelling internship-, curricular-, licensure-, or accreditation-related argument against it, **the minimum GPA required for intra-University transfer should be the same—2.0—as that for graduation.** The “no resources” argument should not be used aprioristically to exclude students.

### *Locating Courses*

- 🔑 Course descriptions should be regularly updated in order to keep up with ongoing revision and refocusing. Titles of courses, too, should be more engaging and keywords should facilitate searches. Include the phrase “no pre-req” to further assist students seeking courses outside, or complementary to, their own disciplines; revise at least 50 percent of these online within the next 18 months and update the 2010-2011 Bulletin.
- 🔑 Courses with changing content using an omnibus title —“Selected Topics” or “Studies in ...,” etc.—should link to a description of the precise offering for that semester.
- 🔑 Both the disciplinary and cross-disciplinary aspects of a course should be reflected in the description through the periodic but regular addition or deletion of keywords when necessary.

### *Clusters*

- 🔑 We recommend that all BU undergraduates combine and consolidate knowledge from at least three courses taught by different colleges or departments in order to impart knowledge of a single topic through varied approaches, and to understand the strengths and limitations of disciplinary approaches to big questions and complex problems. The creation of these clusters will be part of the agenda of the newly created Integration & Accessibility Committee.
- 🔑 Design a campus-wide Cluster Course environment as part of a BU General Education, anchored, if possible, to the Writing Program.

### *Postgraduate Opportunities*

- 🔑 In addition to traditional “3 + 1” bachelor’s and master’s degrees within a discipline (such as the BA/MA in Economics), create similar “3 + 1” or “3 + 2” opportunities that cross disciplinary and school/college boundaries—especially those that combine the creative with the practical.
- 🔑 Along the lines of existing, accelerated, BS/MPH, BA/MPH degrees, create pathways for similar accelerated degrees, combining undergraduate and graduate education in various ways, such as common courses, integrated curricula, and mentoring.
- 🔑 Adopt reasonable guaranteed admission policies for graduates (and recent alumni) who wish to continue their education in their discipline at BU.

### *Navigating, Advising, and Compassing*

- Add professionally trained academic advisors—a process already begun by the College of Arts & Sciences—as complements to faculty advising and mentoring. Advising entails both: 1) **form**, the nuts and bolts of registration and degree completion, and 2) **substance**, the conceptual/intellectual give-and-take about aspirations, strengths and weaknesses, and opportunities. Given the complexity of the University's undergraduate system, the degree of exploration we encourage in our students and increasing demands on faculty time, can we continue to rely solely—or principally—on faculty advising? We say, emphatically, “No!”
- Expand advising to include more across-the-discipline approaches to fulfill requirements within major areas of study and to remove real and perceived barriers that inhibit a student's intellectual and socially responsible curiosity.
- Encourage advisors to recommend that students pursue leadership positions, whether through on-campus positions, extra-curricular responsibilities, or community and civic service, to illustrate the vital links between the actual classes they take and these volunteer or work-study roles.
- Provide for co-curricular advising and mentoring, especially around service and its relationship to academic and postgraduate goals. As the University makes investments in career services and academic support, and as those functions begin to work more closely together, we begin to create a “home base” for students' co- and extra-curricular experiences. The Task Force suggests that this home base should provide room for students to explore and receive guidance on how their lives outside the classroom can complement their academic goals and develop habits of civic engagement and leadership.
- Add capacity within the Center for Excellence & Innovation in Teaching to support, through grants and workshops, the integration of novel teaching, systemic change, and assessment modalities into courses and programs.
- Provide additional support for expanded use of technologies such as Blackboard™ in assessment of student engagement and progress across the curriculum.

### *Assessment*

- Add capacity in institutional research to support learning outcomes assessment, especially for assessment across the curriculum.
- Encourage the use of ePortfolios as a self-appraising instrument for students to cultivate responsibility for their education and an appreciation for their BU education's relevance to their communities (campus, national, global) during and after their completion of the undergraduate degree.
- Encourage the use of ePortfolios as a virtual forum for students to describe, to comment on, and to mentor each other regarding co-curricular and academic experiences at BU that incorporate volunteer and/or intern work into course requirements and that encourage interdisciplinary study.

*Accomplishing Our Goals*

- Address structural and policy issues related to course scheduling, and require courses in all colleges to adhere to the block system. Recommendations include adopting yearlong scheduling and implementing course schedule distribution requirements.
- Drawing on existing programs in Engineering, create a faculty teaching fellows program to seed innovation, with the expectation that the results of fellows' work can be adopted and scaled for use in other disciplines.
- Expand upon current initiatives and courses that align with the recommendations in this report. Through our discussions with deans and others, we uncovered many existing activities and new initiatives that fit well with our recommended course of action. We must provide formal forums or workshops where new approaches to undergraduate education can be critiqued, expanded, and adapted.
- Utilize assessment results and budget and planning processes to direct resources towards successful adoption of agreed-upon recommendations.







**Boston University** Office of the Provost

One Silber Way  
Boston, Massachusetts 02215

[www.bu.edu/unlock](http://www.bu.edu/unlock)

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