STANDARD IV

Programs and Instruction

Program and Instruction Task Force:

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The University of New Hampshire's *Mission Statement* clearly articulates the institution's primary focus as the education of its students, "providing comprehensive high quality undergraduate programs and graduate programs of distinction." As the sole public research university in the state, UNH acknowledges its special responsibility to its original land-grant charter which mandates that the study of liberal arts and sciences be combined with professional training in agriculture and technology "to serve the public need for educated citizens."

The University continues to strive to fulfill its multiple educational mandates through the high quality of its undergraduate and graduate programs, faculty commitment to teaching and research, and the expansion of its public service activities. New interdisciplinary research centers and programs, the growth of international, interdisciplinary, and graduate programs, significant increases in faculty research and public service, and efforts to utilize new technologies in research and instruction, all testify to an institutional commitment to educational excellence. At the same time the University community is engaged in an ongoing discussion of crucial educational and organizational issues. How the University should balance the components of its mission and how it should address general education, graduate research, methods of assessment, and cultural diversity, remain live questions.

The following self-study of programs and instruction is divided into a brief descriptive overview and five sections addressing undergraduate degree programs, graduate degree programs, instruction, scholarship and research, and public service and special activities. Each section incorporates separate description, appraisal, and projection subsections. Responses to the NEASC's criteria for admissions and retention appear within sections on undergraduate and graduate degree programs.

OVERVIEW

The University of New Hampshire confers degrees at the associate, bachelor, master, and doctoral levels. There are 120 undergraduate degree programs

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offered at the University which include interdisciplinary and interdepartmental majors as well as traditional majors in a single academic discipline. Student-designed majors, double majors, and dual degrees are also available to undergraduate students. At the graduate level, the University has 53 masters degree programs and 23 programs leading to the doctorate. The University's 14 associate degree programs are located within the Division of Continuing Education, the Thompson School of Applied Science in the College of Life Sciences and Agriculture, and at the University's Manchester campus.

The University also offers a wide array of specialized programs designed to foster professional development and increase educational opportunities for nontraditional students. The University of New Hampshire at Manchester and the Nashua Graduate Center have provided increased access to the University's programs for commuter students in the most populous regions of the state. The Division of Continuing Education, in collaboration with the University's schools and colleges, offers non-degree programs and in-service training to increasingly diverse constituencies in business, technology, state agencies, and public education.

Over the course of the last decade, the University has developed new programs and revised and improved existing programs to meet changing educational needs. Increased student demand at the undergraduate level has led to program development and growth in the biological sciences, ecology, humanities, international perspectives, communications, nursing, occupational therapy, and women's studies. With the integration of the University of New Hampshire at Manchester in 1985, the University expanded its associate degree programs to include biological science, business, computing, and sign language interpretation.

Since 1983, there has also been a sustained effort to strengthen graduate education. Masters degrees have been added in marriage and family counseling, health administration, nursing, ocean engineering, and special education. At the doctoral level, degrees added in the last ten years include: animal and nutritional science, computer science, education, natural resources, and reading and writing instruction.

The University of New Hampshire's academic year consists of a 14 week fall semester, 15 week spring semester, and 10 week summer session. While courses vary in length and number of credits, the standard University course receives 4 credits and meets for 3 hours per week. However, some courses, especially in professional programs, maintain a 3-credit norm. The typical UNH class meets from 42-45 hours per semester and students are expected to spend additional out-of-class time in study, research, conferences with instructors, and tutorials. A normal undergraduate course load is 16 credits per semester and may not exceed 20 credits except by special petition. The baccalaureate degree requires a minimum of 128 credits, associate degrees require a minimum of 64 credits, and masters degrees require at least 30 credits.

The administration of all academic programs at the University is the responsibility of the Provost . The deans of the College of Life Sciences and Agriculture, the College of Liberal Arts, the College of Engineering and Physical Sciences, the Whittemore School of Business and Economics, the School of Health and Human Services, the University of New Hampshire at Manchester, the Graduate School, and the Division of Continuing Education oversee programs in their school, college or division. Within these contexts, several administrative structures ensure the educational integrity of each academic program.

Proposals for new courses, program changes, and the initiation of new programs are normally evaluated first at the department level. Each college or school has a governing body or curriculum committee composed of faculty that considers departmental recommendations. Undergraduate general education requirements and proposals for new general education course offerings are subject to the approval of the University General Education Committee. A proposal for a new undergraduate major, program, or degree is forwarded to the dean, Provost, the System Academic Planning Council, the Administrative Board, the Academic Affairs Committee of the Board of Trustees, and finally to the full Board. New graduate programs follow a prescribed process which includes review by the department faculty, Systems Academic Planning Council, Graduate Council and the Graduate Faculty. Recommendations for new programs are then sent to the Vice President for Academic Affairs and to the Board of Trustees for final approval. Finally, a policy of regularly sequenced program review was initiated by the Provost in 1991 to provide for the ongoing assessment of existing programs.

Academic policies, program and course descriptions, and degree requirements are clearly specified in the Undergraduate Catalog, Graduate Catalog, UNHM Catalog, and Thompson School Catalog which are regularly reviewed, updated and revised. The University's Time and Room Schedule, UNHM Bulletin, and DCE Bulletin, which are published each semester, contain listings of current course offerings. All official publications are checked for accuracy by the relevant faculties and by the Office of University Publications. Colleges and departments also produce handbooks and brochures which detail program objectives, requirements, and course sequencing advice.

UNDERGRADUATE DEGREE PROGRAMS

DESCRIPTION

Degree Programs and Requirements

The University of New Hampshire offers five bachelor's degrees: bachelor of arts (BA); bachelor of fine arts (BFA); bachelor of music (BM); bachelor of science (BS); and bachelor of science in forestry (BSF). Three Associate's level degrees are also offered: Associates in Arts (AA), Associate in Science (AS); and Associate in Applied Science (AAS). (A full listing of UNH programs and degrees is given in Appendix D.)

Undergraduate degree programs at the University are designed to provide academic breadth across disciplines through general education requirements, concentration in a major field of study, and opportunities for pursuing individual interests through electives.

Requirements	Credits
General Education Major Field Electives	40 32 - 72 16 - 56
Foreign Language or Equivalent (BA) Graduation	0 - 8 128

BACCALAUREATE CURRICULUM

Requirements	Credits
General Education	17-28
Major Field	20-32
Electives	12-16
Graduation	64

ASSOCIATE CURRICULUM

Undergraduate students at the University need to maintain a grade point average of at least 2.0 on a 4.0 scale in order to graduate. These and other University-wide policies are periodically reviewed by the Academic Standards and Curriculum Committee of the Academic Senate. The Office of the Registrar reviews student records to ensure that all Universityrequirements have been met. Departments, schools, and colleges are responsible for ensuring that candidates for graduation have met requirements in their majors.

Undergraduate courses of study at UNH are designed to meet student needs and provide intellectual challenge. The grade point averages (GPA) of UNH students are one indication that curricula are appropriate to the abilities and scholastic preparation of admitted students. According to statistics compiled by the Office of Institutional Research, in 1991-92 undergraduate GPAs averaged 2.84 in the fall semester and 2.92 in the spring semester. Preliminary data from for the 1992-1993 academic year indicate the average GPA for the fall semester was again 2.84. However, the numbers of scholastic warnings approximately doubled from the fall of 1991 to fall 1992. Improvement in retention and graduation rates suggest that undergraduate courses of study are meeting student needs. 85% of all first year students now return the following fall as sophomores, and 5 year graduation rates have steadily increased from 62% in 1982 to 70% in 1992.

General Education

In 1983, after extensive study, a University Commission on General Education proposed a new more rigorous General Education Program for UNH undergraduates. The new program was instituted in the fall of 1984 and the General Education Committee was established to monitor requirements, review the program's progress, and make recommendations for improvements. A description of the program's philosophy and goals are contained in the *General Education Bulletin*.

The General Education program sets the pattern for all undergraduate study at UNH. Its coherence derives not only from the broad categories of knowledge which students must study to be considered educated; it also recognizes that the fundamental task of education is to teach people how to learn and how to apply knowledge. Thus, the General Education component is designed to emphasize the acquisition and improvement of fundamental skills essential to successful completion of advanced college work: the abilities to think critically, to read with discernment, to write effectively, and to understand quantitative data. It aims to acquaint the student with some of the major modes of thought necessary to understand oneself, others, society, and the environment. It seeks to develop a critical appreciation of both the value and the limitations of significant methods of inquiry and analysis.

General Education is intended in part to serve as a foundation for any major, and also to introduce students to broad areas of knowledge they may not have previously encountered. Based on the premise that change is the dominant characteristic of our times and that truly useful education stresses intellectual adaptability and the development of those problem-solving abilities, cognitive skills, and learning techniques vital to lifelong learning, the program aims to go beyond the mastery of specific job-related skills and educate students so that they learn how to learn.

Courses carrying general education credit are designed to broaden the undergraduate learning experience. The goals of the program are to:

- help students learn to organize and express their thoughts in a variety of disciplines through significant writing experiences;
- introduce students to the fundamentals of language, issues, perspectives, and methodologies in a particular field, discipline, or sub-area of study;
- deal with the larger issues and ideas of our time with which any University graduate should be familiar;
- focus upon and stress the acquisition and improvement of basic skills generic to further learning: sophisticated reading comprehension, library research, critical thinking, scientific reasoning and laboratory research, and effective writing;
- balance the content knowledge of a subject with how knowledge is acquired, verified, utilized, and communicated;
- include perspectives from a diversity of cultural traditions, races, classes, and genders; and,

 encourage students to understand and to formulate their own interdisciplinary connections.

The general education requirements are the same for all Bachelors' degree programs, requiring 10 courses in 8 categories for a minimum total of 40 credits. Since a minimum of 128 credits is required for graduation, this represents 31% of a student's studies. Candidates for the bachelor's degree must fulfill the following general education requirements:

Group 1.	One course in writing skills, which must be taken during a student's first year;
Group 2.	One course in quantitative reasoning, which must be taken during a student's first year;
Group 3.	Three courses in biological science, physical science, or technology, with no more than two courses in any one area;
Group 4.	One course in historical perspectives;
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- Group 5. One course in foreign culture;
- **Group 6.** One course in fine arts;
- Group 7. One course in social science; and,
- **Group 8.** One course in works of philosophy, literature, and ideas.

The University's associate degree programs also have general education components. In the associate in arts and associate in science programs 6 and 7 courses respectively are required from 6 categories for a total of 24 and 28 credits. This represents at least 37% of the 64 credits of study required for graduation. In the associate in applied science, 17 credits, or 27% of a student's program, are required in a general education program offered within the Thompson School that is substantially different from the University General Education Program.

Students and faculty are generally satisfied with the goals and structure of the General Education Program. It is ambitious, rigorous, well conceived, frequently monitored, and revised as necessary. Many faculty find the mix of students in such courses interesting to teach. There is some, perhaps natural, frustration with its cost and implementation, however. Its

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original ambitious goals of small class size and substantial writing in all courses have never been realized completely. From the outset it was recognized that adding a substantial writing requirement in large lecture courses, such as introductory psychology, was unrealistic. In some cases, faculty members have reduced the writing component to a "realistic" level commensurate with the number of students enrolled. However, the program has also initiated some significant changes in the quantity and quality of writing required in many of its courses.

Although the University has made significant financial commitments to provide reasonable student access to desired courses in each category, there have been periods, particularly in the middle to late 1980's, when certain general education courses filled up so quickly that not all students could be accommodated during a given semester. Crowded courses have also caused concern that in some cases the laboratory science experience is not as rigorous as desired because laboratory facilities are limited. Efforts have been made to correct that difficulty by providing additional funding, reducing the number of required general education courses to 10 from the original 11, and by redefining Groups 7 and 8.

Another concern is that a significant number of courses in the program are staffed with part-time and temporary faculty. For example, in the fall of 1991, of 562 course sections taught, 314 sections, or 56%, were taught by tenure track faculty. 248, or 44%, were taught by non-tenure track faculty. While a certain percentage of those faculty may be faculty in residence or 95% time core instructional faculty, and while part-time faculty are often skilled teachers, this percentage indicates that undergraduate students are less likely to be exposed to experienced senior faculty outside their majors.

Since 1984, the General Education Committee has fulfilled its charge to provide ongoing assessment of the University General Education Program. Courses included in each group at the start of the program in 1984 were re-examined in 1985. Each new course proposed for general education has been reviewed for suitability for the proposed group, approaches to teaching critical thinking, class size limitations, concern for diversity, and the inclusion of appropriate writing experiences. In 1986, the Committee developed guidelines to promote writing across the curriculum and organized faculty development workshops. From 1988-1990, a grant from the University System supported the use of a curriculum consultant to work with interested departments on the integration of writing within their courses. A variety of formal and informal communications to the General Education Committee indicate that this program is well respected among secondary schools, colleges and businesses throughout the New England region, and that is serves as a significant factor in attracting applications for admission.

Academic Majors

As described in the University's Undergraduate Catalog, in-depth study in at least one disciplinary or interdisciplinary area is assured by the requirements in a student's declared major. Admissions requirements for secondary school preparation necessary for each degree program are also specified in the Catalog, as are the prerequisites for advanced-level courses within the program. Except for some specialized professional majors, unrestricted electives are included in undergraduate programs.

Every academic major at the University is designed to develop mastery of knowledge, methods, and relevant theories in a particular disciplinary or interdisciplinary area of study. All major programs require a concentration of coursework beyond the introductory level, and properly sequenced foundation courses and advanced courses. A minimum of 32 credits earned with a C- or above are required to complete most majors. However, many majors require more than 32 credits and students typically elect to take a greater number. While majors generally require some freshman level courses within the home department, most of the student's major courses will be at the sophomore level or above. Many programs also require special projects, research, internships, portfolios, or a senior thesis as an integrative concluding experience.

The requirements for each area of concentration are detailed in the *Undergraduate Catalog*, and programa are subject to ongoing review by the department faculty, with a general University programmatic review every six years. In addition, several academic programs are subject to periodic reviews of effectiveness by specialized accrediting organizations.

Special Academic Programs and Degrees

The Honors Program. The University Honors Program was established in 1984 and is open by invitation to highly qualified incoming freshman, some transfer students, and continuing freshman and sophomores with a 3.2 grade-point average or better. Both University honors and honors-in-major programs are available. The University Honors curriculum consists of the freshman/sophomore seminar, Intercollege 404, plus a number of honors-designated general education courses. Thirty-eight honors-in-major programs are currently available across all five undergraduate colleges. Students in the Honors program are automatically considered for the program's merit scholarships. As reported in the University's 5th Year Report to the Commission, there were 560 students enrolled in the Honors Program in 1988. In the fall of 1992 the figure was 866.

Undergraduate Research Opportunity Program (UROP). UROP was established in 1987 to foster faculty-student collaboration in research. It provides funding to allow undergraduate students to design, propose, and conduct their own research under the supervision of a faculty mentor. Both academic year and summer stipends are available.

The Center for International Perspectives. The Center for International Perspectives designed in 1989 to "foster the growth of international awareness and programming." A full-time faculty director coordinates the dual major in international affairs, study abroad opportunities, and exchange programs, integrates international students through the International Student's Office, facilitates student applications to the Fulbright Scholarship Program, and organizes an International Seminar series each year.

Dual Major in International Affairs. The dual major in International Affairs was developed in 1987 and is administered by the Center for International Perspectives. It is a multi-disciplinary degree which combines the international affairs program with another appropriate major. The program requires core coursework in international perspectives, electives in science, technology and policy, foreign language competency, and a minimum of two months in an approved educational placement in a non-English speaking country. Humanities Major. The interdisciplinary Humanities Program has offered a major in humanities since 1988. A full-time faculty member serves as coordinator of the program and faculty within the College of Liberal Arts are appointed to serve as core faculty. A sequence of upper level and team taught humanities courses have been developed since 1983 to support the major and a senior thesis and oral examination requirement has been added.

Women's Studies Major. The Women's Studies major was approved in 1991 and offers an interdisciplinary program composed of core courses in women's studies and supporting cross-listed courses in a variety of other departments. Core courses are taught by two full-time faculty members appointed within the program and 12 faculty from other departments who are appointed as core women studies faculty.

Domestic Exchange Programs and Study Abroad. The University has extended its domestic exchange and study abroad programs and improved their coordination through both the National Exchange Program and the Center for International Perspectives. Foreign exchange programs, which are structured in several different ways, all serve the common goals of providing inter-cultural experiences, and increasing foreign language competency. UNH assures the academic quality of courses at all institutions with which it has a formal exchange relation either by direct control over the program or by working with other institutions to ensure the program's quality.

Field Experience and Internship Programs. Students may also earn academic credit off campus through approved internships and field experience programs. Students who desire academic credit for career-related experience may work through the Internship/Field Experience Program in the Office of Career Services to develop a proposal and identify a faculty sponsor who will guide the proposal process, ensuring appropriate assignment of academic credit and supervising the field experience to ensure its integrity. The Internship Program and the faculty sponsor both monitor the project and verify its completion. Many majors also require internships. All undergraduate candidates for teacher certification and almost all the majors in the College of Health and Human Services complete closely supervised clinical experiences. Other examples include a social welfare work experience, psychology externship, hotel administration internship, practicum in family and consumer studies, and journalism. Specific departments and their faculties monitor these programs to ensure their effectiveness.

Associate Degrees

The associate in arts (AA) and associate in science (AS) degrees offered by the Division of Continuing Education and University of New Hampshire at Manchester are primarily designed for non-traditional students who have interrupted or deferred their education or careers. These programs are organized to be comparable to the first two years of a general bachelor's degree program. Candidates enroll in University courses designed for bachelor's degree programs. Over 90% of students who earn an AA or AS degree pursue a Bachelor's degree at the University.

The associate in applied science (AAS) degree programs in the Thompson School began as a group of terminal, two-year technical programs. The Thompson School administers its own associates degree courses which are taught by faculty members appointed within disciplinary areas in the school. Credits earned within these courses are not equivalent to regular University credits. At present, 60% of the credit hours earned in an AAS degree are transferable to University bachelors programs. This parallels the University's transfer credit policy for vocational/technical schools and recognizes the vocational and technical goals of AAS degree programs. Baccalaureate Track Agreements which will facilitate the transfer of Thompson School students to four year majors have been designed and are in the process of approval.

Special Credit Programs and Summer Sessions

Division of Continuing Education. While many institutions clearly distinguish their continuing education programs by offering them at alternative times, developing different curricula, or employing a separate faculty, the University of New Hampshire has an integrated continuing education division. With the exception of a few credit courses related to the A.A. programs, all other credit courses offered through continuing education are baccalaureate level courses offered by academic departments. Thus, non-matriculated students are given access to regular credit-bearing courses listed in the *DCE Bulletin* each semester. Since the vast majority of credit courses taken by continuing education students are regular courses

within the schools and colleges, the University has direct and complete responsibility for the academic content and delivery of these courses.

The Division of Continuing Education also offers courses at the Nashua Graduate Center. This provides access to credit courses for part-time and continuing students, non-credit courses and workshops for professional development and personal enrichment, and non-degree diploma and certificate programs. The Division has expanded access to higher education by offering some of its courses as telecourses broadcast over public television with regular meeting and discussion periods with approved instructors.

In 1988, the position of Dean of Continuing Education was created to improve and strengthen the administration of the division. The Dean regularly assesses the quality of both the summer session and and academic year offerings and collaborates with the deans, departments, and faculty members in planning. Since 1989, the Division has sponsored University grants to support the design of innovative summer courses and institutes.

Summer Sessions. Summer courses lasting between 5 and 10 weeks are offered at both the graduate and undergraduate level through the Division of Continuing Education. The majority of these credit courses take place on the Durham Campus, although some are given at the Nashua Graduate Center in Nashua, NH. A summer session is also offered at the University of New Hampshire at Manchester and is administered directly through UNHM.

Since the time frame for summer courses is abbreviated, classes often meet more frequently each week. The length of each class is extended and out of class activities or conferences are required to ensure equivalence in terms of contact hours. With summer study abroad programs and many special institutes, the formal academic component is augmented by intensive experiential learning.

While certain courses (calculus, certain science courses) may be more difficult than others to tailor to an abbreviated term during the summer session, efforts have been made to accommodate to the shorter period without compromising the integrity of the courses. The fact that regular faculty commonly teach these courses using their normal syllabi, including testing and writing assignments, strongly suggests that these courses are generally comparable both in terms of their content and process. Even though they are shortened, summer courses do offer some unique pedagogical benefits and opportunities. Along with the beneficial effects of smaller class size, which provides for greater interpersonal interaction, the frequency and duration of class time can also help build a community of learners more rapidly, which in turn facilitates productive discussion and collaborative learning. Recent data from the Office of Institutional Research comparing student evaluations of summer courses to those in the regular academic year shows that summer evaluations of course content and design are generally higher than those for semester length courses, even when taught by the same instructor.

Academic Advising

Advising is a major factor in determining the quality of life for a student and is widely recognized as contributing to the enhancement of the learning experience at the University. Students depend on quality advising to assist them in proper course and curricula selection, to provide direction in terms of career decisions, and in some cases to help them address difficult problems in their lives. For minority and non-traditional students, effective advising is even more critical. Recognizing the crucial role which academic advising plays at the University of New Hampshire, the Provost appointed a Committee in the Fall of 1992 to review undergraduate academic advising on campus and make recommendations for improvement..

There are several advising systems in place at the University to meet the needs of students in different programs, degrees, and colleges. In the Colleges of Liberal Arts, Life Sciences and Agriculture, and Engineering and Physical Sciences (CEPS), and in the School of Health and Human Services, faculty assume the major responsibility of advising majors in their programs. Undeclared majors are advised by an Academic Counselor in the School for Health and Human Services, by faculty in College of Life Sciences and Agriculture, and by the Associate Dean in the College of Engineering and Physical Sciences. In the Thompson School, responsibility for organizing and allocating advising lies with the seven program Chairs, and the advising process is overseen by the Assistant Director of the Thompson School.

The large population of undeclared majors in the College of Liberal Arts (25%) is served by a different advising mechanism. The University Advising Center provides academic advising for all undeclared liberal arts students and certain provisional (pre-major) students in English, political science, history, and psychology. However, the University Advising Center is open to all students who need advising support. The Center has a professional staff of academic advisors as well as a group of faculty who volunteer their time to ensure that all students with questions about curriculum and program planning can get direct and informed assistance.

The Whittemore School of Business has an Advising Center which serves all of its majors. In addition, WSBE has a formal Peer Advising Program in which upperclassmen advise first year students. WSBE faculty do not have formal assigned advisees, but do meet regularly with students on academic matters.

The Division of Continuing Education has primary responsibility for advising all non-matriculated students enrolled in credit-bearing courses as well as matriculated students in the associate of arts programs. At UNHM, there is an Academic Advising Center as well as faculty advising for all matriculated students. Academic counselors and faculty members also work with non-matriculated students on an informal basis since there is a high percentage of continuing education students registered each semester. There is no formal mechanism for advising non-matriculated students at UNHM, however.

TASk (Training in Academic Skills) also provides supplemental advising for particular constituencies. These advising services, directed primarily at low-income, first generation college students, and students with disabilities, are a part of a larger academic support package that fosters the academic success of these students and, as appropriate, facilitates their enrollment in graduate level programs. TASk has recently received a grant from the US Department of Education to continue these efforts from 1993–1997. 16 PAT staff members in the various school and colleges and the Advising Center assist faculty in supporting the advising needs of students.

In the last ten years, the administration has provided funding, facilities, and incentives to promote the goal of good advising. The *Report of the Undergraduate Advising Review Committee* in 1993 found that although there is a great deal of variation in advising methods at UNH, the systems seems to be working well. Two out of three students surveyed felt their

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advisors provided adequate advising time and accurate helpful information. Faculty and professional staff devote a considerable amount of time counseling informal advisees, are knowledgeable about academic support services such as TASk and direct students to those services appropriately. The professional advising group is committed, appropriately credentialled, and well informed. The recent development of a Professional Advising Network has facilitated communication among the professional advising staff.

The *Report* of the Advising Review committee also found that: there is a need for greater information sharing between departments and the academic support services; when departments revise their requirements or policies, students can be inadvertently given outdated information; as departments become more restrictive in their policies to allow students into the major, more students are using the option of undeclared status to pursue their major programs for some period of time; many students are not taking sufficient responsibility for evaluating or monitoring their own academic progress; and many faculty feel that good advising is not well recognized or rewarded.

The *Report* made several recommendations, among them that students and faculty (with departmental support) take additional responsibility as advisors and advisees; that advising should be more accurately described in the promotion and tenure guidelines and that excellence in advising be honored with annual awards; that the Professional Advising Group become a formal group empowered by the Provost; and that the Office of Academic Affairs seek ways to reorganize and integrate support services with the Professional Advising Network; that each academic department appoint an Undergraduate Advising Coordinator; that peer advising, computer assisted advising, an Advising Hotline and Advising Handbook (for each school or college) be explored as options to support current advising systems.

Admissions

Within the limits of its resources, the University is open to all qualified students. If the number of students to be admitted must be restricted for lack of adequate staff or facilities, admission is then based on individual merit. The only departure from a completely non-discriminatory admission policy

consistent with the University's educational mission is that which is imposed by the University's public, tax-supported character. Accordingly, in academic programs where enrollment restrictions are in effect, qualified New Hampshire students are given preference over students from other states and foreign countries as required by New Hampshire law.

Admission policies and procedures are generally consistent and equitable in part because there has been long-term consistency in administration of the admissions process. Continued efforts are being made to increase access to University programs and improve the overall educational climate for women, minorities, those with physical or learning disabilities, and non-traditional learners. Organizations which support these efforts are described in the Student Services Standard. Most Departments also work closely with admissions to recruit particular groups of students.

Generally, the University seeks to encourage the interest of students from other states and foreign countries. During the 1992–1993 academic year approximately 40% of the University's students attending are from out–of–state. This circumstance contributes both to the realization of enrollment objectives for the University's schools and colleges as well as to the cultural enrichment of the general school population.

Considerable care is given to insure that students approved for admission have demonstrated "reasonable potential for success." The academic performance of freshmen is clearly monitored by the Admissions Office which also maintains a regular dialogue regarding freshmen "outcomes" with the Guidance Offices of the University's primary feeder schools.

The University does not accept undergraduate students conditionally. However, a relatively small number of students (130–160) are approved for freshman admission each year whose acceptance letter includes expressions of "concern." These are students who have met the University's basic admissions criteria but whose achievement records have been on the margin in terms of University performance standards or they have been students whose senior year achievement showed a negative trend.

The University of New Hampshire at Manchester, in order to increase access to a broader range of students, has developed a College Transition Program (CTP) which is a revision of its Alternative Freshman Year Program. The Transition Program admits students who show academic promise but who may have gaps in their record of achievement. While students are fully admitted to an associate's degree program, they must meet certain conditions to retain that status. Key components of the program include mandatory orientation and assessment in math, reading and writing, regular learning support from the Learning Center, and a formal mentoring relationship with an advisor for the CTP program.

Awarding of Credit

The University of New Hampshire assumes full responsibility for the awarding of academic credit based on course content and degree level.

Qualified transfer students are encouraged for those academic programs with enrollment capacity at advanced levels. At the undergraduate level, the University's Office of Admissions evaluates transfer credit in cooperation with the admitting department. Transfer credit is approved for coursework completed at regionally accredited colleges and universities which is judged to be comparable to courses offered at UNH according to the American Association of Collegiate Registrars and Admission Officers' *Transfer Credit Practices of Designated Educational Institutions:* 1990–1992, and which has been completed with a grade of "C" or better.

A handbook of transfer credit policy is maintained by the Admissions Office and was updated in June of 1991. This provides a compilation of University transfer credit policies which govern the awarding of transfer credit. Copies of the handbook are distributed to the University's schools and colleges, the University Advising Center and the Division of Continuing Education. Formal articulation agreements for transfer students have been established between the University and the New Hampshire Technical Institute as well as between the University and several of the New Hampshire Technical Colleges. Information about admissions and transfer processes can also be found in all the major University catalogs.

Transfer of departmental major credit is decided by the department on the basis of course similarity and competence testing. Thus a transfer music major, for example, might be awarded 4 credits for a music theory course taken at another institution, but find that he or she must repeat that course here for credit toward the major since the material covered did not correspond.

UNH recognizes the College Level Examination Program (CLEP) and the College Board Advanced Placement Program (AP) as means for evaluating a student's eligibility for advanced placement and credit. In order to be eligible to receive credit for the CLEP General Examination, students may not have earned more than 57 semester hours of college credit at the time they take the examination. These examinations must be taken prior to the accumulation of sixteen credits as a matriculating student at the University. A list of exams, scores, and credits awarded is available from the Admissions office.

In general, the criteria for advanced placement credit are determined by the departments in question; the Admissions Office has developed a complete listing of the AP subjects, scores, course equivalents and credit awards given. It is rare that preparatory school courses would substitute for courses in the student's major. Such courses often will substitute, however, for General Education courses. Course awards for prior learning and the practice of "contracted-learning" are the province of USNH's College of Lifelong Learning.

Retention

Retention efforts are coordinated through departmental advising, Student Services, Academic Support Services, such as the Training in Academic Skills (TASk) Center, and the Advising Center. The University has been aware of the importance of retention efforts for many years. Retention, transfer, and withdrawal patterns are carefully monitored by individual departments and by Institutional Research. They are analyzed and assessed by the Enrollment Planning Committee (established 1983) to develop policies or take specific actions to increase admissions and retention effectiveness. These efforts appear to be successful as retention rates have improved from 66% for full-time entering freshman in 1985 (graduating in five years) to 71% and 70% respectively for students entering in 1986 and 1987. These figures are well above the national average.

APPRAISAL AND PROJECTION

There are many challenges that the University will face over the next few years. Some of the most important will involve curricular issues, assessment of teaching and learning, the balance of teaching and research, the relationship of undergraduate and graduate education, and diversity. Further, the continuing lack of sufficient support from the state continues to be a cause for concern regarding the University's ability to provide sufficient resources to sustain and improve programs and instruction at the level of excellence desirable. Given financial realities, it is likely that some present programs may be cut, combined, or moved to another USNH campus. If this occurs, the University will continue to ensure that matriculated students will be able to complete their programs in a timely manner.

The University's current intensive efforts in planning and evaluation should help us emerge from a coming period of consolidation and selective growth with a better understanding of our common purposes. While, over the next five years there will probably be no net gain in the number of programs funded by the University, we are confident that new programs will continue to be added as warranted both at the graduate and undergraduate level and that UNH will remain a vital, resilient and resourceful institution committed to discharging its mission fully and productively.

Significant changes in most baccalaureate major programs do not appear likely, but a continual process of streamlining courses and sequences will be necessary to improve efficiency and to keep pace with changing demands placed upon graduates in many fields. The University must also continue to work to develop fair and efficient techniques for dealing with changing enrollments in majors. Undergraduate advising at the University has recently undergone an intensive review. The recommendations of the Advising Review Committee are expected to be evaluated during the 1993-94 academic year.

The University's 4-credit, 3-hour norm was adopted after significant debate. The main reason for its adoption was to allow students sufficient out-of-class time to reflect on and research the topics being covered. This system has worked better in some academic areas than others. In particular, some professional fields, responding in part to pressure from outside accreditation agencies, have moved back to a 3–credit norm for their major courses. At present, the University, while adhering in the main to the 4–credit, 3–hour norm, has allowed individual department's great flexibility in determining the credit–structure that best reflects their major. There will continue to be some debate over the 4–credit, 3–hour norm, but it is unlikely there will be changes in the near future.

University undergraduate programs are well designed, properly sequenced, and coherent. There is a balance between general education requirements and major course requirements. Competency of students is assured by a sequential selection of courses in the major discipline and related areas. The faculty in each program frequently re-examine the required course sequences within the framework of their mission and program objectives. Formal reviews of all programs are required at six year intervals.

Most degree programs provide some unrestricted electives, but this is not possible in certain professional programs unless the credit requirement for a degree is increased to considerably more than 128 credits. Though most degree programs have some leeway in the number of majors they can accept, this is again not the case for certain professional programs due to shifts in student program demands and limited staffing.

The University has a rigorous and well designed General Education Program. The effectiveness of the program has been closely monitored since its initiation in 1984. While faculty and students are generally positive in their evaluations of the program, instructors in large general education classes have complained of some decline in academic skills among entering students. When this is superimposed upon the limited resources available to academic support services, new strategies seem necessary. Two avenues now being explored are a mandatory first-year course to orient students to academic resources and, in fall semester courses enrolling large numbers of first-year students, the development of segments dealing with appropriate study skills. In addition, considerable emphasis is being placed on using multimedia instruction in large introductory courses.

At the present time, the General Education Committee is developing a series of proposals to improve the efficiency and effectiveness of the program. In terms of the mechanics of the program, a more thorough assessment of the adequacy of teaching resources and facilities will be done Standard Four

during formal approval for newly proposed general education course offerings. Further, a reliable means of assessing general education outcomes is being explored to determine effectiveness of the program, but also to identify those areas where additional emphasis is needed. Many curricular changes are also being examined. Foreign study has been approved to satisfy the foreign culture requirement. Consideration is being given to a change in the writing requirement which will place more emphasis on writing in specifically designated courses, including certain general education courses, but also elective and major courses, while minimizing the writing expectations in large general education classes. A University–wide Writing Center and the development of computer simulations to augment or replace some more traditional laboratories are also under consideration.

Consideration is also being given to "clusters" of general education courses which allow students to pursue interests in greater depth and acquire a "discount" in requirements (e.g., count as four general education courses an appropriate cluster of three courses). This clustering may facilitate students' synthesis of cross–disciplinary perspectives which is one of the goals of the General Education Program. If the program is streamlined by the institution of "cluster" groupings, the credit hours for general education will decrease for some students. Care must be exercised in the design of these clusters to ensure that all goals of the program are maintained. Finally, serious consideration is being given to the idea of including a public service requirement, either through formal courses or other experiences, to teach the ethic of public service and provide experience in more culturally diverse settings.

The Division of Continuing Education is well integrated into the academic structure of the University and offers extended access to high quality academic courses for non-matriculated students. The AA and AS degree programs are two-year programs requiring one-half the credit hours of the bachelor's degree programs. Furthermore, as shown earlier, the percentage of general education courses in the associate's programs is somewhat greater than that in the bachelor's programs. Since no distinction is made between courses taken by associate's degree candidates and bachelor's degree candidates, these programs are of high quality and serve as an introduction to college-level study for students whose credentials do not meet all of the admissions criteria for acceptance into a four-year program. The Thompson School's AAS degree is designed as a terminal, vocationally-oriented, two-year degree. For some students, it may also serve as preparation for a bachelor's degree, but not in the direct sense of the previous programs. The proposed Baccalaureate Track Agreements may encourage more Thompson School students to continue at the University.

The activities of the Division of Continuing Education are likely to increase in response to student need. No significant changes appear necessary in the current AA and AS degree programs, and they appear to be meeting student needs. The Thompson School's AAS degree and its dual vocational and pre-baccalaureate roles however will continue to be assessed over the next few years.

With regard to summer programs, if anticipated growth in graduate programs occurs, this growth will certainly cause some increase in graduate summer programs. Doctoral and masters students are often on campus in the summer and need to continue their education. One practical difficulty limiting summer sessions in New Hampshire is the lack of air conditioning in most campus buildings. As additional summer residential programs are being created, the need for the coordination of all housing, dining, and recreational aspects of these programs will increase. The development of the Conference Office under the aegis of DCE, described later in this report, could be a step in that direction.

The University's Admissions Office serves all prospective undergraduates regardless of the school or college they seek to enter or their status as freshmen, transfer, or re-admission applicants. All advanced standing and transfer credit for entering undergraduates is awarded by the Admissions Office and for several years special admissions counseling has been provided as a support service to non-traditional students.

The success of the admissions process, including significant increases in financial aid have enabled the University to maintain its ability attract an academically able and sufficiently numerous freshman class in a time when the traditional college age population is decreasing. However, while student enrollment rates are healthy and tuition has increased, student financial aid has grown more quickly than any other part of the university's budget. We may not be able to meet the dramatic growth in the need for financial aid much longer, which could impact on recruitment and retention. Our current retention rate of 70+% is, however, quite favorable. We have developed comprehensive plans for increasing the diversity of the student population, but we have not attracted as many minority or international students as we would like. The University anticipates no basic change in its admissions procedures. There will, however, be increased pressure to award credit for non-academic experiences other than strictly academic, especially for non-traditional students.

GRADUATE DEGREE PROGRAMS

DESCRIPTION

Administration

Graduate education at UNH is supervised by the five hundred faculty members of the University's Graduate Faculty. The Graduate School is led by the Dean, who is advised by the Graduate Council. Elected faculty and graduate student representatives serve on the Council. The Graduate Faculty consists of all faculty members who have been appointed on the basis of their professional credentials, active participation in research, or other professional activities as determined by their respective departments. Criteria for membership is reviewed by the Graduate Council and the Dean and prospective members are designated by their department chairperson or equivalent, on the recommendation of the department's Graduate Faculty.

Admissions

Admission to the Graduate School is both limited and competitive and is based upon academic qualifications and potential. All applications are processed through the Graduate School and reviewed by faculty members of the appropriate program. There are three admissions categories at the graduate level: regular admission (for students whose records and documentation indicate the are fully qualified for graduate study in the program of their choice; provisional admission; and conditional admission (for applicants whose academic records indicate deficiencies but suggest some promise of success). The Graduate School will accept no more than eight transfer credits in order to preserve the integrity of its degree programs. As of spring semester 1993, our graduate programs were serving 1,526 students enrolled in Certificate of Advanced Study, Master's, or Ph.D. programs.

Mission

One of the basic tenets of graduate education is that for quality graduate education to thrive, research must coexist with and enhance the process of classroom teaching. Faculty members of the Graduate School, while dedicated to teaching, carry on active research programs. Their research serves many vital purposes. First, it supports graduate education by developing new knowledge in areas of scholarly interest. Second, it provides training opportunities for graduate students in residence. Moreover, these programs fulfill the University's obligations as a land-grant, sea-grant and space-grant institution, by conducting research and disseminating information to the public in areas affecting the nation's welfare. As the state's only public university, UNH occupies a unique role. It is the primary Institution within the University System of New Hampshire responsible for providing graduate programs that meet state, regional, and national needs—and the only one at which doctoral programs are offered.

Development and Current Programs

The University of New Hampshire has developed its graduate programs carefully, with major emphasis being given to program quality, demonstrated need in society for program graduates, clear student demand for the program, and evidence of a positive impact on undergraduate programs. Proposals for new graduate programs generally originate with the responsible faculty and follow a rigorous set of steps requiring approval at the Departmental, College, University and System levels. At the University level, an elected Graduate Council, and the Dean of the Graduate School oversee the proposal process. Proposals must demonstrate need, demand, lack of redundancy within the system, internal cohesiveness and availability of faculty and financial resources, including library support.

This intensive process results in relatively few new degree programs in any given period of time. It may be a period of two years or more between the time a proposal is first submitted and a final decision on the program is made. However, this process leads to programs of high quality which enhance the overall academic mission of the institution. Since the last accreditation review in 1983, 10 new programs have been initiated, 5 at the Ph.D. level and 5 at the Master's level.

Enrollment

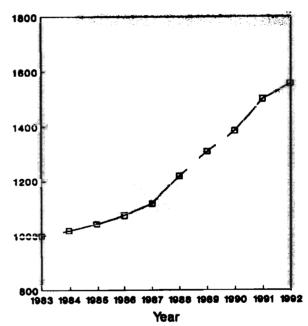
As predicted in the 1983 Self-study, and in accordance with the 1990 Academic Plan, total student enrollment at the Graduate level has increased steadily over the last 10 years, with masters' students representing about 75% and doctoral students about 25% of enrolled graduate students. Even with increasing enrollments, the quality of the incoming graduate student

body, as judged by undergraduate grade point averages and Graduate Record Examination scores, has remained steady over the last 5 years. Clearly, increasing graduate enrollments are not coming at the expense of student quality.

Requirements

The graduate degree programs at the University of New Hampshire vary according to discipline in the range of intellectual activity and course or program requirements. The graduation requirements

University of New Hampshire Total Graduate Enrollment



therefore exhibit an appropriate range of expectations. Master's degree programs include both professional and academic tracks, with the requirements of the degree varying with the purpose. For example, masters programs in nursing, education, and music contain practicum, internships, or performance requirements as part of the degree. Programs designed for mid-career professionals like the Masters in Health Administration and the Executive Masters in Business Administration tailor course offerings to meet the schedules of those working full-time at managerial-level jobs. The list of concluding experiences for the master's programs demonstrates a wide range of requirements which reflect the uniqueness of the disciplines. These include examinations, thesis and non-thesis options, field study, capstone courses, and internships. A minimum of 30 credits is required for the degree.

Requirements for the doctorate include a written and/or oral qualifying exam, thesis, and thesis defense. Some programs include a second pre-thesis exam as well as a language requirement. Standards for residency and the formation and function of the thesis committee are set by the Graduate School and published in the *Graduate School Catalog*. Numbers of credit hours required for each program are variable, and many programs also require a teaching experience component for graduates.

Financial Support

The largest source of financial support is University teaching assistantships which are distributed through colleges and departments. The number of teaching assistantships has grown nearly 20% (from 282 to 348) over the last ten years. Indeed, a commitment was made in 1992 to add ten assistantships every year for three years. In addition, full-time tuition scholarships have increased from 55 to 65, and part-time tuition scholarships from 50 to 81. Two Presidential Scholarships, which include full tuition waivers and stipend, are awarded every year to minority graduate students to promote diversity. The Graduate School has also recently applied for six Patricia Harris Roberts Fellowships from the US Department of Education for minority students entering master's programs in education. This effort is intended to enhance diversity both within the University and externally in the state and region, and to provide models for undergraduate minority students. University dissertation fellowships and summer fellowships provide additional support to graduate students. During fiscal year 1993, 14 Dissertation Fellowships of \$9,500 and 42 Summer Fellowships for Teaching Assistants of \$2,100 were awarded. Over the same time period, the number of project and research assistants, and graduate and research associates (those supported by external grant awards) has increased from 99 to 185. This is linked to the dramatic increase in external grant funding.

In an attempt to increase the competitiveness of the University's graduate programs in recruiting top-ranked graduate prospects, the dollar

value of academic year stipends has been increased from a range of \$4,400–48,00 in 1983 to \$8,650–9,200 in 1993–94. A comparison of these rates with those of similar institutions in the regions shows that UNH is slightly below the median in this form of support. However, departments do have the option of augmenting the normal stipend to increase competitiveness in recruitment and retention if they have sufficient funds. Also, the total annual value of support can be nearly doubled if funds are available for full-time summer support.

APPRAISAL

One indication that graduate programs at UNH are perceived to be of high quality is the demand for those programs and the achievement of potential students as reflected in applications for admissions. Between 1983 and 1992, total applications nearly doubled from 1,096 to 2,014 (for fall 1993 admission) per year. Another important indicator is that graduates from master's and doctoral programs have gone on to find excellent positions in research, teaching, business and industry, health and social services, government, the arts, and the media.

Graduate programs undergo a stringent development and initiation process which ensures programs of high quality which are central to the university's mission. Existing graduate programs are reviewed both internally and externally. External evaluations for some programs occur during the professional accreditation process, although many of these deal with the entire Department, and thus are not focused solely on the graduate level program. However, these reviews are useful because they do consider the relationships between graduate and undergraduate curricula, instruction, and resources.

Considerable resources have been directed to the support of graduate education, and new efforts continue to be made to ensure the competitiveness of such support. The reduction of travel funding for graduate students from the Graduate School Office to attend conferences, and the elimination of Central University Research Fund support for graduate student research has decreased resources for students who are not supported by external funding sources. Several activities have recently been initiated which will provide additional internal assessments of existing graduate programs. Since 1991, a questionnaire soliciting graduates' opinions regarding their UNH experience has been distributed with the diploma. Responses to these questionnaires are currently being compiled. An external assessment will also be provided by the inclusion of many of the UNH doctoral programs in a national review of graduate education to be performed by the National Research Council. This review will include national rankings in different subject areas. Finally, the newly appointed acting Dean of the Graduate School, Karol LaCroix, has been charged with performing a critical internal review of existing graduate programs, to be started in fall 1993 and completed by spring 1995.

PROJECTION

There are three major, recent documents that outline the University's vision of the future of graduate education on campus: the 1991 Academic Plan, the 1992 Report of the Commission on Graduate Education, and the 1993 Report of the University Planning Council.

The University's *Academic Plan* projects an important role for graduate education in the growth of the institution. It notes that we have a disproportionately small number of graduate students and graduate programs for a University of our size, and suggests that there is unused potential to expand graduate programs selectively. Acknowledging the current financial realities of the University, however, the plan stresses that growth will have to be built on existing areas of strength. Overall, the plan foresees a change in total student population from 11,500 to 14,000 in the year 2010, and a shift in the ratio of undergraduate to graduate students from 9:1 to 6:1. Much of this growth is expected to occur in interdisciplinary and applied programs at both the Master's and the Ph.D. level. Past interrdisciplinary efforts have included the Institute for the Study of Earth, Oceans, and Space, the Department of Education's doctorates in education and in reading and writing instruction, and programs in the sciences such as genetics, natural resources, engineering.

The Planning Council was established to develop an institution-wide approach to meeting current and future financial constraints. Proceeding from a clear set of assumptions and principles, the Council produced a list of Standard Four

92 recommendations. Only 3 directly affect graduate education. The first and most concrete was to postpone refilling the position of Dean of the Graduate School on a permanent basis. The remaining two were to review the role and responsibilities of the Schools and Colleges in graduate education, and to review all graduate programs using the established criteria of centrality, quality, cost and demand. As mentioned earlier, an interim Dean has been appointed who will carry out these reviews over the next two years.

The Commission on Graduate Education was formed to analyze the current state of graduate education and to recommend changes. The Commission consisted of 10 faculty members, 2 graduate students and the interim Dean of the Manchester campus. Their report calls for a substantially increased commitment to graduate education and was officially presented to the faculty at an open forum in the spring of 1993. The report recommended the development of a strong centralized administrative unit for the Graduate School, an increased operating budget, an evaluation of the effectiveness of stipend levels, and the development of a training program for graduate teaching assistants.

In addition to the appointment of the Interim Dean and the initiation of program reviews, a Faculty Fellow has been appointed for 1993–4 to examine the current system of financial support for graduate students and its influence on the recruitment and retention of qualified candidates. Also, the Teaching Excellence Program is in the process of developing a training workshop for teaching assistants to be offered in the fall of 1993. The future of other recommendations of the Commission will continue to be explored during the 1993-94 academic year.

INSTRUCTION

DESCRIPTION

Assessment of Learning

Faculty at UNH devote considerable effort to assessing student's knowledge and skills in both the majors programs and the General Education Program. Examinations and quizzes, course projects and presentations, term papers and other regularly assigned writing tasks assess individual student performance and proficiency levels within specific courses. Courses within curricular sequences also act as assessment tools, since performance in later courses is dependent on proficiency levels attained in the previous course. Minimum standards for degree and program academic achievement (such as required grade point averages) ensure that only students found qualified in those areas will receive a degree from the University. UNH at Manchester assesses both math and reading/writing skills of all incoming students for advising placement and assessment information. At the graduate level, there are a host of specific measures in place which serve to assess competence and performance at advanced levels.

In addition to assessments aimed at judging individual student achievement, however, the University community also engages in a number of outcomes assessment activities that are structured to judge institutional effectiveness. We regularly address questions about how well we educate our students and how we might do a better job of it. These kinds of questions direct us to reflect on our educational goals, analyze the various methods by which we seek to accomplish those goals, evaluate how successful those efforts are, and then re-examine and re-think our goals and methods based upon those evaluations. At present we are engaged in a critical evaluation of our assessment processes, and we are exploring possibilities for expanding our efforts in light of the recent development and dissemination of a number of innovative approaches to outcomes assessment in higher education settings.

Recent interest in assessment practices started in June 1988, when the Board of Trustees adopted outcomes assessment as an important goal for the University, stating that "Our student learning assessment goal is directed toward having the campuses initiate, identify or develop new ways Standard Four

to assess student learning which, in turn, will produce recommendations for improvement in academic programs and will underscore the primary importance of instructional excellence throughout the University System."

The University's approach to this directive centered on identifying specific procedures already in place to assess specific outcomes in various courses and curricula, and on developing means to assess broad intellectual outcomes. The University, through the development of an Assessment Task Force, began to examine the effectiveness of assessments of general education currently in use, develop new or revised assessments, evaluate these instruments on samples of students, and explore the possibility of extensive University-wide assessments.

A survey of teaching and learning assessment practices already in place during 1989, compiled by the University for the University System Office on a Department or program basis, identified a wide range of measures, including: alumni surveys; placement, proficiency, certification, and licensing exams; accreditation reviews; internal program reviews; student surveys; reports of the Student Life Committee of the Academic Senate; reports of the Quality of Life Task Force; and reviews of institutional indices such as retention figures and graduation rates.

With this inventory of existing assessment practices available as its foundation, The UNH Assessment Task Force developed a series of principles to guide its future work with assessment practices. One critical principle the Task Force agreed on was that assessment as evaluation of students should be inseparable from enhancement of student performance, and that the instruments of assessment should make a significant, positive contribution to each student's educational experience. In addition, it was agreed that new assessment procedures should suggest and motivate improvements in teaching, and should be course-content independent. Since the only clearly-articulated, University-wide educational goals are those for the Gernal Education program, it was decided to focus some of its initial efforts on assessing intellectual skills addressed by the General Education program. In a preliminary report, the Office of Academic Affairs formulated a set of guiding principles affirming that outcomes assessment should:

- evaluate, first and foremost, how well the University performs, not how well the individual student or the individual faculty member performs.
- •not be synonymous with testing.
- be geared specifically to the culture, values, and mission of the institution.
- rely on multiple sources of evaluative information.
- include methods that are consistent with a "value added" model of learning.
- benefit the student, the faculty, and the institution.
- should require tasks that include higher cognitive processes, such as problem solving and critical thinking, and involve projects, oral responses or performances, as well as written responses.

Following these principles, the Task Force prepared a preliminary set of four assessment tasks and evaluated two of these with a small sample of firstyear and fourth-year students. Based on the preliminary results of this pilot test, a report was prepared in 1992 for the Office of Academic Affairs. The Task Force completed its assignment in the Spring of 1992 by making a series of recommendations to the Office of Academic Affairs about the administrative structure and methods of future assessment activities at UNH. In response to those recommendations, responsibility for learning assessment was incorporated into the duties of an Associate Vice President for Academic Affairs.

An Institutional Effectiveness Steering Committee was formed by the Office of Academic Affairs in January 1993. This Steering Committee was charged with producing a report annually to provide evaluative information about both learning processes and learning outcomes. The Steering Committee is currently working on the 1993 report which will include information about program evaluations, alumni feedback, assessment of learning outcomes from the Gneral Education program, and in-process evaluation of teaching and learning. The Steering Committee also plans to correlate information related to admissions, retention, and post-collegiate placement test scores.

Assessment of Teaching

Teaching takes many forms at the University of New Hampshire including lecture, discussion, workshop, seminar, laboratory, field work, individualized tutorial, independent study, ensemble performance, studio art classes, networked computer classes, supervised teaching, and instructional telecourses. These differences reflect the nature of the discipline in which the classes are being offered and the purposes and goals of particular courses, programs, and degrees. While not every instructional technique can suit every student's preferred learning style, students are exposed, through the extensive General Education requirements as well as departmental coursework, to a broad range of learning tasks and teaching styles.

In courses across all departments, however, evidence can be found of innovative instruction. Many faculty now use advanced technologies to run programs, build databases, do complex problem-solving and modeling, and some draw on hypermedia to incorporate audio, video, CD–ROM and computer technologies simultaneously. Examples include using hypermedia approaches to learning languages or classical mythology in their full cultural contexts, to composing music with special computer software, using computer programs to analyze a full week's dietary input for nutrition courses, or modeling trace gas emissions from selected wetlands in advanced ecology and biogeochemistry courses.

While making use of technological innovation is critical for any institution of higher learning in the twentieth century, innovative teaching at the University has also involved writing across the curriculum, collaborative learning, study groups, collaborative research groups, co-authoring, and portfolio projects. Similarly, some faculty are developing pedagogies designed to improve classroom climates for women, minorities, and non-traditional students. Many courses include laboratory experimentation or field work. Performing and fine arts curricula have always included performance and exhibition as essential learning tasks, and the many types of internship and exchange programs offer students enhanced opportunities for different types of learning environments, mentoring, and active or applied learning.

The University monitors the ways in which its instructional methods are appropriate for students' capacities and needs, both at the department and college levels. Standardized student evaluation forms, or college approved alternatives, are given at the end of every course with an enrollment of five or more. Many departments also use four-week evaluations for feedback on new instructors or new courses, as well as midterm evaluations. Standardized evaluations ask students to rate the content, method, and style of the course, as well as provide undirected written commentary. Statistics on course evaluations are compiled by the Office of Institutional Research. Overall ratings for University instructors average 4.5 on a 5.0 scale.

Individual teaching effectiveness at UNH is also evaluated by peers. From 1987-90 there was a concerted effort to develop systems of peer observation and review through workshops provided to all the departments and colleges. Since 1990, a majority of departments have included some type of peer review to monitor and improve faculty performance.

While there are a variety of classroom styles, strategies, structures, and pedagogical philosophies, there is a strong commitment to the goal of excellence in teaching at the University of New Hampshire. Evidence of potential for teaching is an important factor in hiring, and demonstrated competence in the classroom is an important component in tenure and promotion decisions. In 1987-88 the Vice President for Academic Affairs instituted new faculty awards to recognize achievement in teaching. Faculty development monies and course release time have also been allocated to foster instructional improvement.

APPRAISAL AND PROJECTION

The university has always been engaged in the assessment of student learning of specific bodies of knowledge as well as the more general facets of knowledge promoted by the General Education Program. However, since 1988, the University has devoted significant time and effort to explicitly identify and analyze its assessment practices, as well as plan for future assessment projects. The several years of intensive study and discussion Standard Four

have given the members of the original Assessment Task Force, the newlyformed Institutional Effectiveness Steering Committee, and the Office of Academic Affairs a thorough understanding of the various philosophies of, and approaches to, assessment of educational outcomes or institutional effectiveness in meeting instructional goals. The Steering Committee, although limited by fiscal constraints, has adopted the basic guidelines set up by the Task Force.

For the immediate future, University efforts will be directed toward assembling and correlating available data to serve as a guide for long-range implementation of the types of assessment programs recommended by the Task Force. Given the rich array of both external and internal assessment practices already in place at the University, no new efforts in outcomes assessment are foreseen until budgetary constraints are relaxed. If this occurs as predicted in 2-3 years, implementation of procedures similar to those recommended and developed by the Task Force appears reasonable. Alternatively, continuing efforts to gain outside funding for assessment activities may be successful, allowing the University to implement its plans earlier than expected.

While the University of New Hampshire has always maintained a strong tradition in teaching, the last ten years have seen an increase in innovative methods and more attention to faculty development in instruction. There has been a considerable effort to ensure and enhance the quality of teaching. There have also been lively discussions and debates concerning national critiques of post-secondary education, new teaching methodologies, and curriculum reform issues.

No significant changes are anticipated in the caliber of instruction at the University. However, with the unionization of the faculty, some evaluation procedures, particularly in regard to tenured faculty, will need to be reviewed. The Teaching Excellence Program has also provided new opportunities for faculty development in teaching.

As the University has developed its research mission over the last ten years, there has been continuing discussion of the complex relations between teaching and research. UNH faculty have a record of achievement in both areas. The concern in the next few years will be to find ways to maintain and foster that balance.

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SCHOLARSHIP AND RESEARCH

DESCRIPTION

Given the size of the faculty, the University of New Hampshire is remarkably productive in the area of research and scholarship. The University's Directory of Research and Scholarly Activities lists an impressive array of over 550 faculty research and scholarly specialties and the research activities of 118 groups, laboratories, centers, and institutes at the University. Faculty in all colleges and schools commonly present their research and scholarship, both theoretical and applied, at regional, national and international conferences. The Faculty Archive in Dimond Library, to which faculty authors are requested to donate copies of new titles, has grown by 50-100 each year over the last five years, and it represents only a portion of the total publication of book-length works by faculty. UNH is also the host institution for several important scholarly journals such as the Journal of Folklore, National Women's Studies Journal, Portuguese Studies Review and Retrospection, The New England Graduate Review in American History and American Studies, among others. The quality and range of scholarship which occurs across academic and research units is illustrated in the awards that UNH faculty have received in the last three years: the Pulitzer Prize for poetry (1990), the Pulitzer Prize for history (1991), and NASA's highest civilian award, the Distinguished Public Service Medal (1992), and a MacArthur Fellowship (1992).

University of New Hampshire plays a particularly important role in the dissemination of knowledge generally associated with a land-grant, seagrant and space-grant University and ranks 83rd in citation references as compiled from the science citation index, ahead of such large research Universities as Ohio State and Purdue.

As a land-grant institution, for example, the institution has had an Agricultural Experiment Station for over one hundred years. With federal and state funds for the Hatch and McIntire–Stennis Programs, the Agricultural Experiment Station supports approximately 70 research projects, many having state and regional applicability. To disseminate their research results, Cooperative Extension has faculty and professional staff Standard Four

associated with nine departments and programs, as well as personnel in every New Hampshire county.

The University's sea-grant and space-grant missions can be seen in the development of the Institute for the Study of Earth, Oceans, and Space (EOS) and the Marine Program. EOS is an interdisciplinary research institute, composed of several specific centers and laboratories, devoted to the study of Earth and its space environment. Particular emphasis is placed on studies that contribute to understanding the global environment. The Marine Program, which includes the Center for Marine Biology, the Jackson Estuarine Laboratory, the Coastal Marine Laboratory, the Cenetr for Ocean Studies, and the Ocean Engineering Center, is also affiliated with the seagrant mission of the University. The program works cooperatively with marine industries, state and federal agencies, organizations and individuals to identify and solve problems associated with the development and conservation of northern New England's marine resources.

The University faculty and staff are also involved individually with state agencies, providing an important source of technical expertise for the management of critical issues. Examples include the operation of the state's computerized mapping system by the Complex Systems Research Center, the Technology Transfer Center funded by the Department of Transportation, work on in-service training and vocational rehabilitation engineering funded through the State Department of Education, and the Institute on Disability's development of facilitated communication as a means or method of communication for autistic individuals.

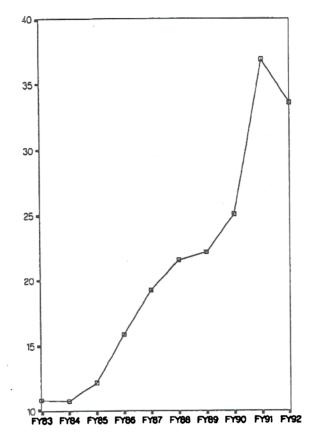
Over the last ten years, the University has made an effort to enhance the research orientation of the faculty and to increase the overall level of research activity. Concrete actions have included an emphasis on research potential in new faculty hires, and an increasing emphasis on publications as a criterion for tenure. Faculty workloads have some provision for scholarly activity built into them, and course releases and other workload accommodations are frequently made to allow additional time for scholarship.

This effort, along with the organization of several research institutes and interdisciplinary centers in the humanities, social sciences, natural sciences, engineering and education, has proven extremely successful in increasing the amount of externally funded research activity. UNH now ranks among the top 120 universities in the country in annual federally funded research. Research funds are an important source of support for undergraduate and graduate students who can offset the cost of education while gaining valuable experience with current research practices.

The recognition that a vigorous research University can contribute to the economic health of the state has come late to New Hampshire. However, the recent decision at the state level to support a major new Biology Building on campus, and the proposed establishment of a Science and Technology Park at the

University of New Hampshire

RESEARCH AND SPONSORED PROGRAMS



Total Award Dollars (in millions)

recently closed Pease Air Force Base, with the appointment of the University's Vice President for Research and Public Service as a member of the Pease Development Authority, suggest that a new level of cooperation on research between the University and the state may be emerging.

APPRAISAL AND PROJECTION

The strained financial situation of the University over the last several years has resulted in some unfortunate reductions in the amount of monies available to support scholarship and research internally, but in recent years there has been a significant effort to reverse that trend. Faculty Development monies and Faculty Scholars Awards have been protected, and sources such as the Undesignated Gifts Competition and Fellowships provided by the Humanities Center provide additional opportunities for internal funding of faculty scholarship. The Vice President for Research and Public Service has recently designated a new fund of \$180,000 in internal support of faculty scholarship, with one-third of this amount reserved for faculty in those areas for which outside funding is difficult to obtain. There are several other endowed programs to which faculty may apply for specific purposes, and the recently expanded departmental budgets have improved the climate for scholarship and research.

The University also sponsors a modest, but important Undergraduate Research Opportunities Program which provides support for undergraduates to work with faculty in all disciplines on selected projects both on-campus and off-campus, at libraries with special collections, historical sites, laboratories, and government agencies. However, as mentioned in the Graduate Programs section, support through the Graduate School for attendance at professional meetings for graduate students has been reduced, as has the CURF program which formerly supplied faculty with small amounts of support for scholarship on a competitive application basis.

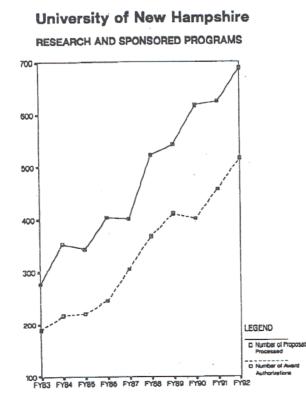
In some sense, the research environment at the University of New Hampshire can best be described as primarily entrepreneurial. This laissez-faire quality has ensured that faculty have been given considerable freedom to pursue research and scholarly projects, and play a substantive role in the development of research policies and practices. However, the relatively low and variable levels of funding from state sources can affect the stability of research funding for individual faculty. Faculty are increasingly encouraged, and expected, to apply for external research support.

Externally supported research programs have experienced a dramatic change in the past 20 years. Presently, more than one third of the tenure track faculty are engaged in such activity, and when combined with the research faculty and some PAT staff, they were responsible for 1,205 proposals and award authorizations in FY92, representing a sum of \$33.6 million, which was larger than the FY92 state appropriation to UNH for its education and general programs.

Simultaneous with the dynamic change in sponsored research activity has been the dramatic increase in the need for the administrative

support for research. In 1990, the Office of Sponsored Research was created from the combination of three formerly separate departments, Research Administration, Sponsored Programs Accounting, and the Industrial Research and Consulting Center. This has improved efficiency, coherence, and effectiveness. The Office of Sponsored Research recently undertook its own self-study, including an appraisal and projection. The report, *OSR* 200:A Blueprint for the Future details a series of recommendations for meeting the needs of current and future sponsored programs.

One obvious finding of the *Report* was that funding for personnel to handle grant-related administration is clearly deficient. The number of grant submissions and awards has increased roughly 150% over the last ten years while the FTE level in the grants offices has increased by only 30%. This means that most of the funds returned to institutes from indirect costs go for research administration and other support costs. On the basis of its assessment, the Office of Sponsored Research has been able to get approval for two new positions to support its work load more effectively.



Number of Proposals and Award Authorizations

The growth in research activity has also resulted in some tensions among the faculty regarding the allocation of resources and distribution of workloads. Because of the state's generally low level of support for the University System, and for research in particular, the focus of the debate over resources has been on internal research support, including indirect cost returns and how they are To address this used. question, in 1988 the

University established the Commission on Research and Graduate Education to develop a policy for the distribution of indirect costs.

The Commission consisted of 11 faculty members who spent two years interviewing administrators and other faculty concerning the distribution of indirect costs. Three recommendations were made by the Commission. The first was that the position of Associate Vice President for Research be changed to full Vice President status. This was one of the first acts by President Nitzschke following his arrival on campus. The second consisted of a formula for the distribution of research support based on the previous year's income between faculty, departments, colleges, institutes and the Vice President for Research's Office. The formula requires that indirect costs not be returned per se. Rather, indirect costs would go into the general fund to reimburse it for research expenses. The University would then distribute the research support to faculty and departments based on grants held in the previous year. This formula has also been accepted in principle by the administration, but the current financial crisis has hindered its implementation. The heart of this internal research support policy, commonly referred to as the "indirect costs policy" is the return of funds equal to 15% of the overhead generated by the principal investigators, a policy which has been in place for over ten years. This policy provides critical seed money for new projects, matching funds for equipment purchases, and support for travel. The third recommendation of the Report was to establish criteria for the review of new and existing research institutes and the dismantling of institutes that have been unproductive. Two reviews were completed during fiscal year 1993.

Over the course of the last five years, there has been an increasing number of research track faculty on campus receiving 100% of their salary from grants. These faculty generally are affiliated with an appropriate department on campus and contribute to the enrichment of course offerings, especially at the upper class and graduate levels. Funding for the support of these offerings has not been formalized and occurs on an ad hoc basis. Recommendations.are now pending to regularize University funding for teaching by Research Faculty. Opportunities may exist for strengthening the graduate programs in several departments through more optimal support of these on–campus scholars. In sum, there are both positive and negative indicators for the future of scholarship and research at the University of New Hampshire. On the negative side, current financial constraints limit broad-based investment in equipment, buildings, travel and other forms of support for the faculty. There are also issues of workload, distribution of resources, and the sudden increase in the demand for administrative support of sponsored research which will continue to be explored.

On the positive side, the University has been successful in attracting funds for major projects, such as Morse Hall and the new Biology building, which will continue to generate rapid growth in particular areas. The potential for the development of a Science and Technology Park at Pease should lead to increased faculty-industry cooperation and greater opportunities in technology-oriented fields.

The approved policy for internal research support represents an unusually clear and logical distribution of funds from this source and, if fully implemented, will provide a moderate flow of funds through the Office of the Vice President for Research for the support of scholarship in areas for which research funding is difficult to obtain. The Planning Council has recommended increases in support for research administration, and an effort to increase state–level contributions to the funding of research. If enacted, the linking of state support for research to the volume of external funding received would provide a significant increase in total funding.

Overall, given the current projections for increasing external funding and the strong commitment of the institution to sponsor a wide range of scholarly activities internally, the future for research at the University seems assured.

PUBLIC SERVICE AND SPECIAL ACTIVITIES

DESCRIPTION

Consistent with its mission, the University of New Hampshire offers a growing number of public service and special non-credit symposia, workshops, institutes, and conferences. Some of these activities have been mentioned in connection with the academic programs discussed previously in this section. What follows is a description of the offices and centers specifically charged with the coordination and administration of public service and non-credit programs intended for public constituencies outside of the University.

The University Conference Office and the Kellogg Program Office

Until 1993, both of these offices operated independently to coordinate public service programs and non-University events held on campus. The Kellogg Program Office was initiated in 1985 through a grant from the Kellogg Foundation. Since that time, it has worked with the faculty and staff of the University, in collaboration with many diverse organizations, to design, promote and conduct residential educational programs at the New England Center. The University Conference Center was created in 1990 to oversee non-academic support services, registration, and accommodations for growing number of summer conferences that take place at UNH. The Conference Center, however, is still in the development phase and has not been fully utilized by many on-campus groups. A study conducted in 1992 evaluated the Conference office and made recommendations to improve its efficiency. The Conference and the Kellogg Program Offices have recently been assigned to the Division of Education. This change reflects the University's ongoing effort to improve their effectiveness and coordination.

Interhostel

Developed by the University of New Hampshire Division of Continuing Education fourteen years ago, the Interhostel Program offers more than 40 enrichment travel/study programs in over 25 countries every year to adults 50 years and older. Each program is designed with the cooperation of an overseas university or educational institution. ELDERHOSTEL, which was created at UNH in 1975, offers inexpensive short-term academic programs on campus year-round for older adults.

Cooperative Extension

Historically, Cooperative Extension programs have been an important part of the University's public service efforts, and have made many valuable contributions to state and regional development. UNH Cooperative Extension is the major educational outreach arm of the University of New Hampshire. It provides individuals, families, businesses and communities in every corner of the state direct access to research-generated knowledge from the University of New Hampshire. Established in 1914, Cooperative Extension now reaches out to one in four citizens of New Hampshire. In fiscal year 1993, more than 260,000 people turned to Extension for educational outreach programs addressing their needs. Cooperative Extension's network consists of 10 county offices and educators throughout the state linked to the University's knowledge and research base who work to identify issues critical to New Hampshire residents and to formulate programs addressing those issues.

UNH Cooperative Extension's programs encompass two broad program areas including natural resources and family, community and youth. These broad program areas focus on such topics as community education, child care and development, fisheries and wildlife management, 4-H youth programs, nutrition and food safety, farm and forestry practices, environmental quality, and marine education. The local communities of New Hampshire have been the center of UNH Cooperative Extension program efforts since its establishment eighty years ago. There are more than 5,800 volunteers in Cooperative Extension who lead programs, give informative instruction, and advise staff regarding unique county needs.

ITV and Distance Learning

The University is participating in a USNH project to utilize interactive instructional television (ITV) as a new delivery system for college classes. In the fall 1992, five courses originating at UNH were delivered through the system for a total of 200 classes and over 300 hours of programming. The network has also gained access to a vast repertoire of national programming by joining the Adult Learning Satellite Service, and a satellite downlink has been installed at UNHM to help meet increasing demand for this service. Although the USNH ITV Project is a System level project coordinated by a Steering Committee, the ITV programming itself is administered by coordinators at each individual institution under the purview of the chief academic officer.

APPRAISAL AND PROJECTION

The educational, research, and outreach mission of the University is generally well served by the host of programs, exchanges, conferences, symposia, short courses, workshops, colloquia, and series. The move of the UNH Conference Office and the Kellogg Program Office may result in greater coordination of special activities and non-credit educational activities over time.

The development of ITV has been accompanied by considerable debate because of its cost and questions of pedagogical effectiveness. Whether it becomes a fully integrated delivery system for credit courses at the university will be a focus of future planning discussions.

Current proposals to trim university budgets include reducing or reallocation the Cooperative Extension budget, and this may result in reduction or elimination of some programs.

Growing competition for federal, state and county appropriations coupled with the condition of the national and state economies present several fiscal challenges for Cooperative Extension. Cooperative Extension's budget totals more than eight million dollars with funding primarily from federal, state, and county government. Funding for Cooperative Extension is likely to remain constant or decline. Fewer dollars will require increased efficiency in program delivery. Consistent with recommendations from a 1987 UNH Presidential Task Force report on the future of Cooperative Extension, the organization has made considerable progress in implementing a strategic communications technology plan to increase its efficiency. Cooperative Extension is utilizing computer networking and video networking to more effectively fulfill its educational mission.

Given current financial realities and the increasingly entrepreneurial bent of the University necessitated by those realities, we may see fewer special programs which are internally funded at UNH.

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