

Standard Four: The Academic Program

OVERVIEW

Northeastern University and its academic programs are organized around its mission to educate students for a life of fulfillment and accomplishment and to create and translate knowledge to meet global and societal needs.

The University is committed to educating students using an educational model that interweaves the theoretical and the applied through work-integrated learning opportunities, aimed at connecting students' experiences in the classroom with practice-oriented experiences in real-world environments.

Undergraduate Degree Programs

DESCRIPTION

Undergraduate programs are initiated and overseen by departmental faculty or, in the case of interdisciplinary programs, by departments with coordination at the college level. New courses and programs and programs undergoing substantive modifications are reviewed by the department, college, and University-level curriculum committees. Programs that combine undergraduate with graduate degrees must pass reviews by the undergraduate and graduate review committees.

These reviews insure that the programs offer in-depth major requirements, including substantial requirements at the intermediate and advanced levels, and are based on an appropriate rationale. Program proposals are also reviewed for coherence, intellectual content, and consistency with the University's mission. Programs require approval by the Faculty Senate, the President, and the Board of Trustees.

Proposals for the elimination of undergraduate programs follow the same review process. When programs are eliminated or their requirements change, currently matriculated students are fully supported in completing their respective programs.

The Faculty Senate is the primary governing board of the University faculty. It works with the University administration to develop and revise academic policies, including those that relate to course/program development and learning assessments. The primacy of the faculty role in academic program and course development is preserved throughout all levels of development and review.

Although no formal University-wide structure for the regular review of undergraduate programs currently exists, individual departments regularly review and update the curricula of their respective undergraduate programs and a process is in place for an annual review of all catalog curricular material. Most of the University's professionally oriented degree programs are accredited so they undergo periodic external review.

All undergraduate programs, courses, and systems were reviewed and revised during the 2001-03

period leading up to the conversion from a quarter to a semester calendar. This change required a complete rethinking of each program's curriculum and its integration with experiential learning. These proposals were reviewed and approved by the respective college curriculum committees and the University Undergraduate Curriculum Committee.

The Undergraduate Catalog (<http://www.neu.edu/registrar/catsugd.html>) is centrally prepared by the Office of the Registrar and provides curriculum descriptions for all approved programs. A degree audit reporting system (DARS), also maintained centrally by the Office of the Registrar, allows students and advisors to determine individual progress toward degree requirements or the consequences of transfer.

The University is committed to providing a wide range of technological resources to students to facilitate and enhance their educational experiences. Starting with acceptance to the University, students are granted access to a portal that is an online resource connecting them to the University.

Once enrolled, students have access to a vast number of technological resources from self-service links to training on library resources. In addition, the library offers an online reference service to all students and faculty. Most courses use Blackboard course-management software and many use online software applications. Several colleges have incorporated technology that students use to achieve course learning objectives, from computer programs to medical training simulations. Some majors and colleges require all entering students to own a laptop or purchase specific software programs for their laptops. Information Services provides Northeastern On Demand, a strategy for delivering services, customized to the individual, any time, anywhere, and on any device available. As of 2007, all 181 Registrar-scheduled classrooms are equipped with audiovisual equipment.

There is substantial support for the use of technology. Information literacy orientation is provided by the library to students in first-year writing courses and repeated during the Advanced Writing in the Disciplines course with a greater focus on the online databases. The Digital Media Design Studio is a newly added resource in the Library that provides training as well as access to recording equipment and specialized design software.

Educational content delivery via synchronous and asynchronous distance learning is growing at the University, though it still represents only a small proportion of content delivery. The College of Business Administration contracts with a vendor to provide support for its online MBA program, with University faculty maintaining all aspects of the content development and delivery. The College of Professional Studies (CPS) applies online learning methods because they offer a degree of flexibility that appeals to adult learners. The Graduate School of Engineering is increasingly offering online course delivery. The University has invested in and supports distance learning programs in order to maintain quality programs and instruction.

In the past, the experiential learning component of a student's education at Northeastern was generally addressed through cooperative education. While cooperative education continues to be a signature program at Northeastern, students are now pursuing experiential learning in a variety of ways, including service learning, internships, and research opportunities both on and off campus.

Before students begin any type of cooperative education placement, service learning, or other structured experiential learning activity, they are typically provided with a structured on-site orientation; written expectations for the position; information on the roles and functions of supervisors/instructors, background checks, and the provision of feedback and assessment; and Northeastern's expectations of and structures for students' reflection on their learning.

Clinical education, seen mostly in the Bouvé College of Health Sciences, occurs primarily toward the end of each program. Clinical affiliation agreements outline the shared responsibilities of Northeastern and the clinical sites. Additionally, each student has an assigned faculty preceptor at a given healthcare institution who provides direct guidance and assessment of student performance. All such programs employ detailed course syllabi and extensive evaluation systems to guide student learning in their off-campus courses/experiences.

The distinctiveness of some of Northeastern's programs reflects its commitment to partnerships. For instance, joint degree programs have recently been launched with the School of the Museum of Fine Arts in Boston (Bachelor's of Fine Arts and Master's of Fine Arts) and with Hebrew College in Newton, Massachusetts (Bachelor's/Master's program).

Northeastern has also developed joint degrees with international partners in order to give students global experiences. For example, Northeastern partners with Swinburne University of Technology in Melbourne, Australia, to offer joint business/leadership master's degrees. The new programming complements the long-standing joint global Bachelor's of Science in International Business programs.

Northeastern has recently introduced a new general education program — the NU Core — that requires undergraduate degree programs to give students a substantial and coherent introduction to broad areas of human knowledge, their theories and methods of inquiry, plus in-depth study in at least one interdisciplinary area that complements major requirements.

APPRAISAL

The University continues to enhance its curricular offerings, particularly with programs that align well with its mission. It is successfully developing new programs via partnerships that leverage Northeastern's assets and complement its strengths.

The University has been exemplary in its commitment to providing a wide range of technological resources for the purpose of enhancing education. These resources include: myNEU portals for admitted students as well as enrolled students; financial aid calculators; DARS, a degree auditing reporting system that serves as an advising and retention tool; FACT, a faculty advisor communication tool that provides early-warning monitoring of student performance; and TRACE, an online system for teacher rating and course evaluation developed collaboratively by students, faculty and administrators.

Experiential learning opportunities have flourished and broadened, commensurate with student interests. The University is currently working to establish criteria for what constitutes an authentic, transformative experience that will be seen as equivalent to a cooperative education experience.

PROJECTION

The University is currently in the midst of implementing a new general education program, the NU core, and developing an assessment plan for the program. Curriculum committees will map course syllabi and delivery methods to specific learning outcomes. Feedback will be used to modify courses for purposes of optimizing student learning. The processes and resources designed for NU Core assessment, and the resultant nucleus of a campus culture of effective assessment, will serve as the base for developing institution-wide programmatic assessment.

Enhancing technology will continue to be important to effective student learning. The phased implementation of the Unified Digital Campus (UDC) project (using several modules of SunGard Higher Education's Banner software) will provide new, and more coordinated, technological resources. Introduction of the course-management module, for instance, will facilitate the inclusion of learning outcomes in course descriptions. Newly developed tools such as FACT and TRACE will continue to be enhanced.

Optimizing web content will remain a continual challenge. One issue for immediate action is ensuring that students view a single version of the curriculum. This will mean revising departmental web pages so that all curricular content is actually displayed on the Registrar's pages, with links to departmental pages. This process has already begun, with leadership from the Associate Deans and Vice Provost for Undergraduate Education.

While new resources and training are constantly available, informing students about this availability remains a challenge. Unless use of a particular technology or resource is required in a course, many students will either be unaware of the technology or unfamiliar with how to use it. Online and group training has greatly increased the use of technology but it remains a challenge in view of the turnover of students, and therefore knowledge, that occurs every year. Use of the myNEU portal for training purposes has begun and the portal content and links will continue to be enhanced.

Given Northeastern's strength in experiential learning, a major future focus of technology projects will be enhanced integration of the in-classroom and experiential curricula. Co-op Connections is a starting point for e-mails, newsletters, and web content intended to link students to campus during their experiential activities. In discussion are many more real-time and student-driven digital resources. Work is also going on in the colleges to develop more distance learning and hybrid courses for delivery to students during periods of experiential learning.

Northeastern's increasingly broad definition of experiential learning at Northeastern poses the question of which learning experiences are sufficiently substantial to make them equivalent to a cooperative education placement in terms of potential for learning and for integration into the didactic portions of the curriculum. The new Vice Provost for Experiential Learning is working toward a categorization and definitional structure for all experiential learning opportunities.

General Education

DESCRIPTION

During the 2003–2004 academic year, the University’s Faculty Senate Agenda Committee charged a Special Committee on Academic Policy to study general education. The Faculty Senate approved the set of general education principles that came from this committee (http://www.facultysenate.neu.edu/committees/20032004/academic_policy/documents/APCGenEdRep41504withAppendices14.pdf). The development of these principles built on the previous Academic Common Experience (ACE) initiative (<http://www.neu.edu/registrar/courses/cat0607-024-033.pdf>) but made the expectations more concrete.

During the following two years, the Committee proposed a draft general education curriculum (http://www.facultysenate.neu.edu/committees/20042005/special_committee/documents/APCGenEdRep2032085.pdf), solicited broad input, and finalized the plan. The final report and recommendations were approved by the Faculty Senate in Spring 2006 (http://www.facultysenate.neu.edu/committees/20052006/special_committee/documents/APCFinalRpt41206.pdf).

During 2006–2007, the Faculty Senate Ad Hoc Committee for General Education Implementation, comprised of Northeastern faculty, administrators, and students, created a draft assessment document (Appendix D of http://www.facultysenate.neu.edu/committees/20072008/200708_general_documents/NU_Core_final_report_4_14_08.pdf) that enabled the Committee to judge the appropriateness of courses for the General Education requirements. On the basis of this document, courses were reviewed for inclusion and course lists for all NU Core categories were finalized (<http://www.neu.edu/registrar/nucore.html>).

Concurrently, each unit developed a plan by which its students would meet the general education requirements and, after University-level approval, the plans were entered into the DARS system. The NU Core was implemented for the Fall 2007 freshman class.

The NU Core is a major component in fulfilling the University’s mission to educate students for a life of fulfillment and accomplishment. It is intended to provide students with a balanced and integrated structure that consistently builds scientific thought, mathematical thinking, quantitative reasoning, logical thinking, critical analysis, humanistic reflection, information literacy, communication skills, and creative habits of mind and practice; promotes practical applications; and encourages ethical awareness. The NU Core provides opportunities to develop the knowledge and skills needed for students to become thoughtful citizens and capable leaders; to identify and effectively use information from a variety of sources; to understand connections among NU Core courses, major courses, and experiential learning; and to continue to consider these connections throughout life. The NU Core requirements can be found at <http://www.neu.edu/registrar/nucore.html>.

All students will complete at least 40 semester hours of general education. Entry-level NU Core courses and the experiential learning requirement involve exploring broad new ways of thinking, and breadth is insured by not allowing any double counting among those domains. Intermediate and advanced NU Core requirements involve more focused, in-depth experiences that can some

times be combined effectively in one course; many disciplinary capstone courses, for example, also satisfy the writing intensive requirement.

The Faculty Senate supported the University Undergraduate Curriculum Committee's (UUCC) being given the responsibility for oversight of the NU Core, including determining which courses and forms of experiential learning will satisfy Core objectives and periodically reviewing the various components of the NU Core to ensure that its principles are maintained.

The Implementation Committee developed model guidelines for writing intensive courses and developed a framework for the assessment of the NU Core. The assessment framework projects that all courses included in the NU Core will have established learning outcomes against which student performance is measured, to be used for programmatic as well as individual feedback. The NU Core assessment framework will be a foundational and critical part of a broader assessment plan for Northeastern.

APPRAISAL

The NU Core is well positioned for success. It commands wide assent due to the multi-year, multi-stakeholder process of its creation. It is built on three previous initiatives: ACE, each major's Integrated Learning Modules (ILMs), and the extensive curricular review accompanying semester conversion. Further contexts of strength for the Core are the integration of experiential learning, an area of unique importance for Northeastern, and the increasingly broad realization of the key role of general education for lifelong learning and for fulfillment and success in multiple careers and avocations.

The 2007–08 launch of the NU Core has created a dynamic environment for curriculum discussions among students, faculty, and advisors. The only major logistical challenge encountered has been determining the best placement for students transferring with credit that would place them between freshman and sophomore years.

The University Honors Program curriculum has especially benefited from the implementation of University-wide NU Core requirements. The Honors Program has created course options for fulfilling a number of the NU Core requirements that provide shared experiences for the variety of the majors accepted into the Honors Program.

PROJECTION

Well-designed and well-implemented assessment procedures will be critical for the continuing success of the NU Core, and well-developed learning outcomes are critical for strong assessment. The UUCC will be vigilant in requiring a set of clear and appropriate learning outcomes for all new Core course offerings and in its review of current offerings.

Northeastern's recently enhanced institutional focus on alumni relations should make it possible eventually to include in learning outcomes assessment some longer-term outcomes, such as evidence for the rate at which students are successful in fields for which they were not explicitly prepared. Such longer-term assessment will be especially valuable in evaluating the outcomes of various forms of integrated experiential learning.

The Major or Concentration

DESCRIPTION

Northeastern's increasing student selectivity has made it critical to adapt programming to students with more options and broader interests. Each of Northeastern's colleges offers an undeclared or open option track for freshmen. Building on entering students' increasing breadth of interests, Bouvé College of Health Sciences has created a health science major designed to provide students with a deep understanding of health policy and administration, health research, medical informatics, and evidence-based health care. This multidisciplinary environment is intended as one route of preparation for a variety of health-care professions.

The University has also expanded its interdisciplinary opportunities by creating more dual majors and has launched a number of new combined bachelor/master's programs.

Pre-professional advising has been strengthened. A formal University-wide pre-law advising position has been created (<http://www.neu.edu/prelaw/>) and the University-wide pre-med advising program has been enhanced by offering participation in the Tufts University School of Medicine early acceptance program.

Coincident with Northeastern's growing emphasis on global issues and in response to a major increase in student interest in languages, the World Languages Center was created to offer both an expanding array of languages and an increased number of sections. In addition, resolutions will be considered by the Faculty Senate in Fall 2008 that will change the Department of Modern Languages to the Department of Languages, Literatures and Cultures and will launch new language, literature, and culture programming in a variety of languages.

Northeastern has also added undergraduate programming to reflect the changing technological environment. The College of Computer and Information Science was renamed to reflect the infusion of information science throughout the college's offerings. The School of Technological Entrepreneurship was launched in 2004 to offer innovative education to students interested in the technology-based business world that lies at the interface of engineering and business.

The College of Professional Studies (CPS) was renamed in 2008 to reflect its growing emphasis on providing professional programs. It has been restructured to focus on professional and continuing education rather than part-time undergraduate programming.

APPRAISAL

Northeastern structures its majors and concentrations to provide students with the opportunity to develop knowledge and skills in specific disciplinary or clearly articulated interdisciplinary areas above the introductory level through properly sequenced course work. The curricula of majors and concentrations are available in the catalog and on the Registrar's website. Requirements for majors and concentrations include a mastery of the knowledge, information resources, methods, and theories pertinent to their particular areas of inquiry. Through the combination of the major or concentration, the NU Core, and experiential learning, a Northeastern student develops an understanding of the complex structure of knowledge in a chosen area of inquiry and its interrelatedness to other areas of inquiry. He or she also develops an understanding of the relationship between curricular content and effective practice.

Academic units vary in their development of clear and articulated learning objectives and their gathering of evidence that graduates have an in-depth understanding of an area of knowledge or practice, its principal information resources, and its interrelatedness with other areas. Curricula in all recently implemented programs have been benchmarked against curricula for similar programs at peer institutions.

PROJECTION

As the University and its environment continue to evolve, Northeastern will continue to be responsive to meeting students' needs and interests by creating new programs and methods of delivery. Much of this programming will be interdisciplinary in nature, and departments are currently working actively together in joint development efforts.

A heightened focus on integration of experiential learning and curricular content is driving the development of technological resources that will make possible more real-time integration of academic with experiential learning while students are off campus during experiential learning periods. These resources will also maintain deeper connections between students and the University while students are off campus.

Graduate Degree Programs

DESCRIPTION

Profile and Organization of Programs. Northeastern University offers a comprehensive portfolio of graduate programs, many of which are highly interdisciplinary. The programs — which range from certificates to PhDs — encompass a broad range of professional and academic disciplines. The offering of professional degrees, such as clinical doctorates, is fairly new. Northeastern also offers several joint graduate programs, some internal to the University and some with other institutions.

Even before the articulation of the Academic Plan, Northeastern had offered a number of interdisciplinary, cross-college, professional master's programs. With the increase in interdisciplinary research centers at the University, each having an educational component to its mission, there are increasing numbers of students pursuing advanced degrees in fields that cross boundaries.

Since the last accreditation visit the College of Professional Studies has been given the authority to offer graduate degrees. CPS, focusing on working, mid-career professionals who are seeking advancement or a career change, offers nearly 40 graduate certificate programs, more than 20 master's degree programs, and a few professional doctorates. In service to the needs of working professionals, the programs are offered in a variety of formats including part-time, weekend, online, hybrid, and executive cohort formats.

Graduate instruction is offered on the main Boston campus, as well as at satellite venues in Burlington, Massachusetts, and in downtown Boston. A Master's of Fine Arts degree is offered jointly with the School of the Museum of Fine Arts, and a joint MD/MBA is offered with Tufts University School of Medicine and Brandeis University. The College of Business Administration, Bouvé College of Health Sciences, and CPS all collaborate with international partners and offer

graduate instruction abroad. Credit-bearing courses in these programs require prior approval by the relevant department and appropriate curriculum committee.

Graduate enrollments in Fall 2007, on a full-time equivalent (FTE) basis, constituted about a quarter of the University's total enrollment. This is up substantially from Fall 2003, when graduate FTE enrollments constituted only about 17 percent of enrollments. Looking at the University as a whole, there has been no shift in the percentage of part-time graduate students (headcount) in the past decade. However, excluding CPS students, part-time students have dropped from about 41 percent to about 29 percent of the graduate student headcount. The percentage of full-time students has increased as the emphasis on research across the University has increased.

International students constitute a large percentage of Northeastern's graduate population. By headcount and excluding the School of Law and College of Professional Studies, 26.4 percent of graduate students are international. With the same exclusions, the percentage of international students by college ranges from 9.0 percent to 71.4 percent. Some of Northeastern's programs are beyond national norms in terms of percentage of international students. This is both a concern and a vulnerability. Northeastern will not be developing the best pool of students if it does not attract domestic as well as international students.

Over the past decade, as Northeastern has been building its research capabilities, it has made concerted efforts to grow and strengthen graduate education. Substantial University resources have been made available. New investments in graduate education have included the appointment of a full-time Vice Provost for Graduate Education, with accompanying staff, and funding to market graduate programs and assist in the recruitment of students. Relatively recently a scholarship program was established to support the professional master's programs. This emphasis has resulted in marked increases in the number of applications and enrolled students over the past three years.

Organizationally, graduate education at Northeastern University is partially decentralized. The Vice Provost for Graduate Education oversees graduate matters that span the University and is responsible for strategic planning, University-wide graduate policy, financial support programs, marketing and recruitment, and the application systems. He is advised by a recently reorganized (2005), 11-member University Graduate Council that is a subcommittee of the Faculty Senate. This council is responsible for overseeing and maintaining University-wide graduate program standards, policies and regulations. It reviews proposals for new programs and is responsible for the periodic review of programs.

Each of the schools and colleges has its own graduate school and graduate director who is responsible for admissions processes, monitoring, clearance, and programming matters within the unit. In the multi-department colleges, these offices work with departments on the admissions and financial aid processes.

The graduate area is managed using a revenue-sharing financial agreement that allows revenue increases to be invested directly into the graduate area. The funds have been used to support additional PhD students and to provide travel funds to students. Centrally, funds have been used to

allocate additional teaching assistant lines, to increase the stipend rates for teaching assistants, to provide full health coverage to teaching assistants, to support recruitment efforts, and to provide a substantial number of fellowships that augment stipends for excellent students.

Program Proposals and Program Review. The establishment of new graduate programs involves a review process like that of undergraduate programs, i.e., one that begins at the department or college level and ends at the Board of Trustees. Except in CPS, which does not have a tenured or tenure-track faculty, programs are proposed by full-time faculty members. It is at the Provost's review stage that resource commitments — space, faculty, graduate stipends, information resources — are determined.

Ultimately, the primary responsibility for assuring the quality of graduate programs rests with the faculty and administrators charged with selecting the students, recommending degree candidates for that program, and developing and delivering a program's curriculum. While instruction for most graduate programs is by research-active Northeastern faculty members, instruction for professional master's degrees is often provided by professionals working in an industry. The Bylaws of the University-wide Graduate Council dictate that only full-time, terminally prepared faculty members at Northeastern can chair a PhD committee.

The Graduate Council recently determined that the previous every-ten-year review of graduate programs lacked the timeliness to anticipate problems. Working with the Provost's Office, it proposed an annual monitoring process, based on benchmark information. A database of indicators has been developed and will be available to faculty members and administrators. The Graduate Council anticipates using this database as an early warning system to forecast the need for internal or external reviews of graduate programs. Senate review of this proposal is expected in Fall 2008.

Many of Northeastern's graduate and professional programs, particularly in health sciences, business, and law, are accredited and so periodically undergo external review.

Structure of Programs. Explicit admission criteria vary by program. Most programs require that scores from a GRE, MAT, GMAT, or LSAT be provided. All international students, unless holding a degree from an American or English-speaking institution, are required to take the TOEFL.

Graduate degree programs are designed to develop students intellectually and ethically, while providing them with a keen appreciation for the complexities of their own disciplines. The amount of required knowledge, expertise, and critical thinking are significantly higher at the graduate than at the baccalaureate level. A number of programs offer a five-year bachelor's/master's program for the most highly qualified undergraduate students.

All program requirements are clearly conveyed to students. While some master's programs offer a research thesis option, most master's students do not pursue research. Many programs, though, do require a non-coursework-based piece of work such as a capstone project, a comprehensive examination, or a creative submission.

Promotion of a student to candidacy for the PhD degree is determined by departmentally set criteria. Students must perform original research carrying out a project they design, plan, and

execute, and for which they analyze and interpret their data. Research results that are strong in both originality and presentation are the ultimate standard by which students in doctoral programs in all disciplines are evaluated.

Experiential Education. Northeastern University has long had a reputation for providing graduate education that leads to economic and social advancement for its students. Its graduate programs have always been firmly grounded in pursuing excellence through research that is distinctive, interdisciplinary, and capable of being applied to the benefit of society. While experiential education has been a cornerstone of the Northeastern undergraduate experience for 100 years, its visibility at the graduate level is less pronounced and more recent.

The number of graduate degree programs that include an experiential component as part of the degree has grown rapidly in the last ten years. Traditionally experiential education has been a central feature of the programs in law and business, and in the health sciences. Now it is also a feature in programs as disparate as architecture, bioinformatics, computer science, criminal justice, economics, and public administration.

All internships, practica, etc. are designed to help the student apply knowledge acquired at Northeastern to the world of work, and *vice versa*, and to help students internalize their knowledge.

Assessment is done through observation and through traditional methods of testing. Some programs conduct workshops for site preceptors at which time they work jointly on establishing objectives and evaluation procedures. In many programs clinical faculty members become adjunct members of the faculty and interact with the department. In some instances, faculty members visit sites to both observe students and meet with site preceptors.

APPRAISAL

Northeastern's graduate programs have grown out of faculty interests and therefore enjoy a strong sense of ownership by the faculty. The systems that are in place — accreditations, graduate reviews — to oversee graduate education have been successful in ensuring academic rigor and integrity in the delivery of programs. The transition to an annual review of performance indicators is a step to intensify the evaluation of programs.

The infusion of financial resources has resulted in increased numbers of strong students and has addressed issues which graduate students have found most pressing, such as health insurance.

The recent period of growth in graduate students needs to be managed in an effective way to ensure sufficient capacity and no diminution in quality of programs. Northeastern is confident that the University has not surpassed its capacity in most areas; however, some of the most popular health science areas are reaching the limit of their clinical placements.

The percentage of international students in some programs is quite high. It is imperative that Northeastern recruit more domestic students to its programs. There would also be value in diversifying the countries of origin of the University's international graduate students.

The management of Northeastern's graduate programs is relatively decentralized. With the growing numbers of students working on interdisciplinary projects and in interdisciplinary

centers, the systems that manage student processes will have to evolve to keep pace with student needs.

PROJECTION

Graduate education, because of its importance to Northeastern's research agenda, will play an ever more prominent role at Northeastern. A commitment has been made by both senior leadership and faculty members to provide a sound analytical base for decision making in the graduate programs. The development of the graduate indicators database was the first step in this process. The next step is the use of these data in driving evaluations.

Together the Vice Provost for Graduate Education, the Graduate Council, department chairs and center directors are developing strategies to expand the interdisciplinary training of graduate students in the social sciences and humanities. Also under discussion is how best to develop resources that would allow more graduate students to undertake experiential learning opportunities.

Resources will be allotted and procedures developed to attract the best pool of applicants to the graduate programs. In some cases this will mean attracting more domestic students.

Integrity in the Award of Academic Credit

DESCRIPTION

Degrees. The institution's degrees and other forms of academic recognition are named following practices common to American institutions of higher education in terms of both length and content of the programs. Northeastern follows a standard model for all degrees. Semester programs are a minimum of 128 semester hours at the undergraduate level and last four years without cooperative education. Master's degrees are a minimum of 30 semester hours and generally last two years. PhD programs are generally 60 semester hours and last five to seven years. Quarter programs are a minimum of 160 credits at the undergraduate level, 80 for an associate's degree, and a minimum of 40 credits for Master's programs. Other programs are in keeping with standards at other institutions.

Northeastern University offers a number of inter-institutional joint degree programs at both the undergraduate and graduate levels and all institutions participating in these degrees meet the same standards and accreditation as Northeastern. All programs are overseen by the college that offers the degree at Northeastern.

Degree requirements at all levels are published in catalogs, bulletins, and program guides. At the undergraduate day level, the Degree Audit Reporting System contains all degree requirements for all approved programs and its contents are used for graduation clearance. At the graduate level, the Registrar applies minimum credit and GPA requirements for graduation. Any exceptions to graduation minimum standards must be approved by the Council of Deans.

Courses. As noted before, all courses offered at Northeastern University are approved through a multi-step process. All courses submitted by students for transfer credit approval are managed through a transfer routing system that goes directly to departments for approval and evaluation of equivalencies.

Credit is only awarded for actual coursework or for experiences, such as research, that are overseen by faculty members and in which Carnegie standards must be met. Courses in the two half-summer sessions meet for 7.5 weeks at twice the usual number of hours per week. The College of Professional Studies offers some courses on an intensive basis, where material lends itself to compression. These abbreviated or concentrated courses must conform to the standard contact hour requirements as outlined by the Carnegie standards.

The Registrar's Office provides grade analysis reports to the academic units every term. A subcommittee of the Faculty Senate reviews grading policies for issues of grade inflation and equity across programs.

Course equivalencies are overseen by the academic units. All transfer credit is reviewed by academic personnel, usually faculty members. All approved equivalencies or approved electives are stored in the degree audit system as part of the transfer articulation module. Northeastern does not award degree credit for remedial work or for prior experiential or non-collegiate sponsored learning.

At the undergraduate level, the degree audit system contains rules for the counting of credit in the major. No Northeastern program has fewer than the 32 semester hours required in the major and many programs completely exclude transfer credit from the major. Northeastern limits the award of transfer credit to 80 semester hours from a four-year institution and 60 semester hours from a two-year institution. At the graduate level, transfer credit is limited to three courses, or a maximum of three-eighths of a Master's program.

Study Abroad programs take place at partner institutions and include semester, faculty-led, and summer options. Northeastern's faculty-led study abroad programs, such as Dialogues of Civilization, are developed and led by Northeastern faculty members.

Offerings of required and elective courses are scheduled with sufficient availability to provide students with the opportunity to graduate within the published program length, taking into account students' experiential learning schedules.

At the undergraduate level, course registration is managed through a priority access system that gives seniors, juniors, middlers, sophomores, and freshmen priority in that order on a daily basis. The graduate schools and the College of Professional Studies plan courses based on program requirements and generally registration is program-specific.

Degree Progress. Student retention is supported by the recently developed Faculty Advisor Communication Tool (FACT) (<http://www.neu.edu/registrar/fact.html>). This system allows faculty members and advisors to communicate about students experiencing academic difficulty and determine interventions to promote academic success. It has been especially powerful in targeting for assistance a group of students who are experiencing difficulty in more than one course.

Satisfactory academic progress for undergraduate students is measured each term according to published University standards. Students who do not meet the standard or who are not making satisfactory progress are put on probation. In most cases dismissal from the University occurs at the end of the third probation term, and may be appealed via published procedures.

APPRAISAL

Innovative use of web-based information has given Northeastern special strength in disseminating degree requirements and in evaluating transfer credit. Moving decision making on course equivalency into the academic arena, from its previous location in enrollment management, has further strengthened the transfer credit process.

Although some units, in particular the accredited professional programs, routinely include clear statements of learning objectives in all courses, there is a great deal of variation across the University in this practice.

PROJECTION

Work is currently underway to bring evaluation of traditional study-abroad programs in line with the transfer credit evaluation process. In some cases, courses at the host institutions have been fully evaluated via the transfer-credit process and the relationship of their grading standards to those at Northeastern are well defined, but many have not. The Registrar's Office is coordinating efforts across majors to complete the evaluation process for existing programs and will routinize the process as new institutional programs are added.

Northeastern will continue to apply technology to issues of course monitoring and student academic progress. Continuous upgrading of capabilities is necessary to build on the strength that currently exists. As noted before, implementation of the Banner course management software will provide the technical capability for including learning objectives in all course descriptions.

Assessment of Student Learning

DESCRIPTION

Northeastern implements and supports a variety of approaches to the assessment of student learning. Previous observation by Northeastern of lower retention and graduation rates than its peers had highlighted the need to understand what and how students are learning through their academic program and through experiential learning opportunities.

Besides being subject to assessment programs internal to the University, the performances of professionally oriented programs are systematically assessed by specialized accrediting agencies.

Assessment for the individual student occurs in all programs and courses. This assessment generally occurs as written testing and grade point average requirements. Another form of assessment exists for students in professional programs who require national or state licensure in order to practice their professions. The peer tutoring programs, committed to working closely with the academic departments, and FACT, designed to identify students at risk, constitute powerful observation tools for student learning.

Learning outcomes at the course level are evaluated by students via the new online Teacher Rating and Course Evaluation (TRACE) system. TRACE incorporates a wider range of questions concerning course content and instruction and a greater number of open-ended questions for student feedback than did the long-standing, paper-based Teacher and Course Evaluation (TCE) instrument. TRACE can also be used for midterm course evaluation, where its information can be

directly applied to increasing learning for the instructor's current group of students as well as longer-term curricular enhancement.

Northeastern uses several approaches to understanding student learning on the institutional level. These approaches include comparison to peer institutions on such measures of student achievement and success as retention and graduation rates, rates of full-time employment and graduate school attendance for alumni, and mean salaries of recent graduates compared to national norms. These data are collected and maintained by the Office of Institutional Research and are shared routinely with the senior leadership, deans and chairs.

Assessment of experiential learning continues to evolve. Many cooperative education coordinators organize focus groups of employers to identify learning objectives and the extent to which they are met. A number of academic programs evaluate integrated classroom/experiential learning via capstone projects.

National Science Foundation funding initiated the development of an e-portfolio assessment protocol for integrated experiential and classroom learning that incorporates a number of features: expert review of student work according to well-defined rubrics; performance-based standards of measurable progress toward proficiency in desired learning goals; development of a web-based portfolio system that allows students to archive their work and present it in different views for different audiences; and a complementary web-based performance evaluation process for use by employers of Northeastern students. The strength and potential of the outcomes of the pilot program have resulted in the University continuing the development of this project under the sponsorship of the newly established Center for Innovation and Excellence in Teaching and Learning (CIETL) in collaboration with the Educational Technology (EdTech) Center.

CIETL and the EdTech Center will also build on outcomes assessment efforts that had been pursued in the former Center for Effective University Teaching.

Conversion to semesters in 2003 and the implementation of the NU Core in 2007 provided University-wide assessment opportunities for all programs. The parallel 2006-2007 institution-wide processes of creating a new mission statement and implementing the NU Core ensured that expectations for student learning reflected the institution's mission. While the University response to these transitions was complex, with the extent of assessment varying among programs, there are numerous areas of excellence in assessment that provide evidence of University-wide capability. These pockets of excellence also serve as anchor points and models for a more broad-based assessment effort.

The Writing Program, based in the English Department, has a strong program of assessment. Learning goals, expectations, and grading standards are made available in course materials and on the web (<http://www.english.neu.edu/writingprogram/>). At mid-term, in both first-year writing courses and Advanced Writing in the Disciplines (AWD) courses, all instructors participate in the mid-term assessment process. All students are required to produce an inclusive portfolio and an end-of-term portfolio review is held in which all instructors review standards and grading criteria and determine final grades. This process encourages instructors to use the outcomes observed in the shaping of subsequent courses.

Through the integrated experiential learning component of the NU Core, Northeastern ensures that students have systematic, substantial, and sequential opportunities to learn important skills and find synergy among the various components of their education. It also ensures that they actively engage in significant problems of their discipline or profession and that they are provided with regular and constructive feedback designed to help them improve their achievement. The development and implementation of Integrated Learning Models in each unit, at the time of semester conversion, has insured that experiential learning within the NU Core has a rich base.

The culture of assessment is growing at Northeastern, with units beginning to explore additional avenues. The Pharmacy Practice program has developed a post-co-op, collective student reflection to assess integration of experiences from the workplace and classroom content. The College of Business Administration has a proposal for an Assessment Center for which it is seeking development funds. With the burgeoning interest in globalization, the University has decided to ensure that all language faculty members go through integrated performance assessment and ultimately be certified by the American Council on Teaching Foreign Languages.

Surveys of student opinion on learning are also carried out routinely, including the National Survey of Student Engagement (NSSE), the Co-op Experiences Survey, and the Higher Education Data Sharing Consortium Graduating Senior Survey at the institutional level, and various graduating senior and alumni surveys at the college level. Other sources of assessment data are industrial advisory board surveys at various levels and surveys of co-op employers carried out at the institutional and college levels. Results from the cooperative education surveys are used continuously to inform co-op position review, change, and elimination.

In early 2008, all full-time faculty members received an online, anonymous survey asking for information on their student learning assessment activities. The approximately 170 unique responses included representation from every college and showed assessment activity in 37 of the institution's units. The data provide examples of 781 specific assessment activities and indicate that assessment is taking place at both the undergraduate and graduate level.

APPRAISAL

Northeastern's academic programming has undergone a series of revisions that have built sequentially on the strengths of the preceding curricula and on multiple reviews of best practices at peer institutions. The University is now poised to institutionalize routine reviews of learning at the institutional, program, and course levels, and to create a campus culture that effectively uses the assessment findings to improve academic offerings and student learning.

Several major factors predict success for these goals: general enthusiasm of the faculty for the new and revised curricula, the support of the institutional leadership, a general climate of expectation for accountability in higher education, and the availability of resources — both in the institution and in the higher-education community — to achieve effective assessment and feedback improvement. While the present level of commitment to assessment varies across the University, the evidence of breadth and depth of strong assessment practices within some units provides evidence of University-wide capability.

The faculty survey data indicate that outcomes from assessments are used to improve or modify course content, course structure, and teaching methods, and are used to improve course quality across sections. Not surprisingly, faculty members frequently indicated that assessment data were used to provide feedback to students to improve their learning.

Northeastern's long commitment to excellence and leadership in cooperative education has yielded multiple assessment tools, rich data, and a culture of responding to the data with effective program changes. Assessment of other experiential learning avenues, such as Study Abroad, service learning, and research experiences, are less well developed. Developing aggregated assessments of the curricular dynamics of these programs will fall within the overall institutional assessment enhancement.

PROJECTION

In the next three-year period, the University will focus institutional assessment efforts on the NU Core. Initially, the focus will be on two of the Core's components: experiential learning and writing intensive (WI) courses. Assessment will be based on the English Department's current approach to the analysis of writing outcomes and the e-portfolio project coordinated by CIETL.

The second, and most likely overlapping, phase of assessment development will focus on effective, course-embedded assessment for all NU Core courses. Ultimately, course-embedded assessment will be extended to all courses in all units. The draft assessment plan developed by the 2007-08 Ad Hoc Committee for NU Core Implementation will serve as the initial framework for course-embedded assessment. Assessment will be built on processes already developed in the Northeastern programs where programmatic outcome assessment is an expectation of accrediting bodies and the information gathered from the faculty survey.

After the initial three-year focus on NU Core assessment, all departments and courses will be expected to be engaged in appropriate assessment and revision. Achieving success in this broad goal will be greatly enhanced by the previous development of the NU Core assessment, by the previous development of outcomes-based assessment in the professional programs, and by the national climate — both of expectation for accountability and of increasing availability of resources.

Leadership will be shared among the Vice Provost for Undergraduate Education, the academic deans and associate deans for undergraduate education, the Faculty Senate Agenda Committee, the University Undergraduate Curriculum Committee, and the Center for Innovation and Excellence in Teaching and Learning.

While clearly identified leadership is necessary, success in creating a campus culture of effective assessment requires engaging the entire faculty. Currently there are many Northeastern faculty members who use various assessment tools and draw on the data they yield to improve courses and programs. It will be important to nurture this fertile ground by identifying and sharing other examples of effective assessment and by making available the resources for development of additional assessment tools.

The key step in engaging more faculty will be having faculty members focus on identifying

outcomes they value and then asking them to translate those values into outcomes, assessment rubrics, scoring expectations, and a process for closing the assessment loop with curricular modification.

INSTITUTIONAL EFFECTIVENESS

Northeastern University has undertaken a number of University-wide initiatives that have entailed reviewing the quality, integrity, and effectiveness of its academic programs. Moving from a quarter calendar to a semester calendar, developing integrated learning models to enhance the intentional linkage between course-based and out-of-classroom learning in undergraduate majors, creating a new mission statement for the University, and implementing a new general education curriculum have all required significant evaluation and assessment of existing programs in order to improve student learning and the programs that Northeastern delivers.

Northeastern is also close to the professional community, and many of its programs are evaluated by working professionals who advise the University on essential skills for students and the relevance of Northeastern's academic programs in the rapidly evolving marketplace.