

Newark Campus
Self-Study
for the
1998 Accreditation Visit
of the
Middle States Association

1. MISSION, GOALS, AND OBJECTIVES

MISSION

The Newark campus of Rutgers, The State University of New Jersey with its 9,400 students and its concentration of professional academic units and advanced degree programs, is a major public university center. The Rutgers-Newark campus is committed to excellence in teaching, research, and service to the community. Through its undergraduate programs in the Newark College of Arts and Sciences (44 major programs including 4 jointly with the School of Management), University College-Newark (15 major programs including 4 jointly with the School of Management), School of Management, College of Nursing, and School of Criminal Justice, the institution equips students with the knowledge and skills to participate in the economic, scientific, social, political, and cultural life of the community and the nation. Through the 19 master's programs offered by the Graduate School and the graduate/professional schools the campus provides opportunities both for enhancement of employment status through the upgrading and refining of skills and for life-long learning. Through 10 doctoral programs in applied physics, behavioral and neural sciences, biology, chemistry, criminal justice, management, mathematical sciences, nursing, psychology, and public administration, through the School of Law's J.D. program, and through interdisciplinary research centers and training programs (Center for Molecular and Behavioral Neuroscience; Research and Training Program in Cellular and Molecular Biodynamics; Center for Global Change and Governance; Center for International Business Education and Research) the campus prepares the commercial, legal, scientific, health care, social, and political leaders of the future.

The mission of the campus is shaped in significant ways by its location in an international gateway city in the midst of one of the most densely populated, and racially, ethnically, and socially diverse, metropolitan areas in the nation. Rutgers-Newark intends to uphold its proud tradition of providing access to students from this richly varied metropolitan area of northern New Jersey and will vigorously pursue new initiatives to facilitate access by these students to high-quality educational programs. Simultaneously, the campus will compete nationally and internationally in recruitment of faculty and students.

CHARTING A COURSE FOR FUTURE GROWTH OF RUTGERS-NEWARK

The campus has acted on the consensus that generated the self-study prepared for the Middle States Accreditation visit in 1988. Growth in stature of the campus's educational and research programs was achieved through strategically targeted development of academic programs, and community-oriented initiatives. Cooperation and collaboration across disciplines, departments, colleges, institutions of higher education, and across public and private sector entities were key features in achieving this growth during a period in which new resources were very limited.

Because it was clear that Rutgers-Newark had entered a new period in its history, the campus embarked on an intensive strategic planning process in 1992, to consolidate gains and direct further growth. The planning process involved every academic department and school. The plan that emerged in 1994 reaffirmed our mission, identified our strengths, and recommended new initiatives to continue our

development as the state university center in northern New Jersey.

A significant portion of this document is based on the campus's strategic plan and the ways in which the campus and the university strategic plans have complemented and reinforced one another in the achievement of campus goals. (Appendix 1 lists the membership of the Newark Campus Self-Study Committee.)

GOALS AND OBJECTIVES

Goal 1. Continue development as a major center of research programs.

We plan to focus resources on those programs which distinguish the campus: management; law; criminal justice; neuroscience; global change and governance; public administration; nursing; mathematical sciences; and molecular and cellular biodynamics (encompassing biological sciences, chemistry, neuroscience and physics components). We also plan to develop a limited number of graduate programs that can be key factors in furthering growth of the campus' reputation as a major graduate/professional center.

OBJECTIVES

- Increase the number of Ph.D.s awarded annually and increase the level of external grant funding so that the Newark campus proceeds in stepwise fashion from its current Carnegie Category Doctorate-Granting University II status to Doctorate-Granting University I; and over the long range, to meet criteria for designation as Research University II.
- Maintain and enhance the doctoral programs offered by the Graduate School of Management and the College of Nursing.
- Maintain and enhance the doctoral programs in applied physics (jointly offered with the NJIT), behavioral and neural sciences, biology, chemistry, criminal justice, mathematical sciences (jointly offered with the NJIT), psychology, and public administration.
- Support the Faculty of Management as it moves towards enhancing its national visibility through targeted (1) recruitment of outstanding faculty, (2) curricular and outreach innovations, and (3) alliances with the corporate community.
- Support the School of Law as it advances toward the top echelon of public law schools in the nation.
- Support the School of Criminal Justice in maintaining its status in the top echelon of schools of criminal justice, as confirmed by the most recent external review.
- Support the Center for Molecular and Behavioral Neuroscience as it continues to move to national and international prominence.
- Support the College of Nursing in maintaining and enhancing its high national ranking.

- Support development of the new Center for Global Change and Governance so that it gains international recognition for its research and graduate programs. Simultaneously support the Center for International Business Education and Research, which will work in synergy with the Center for Global Change and Governance.
- Support development of the interdisciplinary Research and Training Program in Cellular and Molecular Biodynamics so that it becomes a permanent feature of the campus.
- Develop a limited number of new interdisciplinary doctoral programs in international studies, environmental sciences (jointly with the NJIT), and applied economics.
- Develop new professionally oriented master's programs including occupational therapy, telecommunications management (jointly with the NJIT), arts management, and health care management (jointly with the UMDNJ), and Public Health (jointly with both institutions). Aim towards making the professionally oriented master's programs self-sustaining.
- Use distance-learning technologies to develop and expand programs such as the M.B.A. offered by the Graduate School of Management to a recipient site at the Merrill Lynch corporate headquarters in Plainsboro, New Jersey. Evaluate recipient sites of the M.B.A. offerings as part of the accreditation review of the Graduate School of Management by the American Assembly of Collegiate Schools of Business (AACSB) during 1997-1998.
- Strengthen the information, computing, and library resources in support of graduate education.
- Build on recent campus and university-wide strategic planning recommendations to develop new centers, institutes and programs at Rutgers-Newark. Use these new initiatives to address major issues of social and practical concern and to enhance academic programs.
- Provide appropriate housing and campus environment for graduate students and their families.

Goal 2. Provide undergraduates with a university-quality liberal arts and sciences education; increase opportunities for professional education.

To achieve this goal we plan to improve the quality of the undergraduate educational experience by: increasing the linkages between the undergraduate curriculum and the graduate/professional research programs at the campus; developing new interdisciplinary undergraduate majors; incorporating contemporary technologies into teaching and learning; improving responsiveness of basic student services; creating an improved physical environment; expanding opportunities for students to participate in and attend social, cultural, and athletic events on campus.

OBJECTIVES

- Increase the total enrollment at the campus and provide the recruitment tools to accomplish this objective: effective admissions department activities; increased scholarship and financial assistance;

improved advisement; expanded internship opportunities in research laboratories of faculty.

- Create an Honors College.
- Clearly define the role of University College-Newark and support this role.
- Develop a new, state-of-the-art, integrated science teaching complex to prepare Rutgers students for careers in the sciences.
- Develop the physical environment to serve the academic and campus life needs of Rutgers-Newark undergraduates by:
 - Building a new high rise residence hall
 - Completing shell space in Dana library and adding a new wing to accommodate instructional information technology needs
 - Building additions to management and visual and performing arts facilities, including state-of-the-art classrooms
 - Upgrading computing facilities for instruction and research
 - Upgrading facilities to improve access to academic programs for all students

Goal 3. Maintain commitment to cultural and racial diversity in students, faculty, and staff.

We will continue to support programs and services which assist students from local high schools to enter and to graduate from Rutgers-Newark's undergraduate programs. We will continue to identify student needs and aggressively seek the resources required to permit Rutgers-Newark to be a leader in achieving its dual mission of excellence and access in undergraduate and graduate/professional education.

OBJECTIVES

- Maintain and enhance diversity of our undergraduate student body through precollege programs, vigorous recruitment, successful retention programs, and strategic use of scholarship programs.
- Increase the diversity of the student body in the graduate and graduate professional schools.
- Increase the number of women and minority senior and mid-level campus administrators by vigorous outreach campaigns.
- Increase the percentage of minority and women full-time faculty.
- Increase the level of female and minority staff.

Goal 4. Expand outreach and community activities.

We will develop an extensive, high-quality, and socially responsive Program of Continuing Education that will respond to the identified needs of the northern portion of the state for continuing professional education and economic development; expand use of distance-learning technologies to

deliver seminars and courses to primary and secondary schools, county colleges, and private and public sector entities interested in professional education and extension service programs; expand outreach programs of the professional schools in the service of the community; continue deep involvement of the campus in Science Park and other initiatives to revitalize the City of Newark.

OBJECTIVES

- Be among the leaders in New Jersey educational institutions for the provision of continuing education programs for health providers, legal profession practitioners, police science, and other criminal justice professionals, as well as members of the business and educational communities, through a developing distance learning program, through seminars, conferences, and formal course work.
- Bring a university curriculum to advanced secondary school and county college students in a program jointly sponsored and conducted by the Faculty of Arts and Sciences-Newark and the Office of Summer Session and Continuing Education.
- Augment direct assistance to the Newark and other urban school systems through the actions of the Center for Change in Urban Education working hand in hand with the Pre-College Consortium; the Saturday Academy; Latino Scholars. Other programs include: Teachers in Support of Science Education; the Research Science Institute; and other members of the Council of Higher Education in Newark (CHEN)¹ and Science Park.
- Develop a cooperative cultural and arts program with the arts institutions in the city of Newark (the Newark Public Library, the Newark Museum, the New Jersey Performing Arts Center) to bring a greater variety of cultural and arts programs to our students and our community.

Goal 5. Strengthen ties between Rutgers-Newark and NJIT and UMDNJ.

Students and faculty at our institutions will benefit from closer and more extensive instructional, research, and administrative collaborations. Strengthening the consortium with NJIT and ties to UMDNJ will expand courses and services available to students while simultaneously making more effective use of state resources already invested in higher education in Newark.

OBJECTIVES

- Broaden academic choices open to students at these institutions, and enrich the lives of students through coordinated student-life experiences and support services.
- Foster increased interinstitutional research collaboration among faculty members.
- Support existing joint programs and encourage development and expansion of joint

¹ CHEN is an association of Rutgers FAS-Newark, the UMDNJ, NJIT and Essex County College to further their common purposes.

undergraduate and graduate/professional programs and other instructional and curricular innovations.

- Increase administrative and academic efficiency, especially through elimination of unnecessary duplications in programs and services.
- Support the development of a joint graduate center to foster intercampus research and teaching initiatives.

2. INSTITUTIONAL INTEGRITY: REALISTIC PLANNING AND EFFECTIVE IMPLEMENTATION

INTRODUCTION

Although capable of numerous definitions, for our purposes the concept of institutional integrity refers to the ways in which an institution of higher education responsibly upholds its commitments for both the pursuit and dissemination of learning. Features of institutional integrity include recruitment and retention of students; sensitivity to issues of equity and diversity among students, faculty, and staff, especially as they concern recruitment, assessment, and affirmative action; faculty quality and governance; conceptualization, establishment, and quality of programs and curricula; effectiveness in meeting service obligations; allocation of resources; and service to the community, state, and nation.

While we will address these issues in subsequent sections, here we will focus on another important aspect of institutional integrity: the specification and realization of mission, goals, and objectives. Has Rutgers-Newark specified a realistic mission with achievable goals and objectives; and if so, how was this done? Since the last Middle States Accreditation visit in 1988, how effectively has the Rutgers-Newark campus implemented the goals it then set as an integral part of Rutgers University?

HOW HAS THE CAMPUS SPECIFIED A REALISTIC MISSION WITH ACHIEVABLE GOALS AND OBJECTIVES?

Over the last quarter of a century, the mission of Rutgers-Newark has remained constant: to function as a major, public, urban university center which consistently demonstrates excellence in teaching, research, and service. Because Rutgers-Newark is part of a much larger entity, the campus must be able to clearly communicate its aspirations to the university's central administration as well as to the broader community that supports the university and from which we recruit our students and faculty. This is the first step in ensuring that the distinctive character of the campus is not blurred, but continues to be a readily recognizable, clearly visible part of the complex design that the entire university presents and promotes.

Because Rutgers-Newark has long emphasized planning at the departmental, college, and campus levels to identify opportunities for improving and/or expanding existing programs and to identify new opportunities, the campus enthusiastically embraced the strategic planning initiatives introduced by President Lawrence in 1991. As part of this process, strategic plans were developed in the 1992/93 academic year by each of the faculties and schools on the Newark campus. In faculties with departmental structures, individual

departments were asked to develop long range plans, which were then incorporated into a plan for the larger academic unit. After strategic plans were received from each of the faculties and schools at the Newark Campus, a campus steering committee with representation from all units was convened. This committee worked with planning documents from the campus' faculties and schools, consulted with these units both through the steering committee's representatives and through general meetings, and consulted with the Deans' Council and the Newark Faculty Council to develop the *Newark Campus Strategic Plan*. The high level of constituent participation ensured a broad base of support for the results of the planning process at Rutgers-Newark. The *Newark Campus Strategic Plan*, which was produced in 1994; addressed the following:

- Reviewed, confirmed and refined the mission of the Rutgers-Newark campus.
- Identified what the campus does best and proposed to focus resources and development efforts on those areas.
- Proposed to develop new, imaginative, and practical strategies for expanding the capacities of the campus and the university system to serve its students and the public interest.

This process identified existing programs warranting continued support, identified new initiatives that were required to achieve the campus mission, and highlighted areas that required reevaluation. In sum, the Newark campus strategic planning process, fueled by a grass-roots effort at the departmental and school level, identified existing core strengths and innovative initiatives meriting support, while at the same time recognizing that resources for growth are limited.

After strategic plans were submitted by each campus, a university-wide strategic plan was developed and adopted in 1995. The university's strategic plan and the Rutgers-Newark campus plan are necessarily different in perspective and orientation but compatible in content. The university plan is harmonious with the Newark campus' recommitment to developing and maintaining high quality undergraduate programs to provide its students with the knowledge and skills necessary to participate fully in the economic, scientific, cultural, and political life of the community and the nation, and to fostering significant growth in the areas of graduate and graduate/professional fields to strengthen the university's commitments to serve increasing needs for graduate and professional education and training. The Newark campus has been actively implementing its strategic plan since 1994.

The implementation phase of the university's strategic planning process is also underway. Internal reallocation of funds through the Strategic Resource and Opportunity Analysis (SROA) program began in 1996/97. This program provides seed funding for several innovative initiatives developed through the campus and university-wide strategic planning process. (Throughout this report reference is made to initiatives supported by the Strategic Resource Opportunity and Analysis program.) It is now possible for a capital campaign to build on these seeded priorities and fully implement the initiatives identified through the strategic planning process.

HOW EFFECTIVELY HAS THE CAMPUS IMPLEMENTED ITS GOALS SINCE 1988?

If the first step in relating campus planning to university-wide planning is clear articulation of campus goals to the university's central administration, this has undoubtedly been facilitated by the strategic planning process. Given the structure of Rutgers University, implementation of plans reflects on campus leadership and on campus/university interactions as well.

In this section, we provide a brief overview of specific achievements at Rutgers-Newark since the last Middle States accreditation visit in 1988. These examples of successful implementation are listed under the five major goals of the Rutgers-Newark Campus.

Goal 1. Continue development of the Rutgers-Newark Campus as a major center of professional and graduate programs.

- Rutgers-Newark, currently classified as Carnegie Doctorate-Granting University II, has maintained and developed high-quality doctoral programs, and has significantly increased the numbers of Ph.D.s awarded annually since the last Middle States review in 1988.
- Rutgers-Newark faculty have increased federal research awards at the campus from a level of \$4.7 million in fiscal year 1989 to a level of \$9.5 million in fiscal year 1996. Similarly, total awards increased from \$7.2 million in fiscal year 1989 to \$12.7 million in FY 1996.
- The Graduate School of Management merged with the business faculty of the Faculty of Arts and Sciences to form the Faculty of Management in 1993. The Faculty of Management has assumed responsibility for all undergraduate and graduate business education in Newark since then. The Faculty of Management in Newark merged with the School of Business in New Brunswick to form a unified Faculty of Management, with its dean reporting to the Newark campus provost.
- New doctoral programs were established in:
 - Applied Physics (jointly with NJIT)
 - Behavioral and Neural Sciences
 - Mathematical Sciences (jointly with NJIT)
 - Nursing
 - Public Administration.
- New centers were established and became operational:
 - Center for Molecular and Behavioral Neuroscience
 - Center for Global Change and Governance
 - Center for International Business Education and Research.
- New master's programs were established:
 - M.S. in Applied Physics (jointly with NJIT)
 - M.B.A./M.P.H. dual degree program (in collaboration with the New Jersey Graduate Program in Public Health)
 - M.A./M.A.T. in history (jointly with NJIT)

M.S. in international studies and M.A. in global studies
M.A. in liberal studies.

- An interdisciplinary Research and Training Program in Cellular and Molecular Biodynamics was established with funding from the NSF.
- Seed funding was obtained in 1996/97 from the university's SROA program to establish the following new centers and institutes:

Center for Computational Neuroscience
Center for Instructional Information Technologies
Rutgers-Newark Center for Families and Communities
Rutgers Institute for Ethnicity, Culture, and the Modern Experience.

Goal 2. Continue to provide undergraduates with university-quality liberal arts and sciences programs and increase opportunities for professional education.

- New undergraduate majors were established in:

Ancient Mediterranean Civilizations
Applied Physics (with NJIT)
Clinical Laboratory Sciences
Environmental Science
Journalism and Media Studies
Women's Studies.

- Between 1989 and 1997 available internships for undergraduates increased dramatically.
- Computer-enhanced instruction and information-literacy initiatives have been advanced across the spectrum of undergraduate majors.
- An upper division undergraduate School of Management was created.
- The School of Criminal Justice assumed responsibility for the undergraduate major in criminal justice.
- Three small separate arts departments were consolidated into a single Department of Visual and Performing Arts.
- The Department of Psychology was reorganized and enlarged.
- A B.A./J.D. option was developed in collaboration with the School of Law in Newark.
- A B.A./M.D. option was developed in collaboration with UMDNJ.

Goal 3. Remain firmly committed to cultural and racial diversity in its students, faculty and staff.

US News and World Report declared Rutgers-Newark as the most diverse campus among all nationally ranked universities. The following tables illustrate the changes in diversity for undergraduates, populations of the schools and colleges, and for faculty and staff.

Table 1: Percentage Changes in Undergraduate Student Diversity

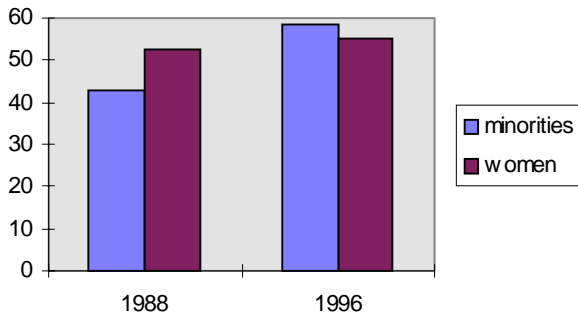


Table 2: Percentage Changes in Graduate School of Management Student Diversity

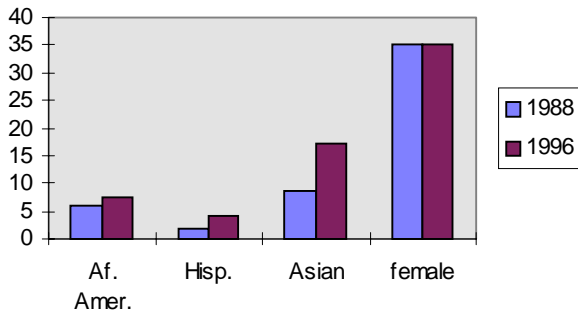


Table 3: Percentage Changes in School of Law Student Diversity

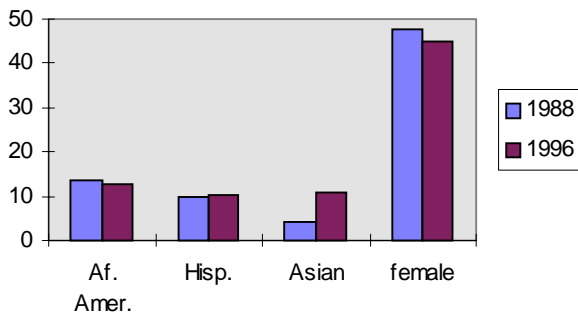


Table 4: Percentage Changes in College of Nursing Student Diversity

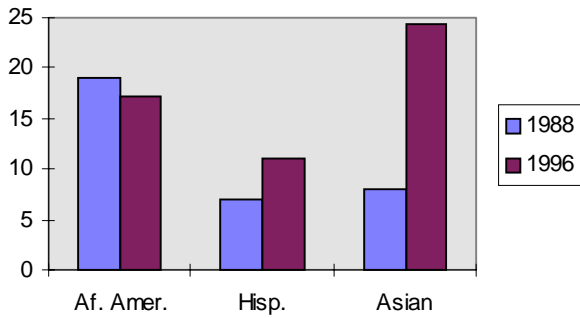


Table 5: Percentage Changes in Graduate School Student Diversity

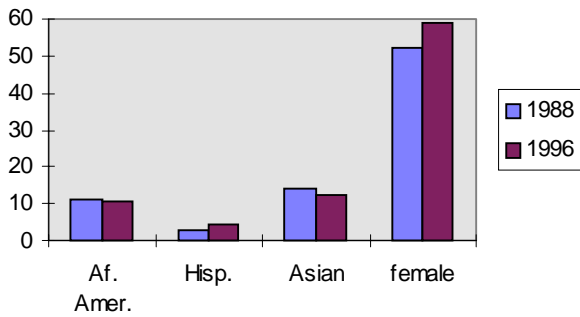


Table 6: Percentage Changes in Faculty Diversity

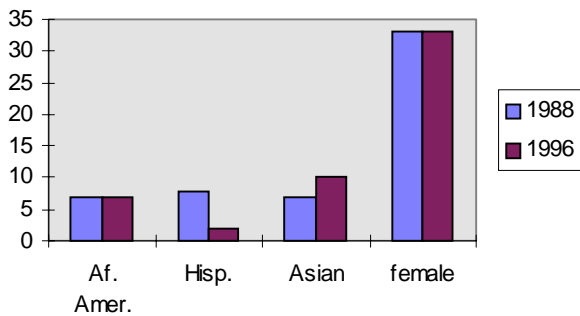
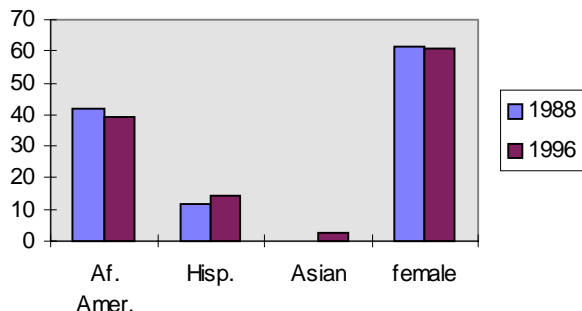


Table 7: Percentage Changes in Staff Diversity

In addition to the changes illustrated above, the percentage of minority senior and mid-level campus administrators has increased by 4.3%, in the period from 1988 to 1996 (in absolute numbers, from 29 to 64 persons). The number of women has increased from 97 to 121, but has decreased from 63.8% of the total to 63%.

Goal 4. Rutgers-Newark will greatly expand its outreach and community activities.

- Rutgers-Newark administrators and faculty members are now involved as officers or as members of boards in more than 20 programs and task forces in our local community (including Council for Higher Education in Newark, Newark Museum Council, New Jersey Performing Arts Center Task Force, Regional Business Partnership, University Heights Science Park, and Connection Newark).
- The FAS-Newark Center for Pre-College Education annually assists more than 400 neighboring middle-and high-school students to prepare for college.
- The Faculty of Management contributes significantly to the health of the nearby and state-wide economic communities. For example, the Rutgers Minority Investment Corporation has made investments totaling \$5 million. The New Jersey Small Business Development Center provides workshops, counseling, and training to small entrepreneurs or would-be entrepreneurs.
- The Clinic in Constitutional Litigation, the Urban Legal Clinic, the Women’s Rights Litigation Clinic, and the New Jersey Attorney General Externship program of the School of Law-Newark are involved in issues of citizen rights, civil rights, and civil liberties, and contribute to the welfare of our multicultural community.
- The Center for Crime Prevention Studies of the School of Criminal Justice works with communities on practical solutions to crime.
- The Department of Public Administration operates the National Center for Public Productivity and the award-winning television program “Caucus New Jersey.”
- The College of Nursing is now a partner in the Family Health Nursing Center of Elizabeth Port.

Goal 5. The Campus will seek to strengthen the Rutgers-Newark/NJIT Consortium.

- Cross registration has been facilitated by establishment of a common academic calendar and a common class-hour schedule. During the spring semester of 1997, 331 students took courses at NJIT and 426 NJIT students crossed Martin Luther King Boulevard to take courses at Rutgers. Graduate courses accounted for 119 cross registrations. Since 1993-94, there has been an increase of 44.5% of the number of Rutgers students who have cross-registered. NJIT cross-registration has increased by 12.4%.
- A dual major option was made available to all undergraduate students at both institutions.
- Joint honors programming and cultural programming are a regular feature of student life.
- Joint degree programs have been established in applied physics (Ph.D., M.S., BS), mathematical sciences (Ph.D.), and history (M.A.).
- History operates as a fully federated department (one chairperson, one budget).
- Support services are being increasingly coordinated (e.g., security, physical plant, and purchasing).

The implementation of such a significant number of programmatic objectives identified in the Rutgers-Newark Strategic Plan reflects favorably on the effectiveness of campus and university planning and on the advantages of focusing this planning on the mission of Rutgers-Newark as a major public university center. In addition to fulfilling so many of their programmatic objectives during the past decade, the campus and university have also made notable strides towards enhancing the Newark campus physical environment. Since the last full evaluation by the Middle States Association in 1988, the Newark Campus has:

- Added a new student dining hall and a new undergraduate residence hall.
- Completed the construction of the Aidekman Research Center, which houses the Center for Molecular and Behavioral Neuroscience (including animal research laboratories accredited by the American Association for the Accreditation of Laboratory Animal Care).
- Added two floors to the John Cotton Dana Library, permitting movement of the Institute for Jazz Studies to a location worthy of its stature and reputation, and also allowing expansion of the library's multimedia services.
- Added the Management Education Center, which expands the facilities available for housing some of the Faculty of Management.
- Added to the athletic and recreation center a swimming pool, racquetball courts, tennis courts and the Alumni Field for baseball, softball, soccer and track.

- Added to the Paul Robeson Campus Center new meeting facilities and a faculty/staff dining room.
- Added a parking deck.
- Established a Campus Beautification Committee and implemented refinements of the campus landscape.
- Added land for future growth.
- The campus has also started a \$7 million renovation of Bradley Hall (housing the Department of Visual and Performing Arts and the Campus Book Store) and is in the initial stages of construction for the \$49 million Center for Law and Justice. When this new center is completed, the campus will be physically consolidated around University Avenue.

3. ORGANIZATION, GOVERNANCE, ADMINISTRATION, AND SERVICES

INTRODUCTION

The achievements outlined in the previous section testify to the integrity of strategic planning and implementation at the Newark campus. This section focuses on the administration of the campus at Newark in two aspects: as a part of Rutgers University and as a major university center in northern New Jersey. Both conceptions of the Newark campus overlap in ways that demonstrate both harmony and tension between the campus and the university's administration.

Because of its location and the clientele it serves, the Newark campus has an identity distinctly separate from the other campuses of Rutgers University. Under the leadership of its provost, the campus strives to fulfill the mission and goals it has set for itself; and each academic unit, led by its dean, strives to fulfill its own mission and goals. The campus is organized in the traditional fashion and has a tradition of shared governance in academic matters. FAS-Newark, the Graduate School-Newark, the Faculty of Management, the School of Law-Newark, the College of Nursing, the School of Criminal Justice, and the Center for Molecular and Behavioral Neuroscience all have their own strong and independent faculties which meet regularly and take the initiative for such academic personnel decisions as appointments, reappointments, and tenure. They are responsible for decisions governing curriculum, degree offerings, graduation requirements, budgets, departmental governance, and student services. The faculties at the colleges function through committees which provide faculty participation in college policy and formulation and decision-making.

RUTGERS-NEWARK AND RUTGERS UNIVERSITY

Despite the unique issues it faces together with other institutions of higher education in Newark, the Newark campus is very much a part of Rutgers University. The campus shares the goals, plans, problems, and fortunes of the wider university. Representation of Newark campus viewpoints in the university context is achieved in many ways: the campus is represented by the Newark provost in the President's Cabinet; the seven member university-wide Promotion Review Committee includes the Newark provost as a permanent

member (Newark faculty members have also been selected to serve on the Committee on a rotating basis); the Committee on Standards and Priorities in Academic Development includes three senior faculty members from the Newark campus; of the approximately 260 members of the university's Strategic Plan Implementation Committees, about 60 were drawn from Newark; similarly, the Newark campus is represented on the university's Committee for the Future; and Newark faculty members are active on faculty committees of the university.

The university also comes to Newark: meetings of the Board of Governors are held periodically in Newark. (Several members of the Board are Rutgers-Newark alumni.) University officials often visit Newark for meetings and conferences, The University Senate, which has representation from all three campuses, periodically meets in Newark, as does the Committee on Standards and Priorities in Academic Development. These efforts and others promote sensitivity to campus issues and reinforce the view that the Newark campus is an integral part of Rutgers University.

The locus of responsibility for services to the academic community is also a salient example of both harmonious relations and sources of tension. The university has delegated to the Rutgers-Newark campus such services as security (including cooperation with neighboring college security forces), maintenance, parking, and other services which are provided, for the most part, effectively and efficiently. Other services such as political relations, the Washington office, state-wide budgeting, and payroll are effectively provided centrally. Still, there are several areas of services which fall in between and have been noted as problems in prior accreditation reports. Financial aid, computing services, and admissions are centralized in the university, and these areas have not provided satisfactory levels of service in the past. (See Section 4 for examples.) However, the campus has made recommendations for the improvement of service and some of these have been embraced by the university and are beginning to be implemented.

THE PROVOST

The Office of the Provost provides guidance and direction to the academic and administrative units on the Newark campus and represents the campus to the university and to the broader community in which it makes its physical home. A primary responsibility of the provost is to assure that the Newark campus sets its academic sights high yet recognizes its obligations to the communities which neighbor the campus. Uniting the campus community around shared goals is achieved, in part, through the strategic planning process.

THE CAMPUS AND THE COMMUNITY

The relationship between the campus and the local community is critical to its ability to function as an integral part of the academic, business and cultural life of Newark and North Jersey communities, as well as critical to Rutgers-Newark's ability to attract students to downtown Newark. The provost has a special role in the continuing involvement with the city and its leaders so that the university serves, and is seen as serving, the communities in which it is located.

The provost's leadership is visible in the Council for Higher Education in Newark (CHEN), a coordinating mechanism for the Rutgers-Newark Campus, NJIT, UMDNJ, and Essex County College. The council has promoted coordination, cooperation, and communication leading to joint graduate and undergraduate programs, cross-registration arrangements, shared capital planning and construction, and student mobility among the institutions. The roots of campus planning must be entwined with the urban

community in which it is located by both necessity and commitment. Rutgers-Newark, with its collegial neighbors, the institutions which constitute the Council for Higher Education in Newark (CHEN), has had a dramatic impact on community planning and the physical reconstruction of the central ward (the focus of the 1967 Newark riots) which all four institutions call home.

THE CAMPUS AND THE UNIVERSITY

The provost is the major representative of the campus to the president and vice presidents of the university and to the Board of Governors. As noted, he is a member of the Promotion Review Committee, the President's Cabinet among other senior university administrators and a member of the University Senate. Associates of the provost regularly meet with vice presidents and their counterparts on matters of budget, personnel, student-service issues, and academic planning and program development. The campus budget covering all schools is allocated to the Office of the Provost for disbursement.

DIRECTION OF THE ACADEMIC AND ADMINISTRATIVE AFFAIRS

The deans of the several academic units in Newark report directly to the Newark provost. Their personnel and support budgets are allocated according to historical needs and program developments. The provost meets regularly and separately with each dean to discuss achievements, difficulties and priorities at least once a month. (See also Deans' Council below.) These frequent, informal meetings permit ample feedback for both deans and the provost to gauge impact on the academic progress of the units and reactions by the university administration. The provost's associates work closely with the deans, their staffs and faculties for the planning and development of academic programs as well as for the planning and development of student-support services and infrastructure needs.

Through his associates, the provost also directs the administrative affairs of the campus. These administrative offices include, among others, Athletics and Recreation, Business Affairs, Campus Housing, Physical Plant, the Paul Robeson Campus Center, University Police (in Newark) and the Newark Department of Personnel. These units report directly and solely to the Newark provost. Administrative units which have primary reporting relationships to New Brunswick vice presidents and dotted line relationships to the provost include Registrar, Financial Aid, Admissions, Student Health and Alumni Relations. The dual reporting can pose problems either in management or in priority setting or both. (See Appendix 2, Organization Chart.)

The provost also convenes three campus forums to hear directly from constituents and permit constituents to hear one another as well. These forums are the Deans' Council, the Newark Faculty Council, and the Administrative Forum. While the provost communicates regularly and formally with the faculty and administrators, he has no regular, effective mechanism for talking periodically to students and student leaders. Each college has its own strong, student organizations, but apart from occasional meetings with student leaders, there is no campus-wide mechanism which gives student leaders ongoing contact with the provost. Though he is widely known among the professionals on campus, students have little reason to find their way to his door. It is expected that the more centralized location of the Office of the Provost in the Center for Law and Justice will remedy this situation.

The Deans' Council

The Deans' Council generally meets every other week during the academic year. The council consists

of the deans of the five academic units, the provost, his six associates, the assistant to the provost, the director of the campus library, and the director of public information. The meetings are held to discuss issues of current concern to the deans, for news affecting the welfare of the campus and the university, and for assembling a consensus regarding such issues.

The Newark Faculty Council

The council consists of elected representatives of the five schools and a Dana Library faculty member. It meets with the provost and his associates (who have voice but no vote in the council) monthly to air matters of academic concern and provide a venue for discussion of matters affecting the well-being of students or the success of academic initiatives. The council elects its own officers and defines its own agenda. As a sounding board for the provost, it has played key roles in raising the quality of services, suggesting budget priorities and adjustments, and guiding development of the campus strategic plan. Some members of the council need to strengthen their activities in communicating to and from the faculty.

The Administrative Forum

The Administrative Forum consists of 105 senior and middle managers of campus administrative departments (both direct and dotted line reporting) which is convened by the Provost and meets twice each semester to hear about and discuss important events relating to the Newark campus. It has been functioning well for the past few years and has helped to develop a consensus on campus regarding many issues.

ADMINISTRATION OF THE SCHOOLS, COLLEGES, AND FACULTIES

The academic units of the Newark campus consist of FAS, home to the two undergraduate liberal arts colleges, Newark College of Arts and Sciences and University College-Newark; the College of Nursing, which offers both graduate and undergraduate degrees; the Faculty of Management (which houses the Graduate School of Management, the School of Management in Newark and the School of Business in New Brunswick); the School of Law; the Graduate School – Newark; and the School of Criminal Justice, a graduate school whose faculty also are responsible for the undergraduate criminal justice major in Newark College of Arts and Sciences and University College-Newark. Also reporting directly to the Provost is the Center for Molecular and Behavioral Neuroscience and the Center for Global Change and Governance.

The individual faculties, colleges, and schools are the sites of decision-making for curriculum matters and degree requirements. In addition, matters of academic personnel are initiated at this level. It is also expected that the individual units will determine their own future academic directions. The provost shares in the concerns of the several units and attempts whenever possible to coordinate the plans of the units so that the campus' resources are not squandered in duplication and the needs of all units can be considered in conjunction with and in support of one another.

CAMPUS SERVICES FOR STUDENTS

Student services are a major factor in attracting and retaining students, and provision of these services, through the associate provost for student affairs, assures their consistency with the special needs of Newark's students. Services which are the responsibility of this associate provost are Admissions, Athletics and Recreation, Campus Center, Financial Aid, Housing/Residence Life, Health Services, Psychological Services, and the Office of the Registrar. These services are discussed in detail in Section 4.

GENERAL CAMPUS SERVICES

Computing Services

The director of Rutgers University Computing Services (RUCS) in Newark reports directly to the executive director of computing and information technology, and has a dotted-line relationship to the provost. RUCS serves student needs, faculty research and teaching, and administrative needs. University-wide, it has been under-funded and stretched too thin for too many years.

Through imaginative leadership and cooperation among the academic units and Dana Library, Newark had been an early university leader in local networking, but Newark quickly outgrew its own “home-grown” infrastructure. RUCS-Newark has consequently been the subject of much campus criticism in the last few years. Inheriting this entrenched situation, the new RUCS-Newark director has begun to establish a clear set of priorities to redefine and stabilize the position of RUCS in Newark.

Although outside the director’s immediate control, her top priority for the campus must be the implementation of the RUNet 2000 initiative in Newark. As the campus with the oldest infrastructure, it is essential that Newark receive top priority in the RUNet 2000 program because the existing network is strained.

In the interim, priorities have been identified: conversion of all student computer labs to Windows 95 (including the necessary campus-wide training), reconstruction and refurbishment of existing student labs, and reconfiguration of all Novell servers on campus to provide consistent system support, local applications, and reliable operation.

Immediate changes implemented by the new RUCS-Newark director that will help achieve these goals include the involvement of students in the computing advisory committee and completion of an upgrade program and enhancement of the UNIX system computing environment on campus.

The infrastructure problems highlighted above are compounded by the difficulty the campus has had in finding qualified people to accept available positions in RUCS-Newark. The major issue is the increased competition that exists for qualified technical personnel and the resulting salary levels. Vacant positions severely limit the ability of RUCS to provide the needed level of service to the campus.

Business Services

Business Services is the campus organization responsible for student accounting, departmental budgeting, purchasing in Newark, and grant accounting for faculty needs. It is a responsive, comprehensive service that provides good service and advice to the campus community.

Sponsored Programs and Research

The Office of Research reports to the provost. The office provides a full range of administrative services to assist faculty and staff in identifying, soliciting, and procuring external funding for research projects and programs. A variety of electronic and conventional media are used to identify potential sponsors through funding searches. The campus community is notified of funding opportunities, and the office provides assistance with all phases of proposal preparation. The office is also responsible for providing

university endorsement for all requests for external funding, while assuring compliance with Rutgers regulations and agency program guidelines.

In fiscal year 1996, the office processed 144 proposals for a total of \$15.5 million (including 68 proposals to federal agencies for \$10.3 million). In fiscal year 1997, the office processed 178 grant proposals for \$22.2 million (including 100 grant proposals to federal agencies for \$17.7 million).

Campus Communications

The Office of Campus Communications reports to the provost and has two major priorities: (1) enhancing the awareness and image of the Newark campus by producing and disseminating comprehensive and quality publications for recruitment and development purposes; and (2) developing marketing strategies for media relations and outreach, including greater saturation of geographic areas that promise high potential sources of students. In addition, this office gives priority to programs which help create closer alliances with the city of Newark.

In the last year or two, Campus Communications has made significant progress in producing substantive marketing publications for student and faculty recruitment, and for enhancing the perception of Rutgers-Newark as a progressive, superior educational institution and a major urban research center.

Campus Communications faces several major issues, and foremost among these is a need for greater resources. Pressing needs at the moment include enhanced computer hardware/software, and improved server reliability. Campus Communications objectives are generally constrained by resource issues, significantly limiting the number of initiatives that may be undertaken in any given year. Campus Communications seeks to develop publications that effectively meet the needs of the Campus and the University.

Other services such as Campus Safety and services provided by Physical Plant are discussed in Section 9.

4. STUDENTS

PROFILES OF RUTGERS-NEWARK STUDENTS

Rutgers-Newark enrolls the most diverse population of students of any campus of Rutgers University, and indeed of any nationally ranked university in the U.S. There is no predominant racial/ethnic population, and the gender composition has remained approximately equal for several years. Rutgers-Newark students are overwhelmingly New Jersey residents, and approximately 80% of undergraduates come from Essex County or the four other neighboring counties. International students enrolled in the Graduate School increased steadily between 1992 and 1996 to 15.5% of the student body, but remain a small minority at other schools. (See Appendix 3, Geographical Distribution of the Student Body.)

Undergraduate Student Profiles **Enrollment**

Admissions to NCAS and Nursing have risen slightly over the period 1989-1996, while University College admissions have declined slightly over the same period. Total enrollment for all three undergraduate

schools fell between 1992 and 1996. For NCAS and Nursing the decline has been minor: 3% and 5% respectively. For University College, the decline was 11%. The minority composition of the student body of each school has risen by 10% for NCAS and 5% each for Nursing and University College. The proportion of female undergraduates has also risen slightly.

SAT scores for entering students have not changed between 1992 and 1996. (See Appendix 4.) NCAS has witnessed an annual increase in the number of applications from students with much stronger SAT scores and/or high school records than the average enrolled student, but these students most often choose to go elsewhere. The dean's office ascribes our inability to attract most of these students to the paucity of merit scholarships; the lack of Campus-specific recruitment materials; and the increasing competition from state colleges, some of which have adopted university status. To help remedy this situation, President Lawrence allocated a substantial number of Carr merit scholarships to the Newark Campus in the spring of 1996. The allocation of James Dickson Carr Minority Scholarships (merit based scholarships) to the Newark campus has been of great benefit to our recruitment efforts. (See Appendix 5.) We look forward to the time when a definite number of presidential scholarships will also be allocated to the Newark campus to help attract more top students to our campus.

Age

In 1996, approximately 25% of Nursing students were 25 years old or older. The percentage of students 25 and older at NCAS and University College for the period 1992-1995 was approximately 20% and 60% respectively (Appendix 6). These data are not unexpected for an undergraduate professional school or for an evening adult school, but the 20% for NCAS is at least double that of other undergraduate liberal arts schools within the university. The greater age of the Newark undergraduate population has both positive and negative aspects: our students are more serious than the traditional undergraduate population, but many have been away from regular studies for a period of time and have to work harder to redevelop good study habits.

Full-time/Part-time

During the five-year period ending in spring semester 1996, the part-time enrollment at the College of Nursing has declined by 3% to 8.3%. At NCAS and University College, part-time enrollments have increased. At NCAS, the increase has been 5.1% to 15.9% in 1996, and at University College, the percentage of part-time students burgeoned from 51.2% in 1992 to 72.8% in 1993 and then progressively decreased to 62.3% in 1996 (Appendix 7). Part-time enrollment correlates with poorer economic status (See CIRP Data, below) and the need to work. Working, while essential for many of our students, also deprives them of the opportunity for study without distraction, and for intellectual stimulation and socialization with fellow students. Anecdotal evidence indicates that many of our full-time students work significant numbers of hours weekly also.

Transfer Students

In light of campus efforts to increase access and to provide a university education to the students of New Jersey, the undergraduate colleges have developed course articulation agreements with several northern New Jersey county colleges. Transfer students now make up a significant proportion of the undergraduate student population. (See Appendix 8, Admitted Students.)

- At NCAS, the percentage of transfers among new students has climbed from around 40% to about

50%, at which it held steady between 1994 and 1996.

- Nursing has admitted about 50% (with some slight fluctuations) of entering students as transfers since 1989.
- A significant number of University College students have been transfer students for the past several years (68.4% in fall 1996).

The agreements by themselves have not eliminated the difficulties faced by many county college students when they reorient to a four-year curriculum. Transfer students have lower retention rates than other liberal arts students. At NCAS, 9.4% fewer transfer students return for their second year than do NCAS first-time students. By the second year, the differential has increased to 12.8%. Significant differences in University College populations do not appear until the second year, when the differential becomes 11.4%. Differentials are attributed, in part, to reduced availability of financial aid for transfer students entering during the spring semester (most financial aid resources are allocated during the fall semester) and also to the “culture shock” of entering into a complex and demanding environment. Given the prominent place transfer students have in the student body, it is incumbent upon the faculty and administration of the Newark campus to better understand their needs and to better assist them in their quest for a University education.

CIRP Data

NCAS participates in the Cooperative Institutional Research Program (CIRP). Data from fall 1995 survey indicate that NCAS first-time, full-time students when compared with students of other public universities are significantly more diverse; come from families with less income; fewer are native English speakers; and more reside with their parents. Almost twice as many NCAS students require remediation in English and math, and fewer, almost half as many, had high school averages grades of A- or better. Consequently our students, our faculty and our academic support services must work harder in order for our students to achieve scholastic success than at other public institutions, including the other campuses at Rutgers.

Retention

Retention rates for undergraduates have generally improved between 1990 and 1995. At NCAS, they have increased from 83% to 86%; in Nursing from 89% to 98%; but have hovered between 56% and 64% at University College. .

Graduation

The number of graduates at University College has increased by 35% to 199 students graduating in 1996, when compared to the number of graduates in 1989. This is noteworthy in light of the retention rate at University College and the decline in enrollments noted above (Appendix 9). NCAS has averaged 690 graduates annually between 1989 and 1996 with a low of 645 in 1991 with a high in 1995 of 725. (See Appendix 10.) When NCAS graduation data are compared with data generated by the Consortium for Student Retention Data Exchange (CSRDE)² for the period 1991-1995, NCAS students graduate at a slightly

² CSRDE is a consortium of 218 public and private colleges and universities.

slower rate than do students at an average CSRDE school³ but the number of students who graduate within 6 years is greater at NCAS (58%) than either private (57%) or public (45%) CSRDE institutions; thus giving NCAS a higher overall average.

University College

The mission of University College-Newark (UCN) is to provide a liberal arts education for the adult student who has work and family obligations during the day, and who attends class in the evening or on Saturday. Through its flexible admissions policy, University College offers access to students whose higher-education career has been interrupted, and to non-traditional students. Some departments rotate electives through the NCAS and UCN course schedules so that students from both colleges may take courses as their schedules permit. Rotation also helps place a greater number of full-time faculty members in the University College classroom. Departments have increased the number of Saturday classes available to UCN students from 8 in Fall 1994 to 14 scheduled for Fall 1997.

Approximately 40% of UCN students major in accounting or other business subjects. These, combined with the growing number of criminal justice majors (approaching 100) and social work majors (over 50) give the student population a more professional composition. University College concentrates its resources in those departments which can support curricula necessary to fulfill major requirements through evening and Saturday courses.

Honors Programs

Honors programs for University College and NCAS are being refashioned into an honors college. Honors programs in these schools have presented challenging curricula to students able to engage in the more rigorous programs offered. In NCAS, students have enrolled in specially designed courses and, in their junior years, they participate in a series of interdisciplinary colloquia sponsored by faculty members each semester. In the senior year, students work closely with a faculty member to produce a senior honors project. While most projects are related to the student's major, interdisciplinary work is also encouraged. Between 1995 and 1997, about 150 juniors and seniors have participated in the honors program each year. In 1997, 57 students graduated with college honors, while in 1995 and 1996, 44 and 39 students awards were made respectively.

Graduate Student Profiles

Graduate School-Newark

Graduate and graduate professional schools in Newark offer the Ph.D., the J.D., M.A., M.S., and the M.P.A. Total enrollment between 1992 and 1996 declined by 6% from 1252 students in 1992 to 1175 in 1996. Minority enrollment in Graduate School programs has held constant at 26%-27%, and the proportion of women has risen by 5% to 58.6%.

GRE scores of entering students in behavioral and neural sciences, in criminal justice and, for 1996, in mathematics have been significantly above the national averages for these programs. Scores in biology, chemistry, history, and management have compared favorably with national averages, and have generally

³ Between 1991 and 1995, NCAS graduated 21% of its students after 4 years, while all CSRDE schools graduated 28%; NCAS graduated 47% of its students after 5 years, while all CSRDE schools graduated 49%.

increased over the five-year period. Scores in another six programs have held steady or decreased over this time.

In the 1988-1989 academic year, the number of Ph.D.s awarded was 16. Between 1992 and 1996, 40 or more Ph.D. degrees were awarded annually. Between 1992 and 1996, the part-time student enrollment varied between 76% and 80%.

Graduate School of Management (GSM)

GSM offers the MBA, the Executive M.B.A. and master's in accountancy degrees. Enrollment held steady at approximately 1500 students between 1992 and 1996, except for a dip in 1994. Minority enrollment increased during this period by 8% to 28.9% in 1996. Enrollment of women has remained fairly constant at 35%. Students have been mostly part-time students, with the percentage in 1996 at 77%. GMAT scores for students in the M.B.A. program are similar for part-time and full-time students and rose between 1991 and 1995. M.B.A.s awarded annually declined between 1993 and 1996 by 27.1% to 376. A possible reason for the decline may be that many part-time students are taking semesters off to look after personal needs, thereby increasing the total time needed to complete M.B.A. degree requirements.

School of Criminal Justice (SCJ)

SCJ awards the Master's in Criminal Justice. Enrollment in the master's curriculum reached a high of 82 students in 1994, and declined very slightly through 1996. The percentage of minority students remained at about 20% between 1993 and 1996, and the proportion of women students has increased from less than half to 60% in 1996. The School has awarded approximately 18 master's degrees annually between 1992 and 1996. The doctorate in Criminal Justice is offered through the Graduate School-Newark.

School of Law-Newark

The School of Law has filled its enrollment goals annually, contrary to the recent trend in schools of law nationally, without sacrificing its admissions standards. However, maintaining enrollments and standards will become increasingly difficult in the future as the number of expected law school applicants continues to decline. Minority enrollment remained steady at near 30% until 1996, when it rose to 33.4%. Women comprised about 40% of the student body between 1992 (41.9%) and 1996 (44.9%).

Full-time students made up more than two-thirds of the student body. Between 85% and 90% of full-time students receive their J.D. degrees in three years, and approximately the same percentage of part-time students graduate in four years.

STUDENT SERVICES

Advising

Undergraduate advisement is carried out by faculty in academic departments or by a combination of faculty and professional staff of the offices of the deans of students of the several schools.

Internships

Academic departments and the Career Development Center arrange for many internship programs annually. For the period between May 1993 and May 1997, the Center listed 467 internships with business and accounting firms; 489 for majors in the liberal arts; 172 (separate from the preceding total) in computer

science, mathematics, sciences and health related fields; and 224 (also separate from the liberal arts above) in a variety of fields including the social sciences, women's studies, and ethnic and racial studies. Of the 1352 listed internships for the five-year period, students reported satisfactory involvement in at least 685 internship programs.

Admissions

The Newark Admissions Office reports directly to the university associate vice president for enrollment management and to the director of graduate and professional admissions, with a dotted-line reporting relationship to the Newark associate provost for student affairs. Newark Admissions is responsible for recruiting and enrolling undergraduate students to the Newark College of Arts and Sciences, the College of Nursing, the School of Management, and University College-Newark. In addition, it works closely with the two campus Educational Opportunity Fund (EOF) programs and the athletic program to develop outreach programs for these special populations.

Recruiters in each of the regional admissions offices recruit students to the entire university, but the Newark campus serves a much more heterogeneous population than the students recruited for other campuses. Applicants apply to the colleges of the university using a single application. Then, admissions decisions for undergraduate freshman applicants to the Newark colleges are processed in the New Brunswick Admissions Office according to criteria established by the schools in Newark.

The *Newark Campus Strategic Plan* outlines three areas for Admissions in Newark:

1. Strengthen the academic quality of the undergraduate student body
2. Meet annual enrollment goals
3. Continue to enroll an ethnically and socio-economically diverse student body.

A new Admissions administration has initiated new strategies in enrollment management, and the campus is anticipating a fresh start in overcoming substantial faculty dissatisfaction with undergraduate recruitment efforts and the notable lack of campus-specific recruitment materials.

The Newark Admissions Office processes admissions materials for the Graduate School-Newark and the School of Criminal Justice. The Graduate School of Management and the School of Law recruit and admit students separately. However, recruitment and other outreach activities would be greatly strengthened by additional staff support, as presently only one full-time staff person is assigned to support graduate admissions activities. Graduate programs are beginning to develop campus number and program-specific literature to fill the information void in this area.

Athletics and Recreation

This unit's mission is to provide students, faculty, staff, alumni and the community at large with a range of programs and activities to enhance the overall quality of life, physical wellness, and participation in the "Rutgers Excellence" program. The Athletic Center houses a 25-yard swimming pool, four racquetball courts, five outdoor lighted tennis courts, a recreation gym for basketball and volleyball, and an arena gym for athletic tournaments. In addition, it contains a fitness room, an aerobics/exercise room, and locker rooms. The baseball and softball fields also host soccer in season, and are surrounded by an all-weather track.

Rutgers-Newark is a men's NCAA Division I volleyball competitor, and for other intercollegiate sports (men's and women's baseball, basketball, soccer, softball, and tennis) competes within Division III. The Center offers 35-40 recreation courses, a full intramural schedule, recreation trips, club sports, and community programs.

Major needs of this unit include improvement of outdoor facilities and an aggressive marketing, fund-raising, and recruitment plan to meet the challenge of state colleges that are achieving university designation.

The Campus Center

The Robeson Campus Center provides a comprehensive educational, cultural and social environment for the diverse populations of the campus and for the wider community.

The center houses student government offices, student clubs, a coffee house, snack bars, the faculty/staff lunch facility, campus meeting rooms, a recreation room, and large meeting rooms for social, cultural and educational functions. A major concern is finding the means to address the increased interest in sponsoring community events in the center.

Examples of events which have involved the broader community in recent years include these from the 1996/97 campus calendar:

- "A Dialogue on Race: History and Implications of the Concept of Race," a series of 10 programs and dialogues among student and community leaders representing a variety of ethnic and cultural groups;
- "The Need for Asian/Pacific Islanders' Cultural Awareness," a series of programs, films and other activities;
- "Immigration Reform Laws: Redefining Who Belongs," a symposium including law scholars and government officials and was attended by 200 persons;
- "The 17th Annual Marian Thompson Wright Lecture Series," brought to the Newark campus eminent historians to discuss "Small Footprints on the Past: Black Children in Historical Perspective." Four hundred attended and ranked the day-long conference as "excellent, among the best ever attended;"
- "Shared Knowledge, Shameful Knowledge: Violence in Women's Lives." More than 300 persons from the University and the broader communities took part in the interactive program of discussions, videos and films concerning violence experienced by women in their daily lives.

Financial Aid

Financial aid administration is a critical function on a campus where the majority of undergraduates are aid recipients and the majority of professional students can attend only with the support of federal loan funds. Prior to this year, financial aid in Newark was not well administered, and this had a significant impact

on recruiting and enrollment. With the appointment of new administrators for the university and Newark the situation has improved.

For example, the Direct Lending program (which has greatly reduced the turn-around time for the disbursement of loan funds to students) was successfully implemented in 1997.

Financial aid is critically important to the low-income students that the Newark campus serves. Concerns persist about the lack of visibility of the Tuition Aid Program and the need for a significant increase in scholarships for students who by and large are first generation college students from blue-collar families, and who generally must depend on loans to pay for their education.

Between 1992 and 1996, the number of undergraduate student loans grew by more than 200% in NCAS, almost 300% at University College, and more than 85% at the College of Nursing. Students in the Graduate School have increased the number of student loans by 98%, and by 83% at the School of Criminal Justice. Grants in aid are up moderately, except at University College where they have increased by 53% during the five-year period. In 1996, 30% of University College students were grant recipients and a slightly higher percentage had student loans. The number of scholarships declined in every Newark school during the five-year period.

Health Services

The Health Service is an integral part of the University Health Service. Its mission is to enhance and maintain the mental and physical health of students and staff and reach out to the larger community to provide health access and education.

The staff of Health Service consists of two physicians, one of whom is the director; two part-time nurse-practitioners; one nurse; one pharmacist; one secretary; one receptionist; and two part-time clerical helpers. A gynecologist visits every three weeks. The staff functions as a group, and patients may select whomever they prefer for care.

The Health Service is busy. During 1996-1997, 8,559 students came to the offices of the Service, but over-the-counter and telephone consultations raised the real number of patient calls to almost 11,000. In addition to serving students' needs, there were 350 staff member visits for on-the-job injuries or for physical examinations if these were required for employment.

Housing and Residence Life

The Department of Housing and Residence Life has responsibility for four facilities which house 700 students: Woodward Hall, a ten-story, suite-style residence hall for undergraduates in three-bedroom suites; Talbott apartments for graduate students and undergraduates who are 22 years old or older; and apartments at 77 Bleeker Street and at 29 James Street that provide 20 family apartments.

The Rutgers-Newark residential occupancy rate (currently over 98%) is consistently among the highest in the university. Construction of an additional high-rise residence hall is a priority for the campus. On-campus housing for students who are married or who have children is in short supply. A new multifunctional residence facility should be built to replace the 77 Bleeker Street apartments.

Psychological Services

The mission of Psychological Services is to support and facilitate the emotional, social, psychological, and intellectual growth of the student. The department's two full-time psychologists and a secretary provide service to an average of 540 students annually. A Graduate Student Trainee Practicum Program has recently been introduced. Additional staff and resources are needed to best serve our students.

Office of Substance Abuse

The role of the Office of Substance Abuse is to educate students, and to respond to and help remedy emergent student abuse problems. The department is led by a coordinator, has a secretary and two student assistants. Another 15 trained student volunteers provide considerable assistance in the department's educational program.

Office of the Registrar

The Touch-Tone telephone registration and transcript system has revolutionized the registration process with excellent results. Since 1992/93, Rutgers-Newark and theNJIT have had direct access to each other's registration systems, and this has facilitated cross-registration to the point that there is now a seamless process for students at the two institutions.

To address the rising demand for information, the Office is becoming increasingly involved in the production and distribution of demographic reports (print and electronic) for the Rutgers community as well as for the private and public sectors.

Food Services

The campus has a student cafeteria at Stonsby Hall, as well as a cafeteria snack bar and a food court in the Robeson Campus Center. The University Club is a food service that caters primarily to faculty and staff members. All of these services are provided by franchised vendors, and the quality of service has been generally satisfactory.

Career Services

The Career Development Center provides invaluable assistance to the Newark students. The Center provides career counseling, planning and placement services for students and alumni through individual sessions, and numerous workshops, conferences, job fairs, on-campus recruitment, and internships.

During 1996/97, the center increased its evening hours for University College students; its staff saw 1771 individuals and, of the 528 new internships listed for that year, 176 students reported successful internship placements. (See the section on internships above for further details.)

Alumni

The Department of Alumni Relations reports directly to the assistant vice president of alumni relations in New Brunswick, and has a dotted-line reporting relationship with the Office of the Provost. The department serves the 70,000 alumni and friends of the five Newark collegiate alumni associations. Despite its obvious importance, the department is staffed by only two professionals and two support staff. Departmental objectives could be significantly enhanced with additional staff and other resources. The number of alumni increases by 6% annually and the department coordinates more than 70 alumni meetings

each year.

Student Satisfaction with Services

As indicated by the results of a questionnaire for graduating seniors, students are generally satisfied with most of the services offered to them. Among the areas which students felt there could be some improvement, access to parking facilities was the number one concern. Dissatisfaction was also voiced regarding financial aid services; the university has recently taken steps to remedy this by the appointment of a new director. In spite of these concerns, graduating students registered their general satisfaction with the campus and their willingness to recommend Rutgers-Newark to others. (See Appendix 11.)

5. FACULTY

INTRODUCTION

In the period since the last self-study, the faculty of the Newark campus has begun to realize the aspiration which had been held since the early 1980s: to become the faculty of a major university center. While the faculty has remained approximately the same size, the academic programs it supports have increased, its reputation has grown and measures of quality such as extramural grants and published research have burgeoned. In fiscal year 1989, federal, state and other grant funding for the Newark campus totaled \$7.2 million, and nearly doubled to \$13.6 million by fiscal year 1993. Prior to the close of fiscal year 1997, funding had already reached the level of \$11.6 million. (See Table A.10.)

We note in Section 4 the multi-ethnic, multiracial, multi-cultural nature of the student body. Drawn from around the world, but principally from northern New Jersey, the students are attracted to this campus in search of a university education and the skills necessary to become active participants in the life and economy of the nation. The faculty that has developed over the past several years is well suited to provide the appropriate high-quality education to our student body. It is a faculty rooted in scholarship, accessible to our students, and able to teach them the fundamentals they require and the research techniques they desire and will need.

FACULTY RESEARCH AND PROFESSIONAL ACCOMPLISHMENTS

Members of the Newark faculty are receiving increased attention for their accomplishments. Notable recent individual faculty achievements include the following. (See Appendix 12 for a summary of grants awarded.)

- Co-Director of the Center for Molecular and Behavioral Neuroscience, Dr. Paula Tallal was in the news for her development of a process to retrain language-based learning impairments in children and help them overcome their disabilities.
- Associate Professor Mark Gluck of the Center for Molecular and Behavioral Neuroscience became Rutgers-Newark's first recipient of a Presidential Early Career Award for his research in the cognitive neuroscience of learning.

- Professor Paul Tractenberg and the Education Law Center culminated more than 25 years of work in 1996 when he successfully petitioned the New Jersey Supreme Court to rule that the state of New Jersey had to provide significantly more funding to poorer school districts.
- Professor Emeritus George Walker was awarded a 1996 Pulitzer Prize for musical composition.

Two campus units which have made remarkable achievements in recent years are the Center for Molecular and Behavioral Neuroscience and the School of Criminal Justice.

The Center for Molecular and Behavioral Neuroscience has 14 regular, tenured and tenure-track faculty members, supports seven other faculty positions through grants, and has 30 postdoctoral fellows on its staff. In 1995/96, 20 members of the center had awards of \$4.5 million for the year, with \$20.5 million pending through the year 2002. In 1995/96, the faculty produced 109 refereed journal articles; were invited to present 83 lectures or symposia; received 10 academic honors including the Presidential Early Career Award; served on 44 professional boards or other administrative capacities; in 97 instances were journal reviewers or editorial board members; served on 12 grant-review committees; and one faculty member was awarded a patent.

School of Criminal Justice

During the period 1991/96, the faculty produced 41 books (17 edited), 212 articles in refereed journals and/or chapters in published books, and made 230 outside presentations of papers, lectures, or commentaries. Since the last Middle States review in 1988, School of Criminal Justice faculty assumed the editorship of six journals, which permits the school to reach out to academic constituencies around the world.

NUMBER AND PROFILE OF THE NEWARK FACULTY

From 1988 to 1996, the full-time faculty in Newark increased 6.9% from 420 to 449. Newark faculty members are graduates of many universities. Only 10 members, or 2% of the full-time faculty of 1996/97, received their degrees from Rutgers University. The overwhelming number of full-time faculty members have terminal degrees: 99% in the Faculty of Arts and Sciences; 83% in the Faculty of Management; 100% in Law; 89% in Nursing; and 100% in Criminal Justice.

The gender and racial/ethnic composition of the Rutgers-Newark faculty has remained relatively unchanged in the several years since the 1988 evaluation. (See Appendix 13.) These data in no way contradict the tremendous efforts of the faculty to attract applications of women and minorities. During this period, we have remained about one-third female, and minority faculty composition has risen from 15% to 19%. The reasons we have not increased the diversity of the faculty in the past 10 years may be attributed to four factors despite having competitive salaries:

- We rarely hire our own graduates;
- Our departments are relatively small and we often limit the breadth of the recruitment pool to avoid duplication of specialties;
- Applicant pools of qualified women and minority candidates are small and competition from larger,

more prestigious schools is very fierce;

- Women and minorities who are successful at Rutgers-Newark are often recruited by other universities after tenure.

It is noteworthy, however, to remark on recent successes in increasing diversity.

In the FAS, 44 tenure-track or tenured faculty were recruited between 1992/93 and 1996/97: 36% were women and 42% were minorities. Of particular note is the success achieved in three of the science departments: chemistry, geology and physics all of which have overcome long-standing under-staffing of either women or minorities through vigorous recruiting.

Although it is widely recognized that the small annual production of female and African-American candidates for assistant professorships in the sciences makes their recruitment both highly competitive and difficult, affirmative action recruitment for the Graduate Program in Public Administration is equally challenging. Therefore it is noteworthy that in the past two years, two minorities have been recruited into the program in Public Administration, one African-American male and one African-American female.

HIRING PROCEDURES

With the exception of the School of Law, new faculty members are recruited through advertisements in professional journals, professional placement services, direct mailings to institutions that are likely sources of faculty members, and at professional meetings. As Rutgers moved to become an AAU institution in the 1980s, the standards for promotion and tenure became more rigorous, and the academic departments responded by intensifying their recruitment of highly qualified young and/or experienced faculty members. In recent years, academic departments have also added the desire to diversify the faculty as an element in the recruitment process.

PROMOTIONS AND TENURE

In the five year period 1992/93 through 1996/97, faculty promotion rates were relatively high. 74% of candidates considered for tenure at the rank of associate professor were awarded that rank; as well as 70% of candidates considered for professor; and 67% of those considered for professor II (Appendix 14) It is expected that the campus will maintain relatively high rates for promotion and tenure because we are able to recruit highly qualified candidates and to compete successfully for them against larger institutions.

FACULTY DEVELOPMENT PROGRAMS

Rutgers has two university-wide programs for faculty development: Faculty Academic Study Program (FASP) and the Competitive Fellowship Leave program (CFL). (See Appendix 15.) In addition, deans provide many *ad hoc* opportunities for faculty members to travel to professional meetings and to devote extra time to special projects through course relief.

Faculty Academic Study Program

Rutgers has no sabbatical program; instead, it instituted a study program in 1972 that permits leaves every three years. The number of persons on leave in any year is generally between 40 and 50. Reports of their activities indicate that faculty members generally find the periods of leave to be highly productive, benefiting both the individual and the university.

Competitive Fellowship Leaves

This program permits faculty members to apply for Fulbright, Guggenheim or similar fellowships which are prestigious but offer little remuneration. The CFL program permits faculty members to retain their salaries and benefits by accepting the leave, and contributes money back to the academic unit to pay for a replacement. One or two faculty members generally apply for CFLs annually. No CFL application in Newark has ever been denied.

Informal Programs

Deans usually provide new faculty members with course relief during the first year or the first and second year to give them time to develop their research programs.

FACULTY WORKLOADS

The only duties assigned to faculty members, aside from requests that they serve as members of committees, are teaching assignments. Rutgers University and the faculty union recognize and agree that the workload of individual faculty members shall be consistent with the workload of their department, program, or unit. Descriptions of faculty workload at the several schools follows.

Faculty of Arts and Sciences

The teaching responsibilities of faculty members are determined by the dean and the chair of the department. Within FAS-Newark, teaching responsibilities vary according to the discipline. The differential between departments is attributable to factors such as: the importance and/or recent growth of a graduate program, an emphasis on grant-related activities, and the establishment of a research-oriented faculty. These factors are also used by the dean and the chairs to establish the teaching responsibilities of individual faculty members.

New faculty members are generally given a one course release per semester for the first two years of their contract at Rutgers-Newark. The standard teaching load for faculty members at FAS-Newark is three courses per semester.

It should be noted that the Center for Molecular and Behavioral Neuroscience is a freestanding research institute and the primary home of the graduate program in behavioral and neural sciences. In

addition to courses in the graduate program, the faculty provides undergraduates with opportunities for independent study.

Faculty of Management

As befits a business school with a research orientation, the standard teaching load for research faculty is four courses (12 credit hours) per academic year. This load is increased to five courses for faculty whose only responsibility is teaching (i.e., below the rank of Assistant Professor). As a result, student/faculty ratios for the past four years have held at approximately 19 students per faculty member.

School of Law

A full load for a full-time member of the faculty is four scheduled class assignments per year, or three if one is a five-credit course. Faculty in their first semester of law teaching receive a reduced course load.

College of Nursing

Considerable effort is put into assigning faculty teaching assignments in order to facilitate faculty scholarship. The distribution of teaching load for faculty by rank is unbalanced. Due to the nature of the undergraduate curriculum, the average faculty workload is nine to ten credits per semester, which includes one six-credit clinical course and one three-credit theory course for assistant professors and above. Instructors and clinical assistant professors may carry a workload of 12 credits. The bulk of the teaching responsibility falls on assistant professors, who along with teaching must fulfill the requirements for reappointment and tenure. Part-time lecturers and teaching assistants augment the full-time faculty cohort.

Each faculty member is responsible for academic advisement of approximately 15 students. Advising occurs at least twice a semester prior to registration. Each faculty member is required to be available during posted office hours once a week.

College of Nursing Clinical Faculty

In 1994, the College of Nursing in conjunction with the College of Pharmacy in New Brunswick proposed that the university establish a clinical faculty series. The clinical faculty would not be eligible for tenure, with the understanding that scholarship and publication would not be considered as major responsibilities for reappointment and promotion considerations. The approval of this series for the two schools has helped the College of Nursing faculty immeasurably in that faculty members devoted to clinical instruction may be hired for extended periods and thereby free assistant professors to perform fully the duties expected of university tenure-track teaching faculty. Prior to 1994, clinical faculty members were often hired as instructors, a title which permits only limited reappointments.

School of Criminal Justice

Most School of Criminal Justice faculty teach three graduate and one undergraduate course per academic year. In addition, faculty are expected to serve in additional teaching capacities as advisor or reader for master's essays, supervise independent study or fieldwork in criminal justice, serve as chair or member of Core Area Committees (for doctoral students), and as chair or member for dissertation research credits. The school does not offer any graduate courses in the summer, and since the school took responsibility for undergraduate courses in 1996 summer courses are taught by qualified doctoral students and part-time lecturers.

INSTRUCTION BY PART-TIME LECTURERS

Part-time lecturers (PTLs), most of whom teach in FAS and the Faculty of Management, is an employee title reserved for instructors who are hired on a per-course basis. They, like members of the faculty and teaching assistants, are represented by a chapter of the AAUP but their responsibilities are limited to teaching (Appendix 16).

Among arts and sciences departments one-third of all courses are taught by PTLs. If remedial courses in academic foundations are not considered, the percentage falls to 29% of all courses. 41% of the courses taught by PTLs (with the exception of Academic Foundations courses) are required introductory courses in the departments of English and math/computer science.

In the Faculty of Management, the percentage of courses taught by PTLs has decreased from 37% in 1992/93 to 24% in 1996/97. The decrease is ascribed to three factors.

- The number of faculty lines has increased over this period by 21%.
- Departments have invested more heavily in instructor positions whose responsibilities are primarily teaching, rather than in assistant professors whose responsibilities are the more traditional mix of teaching and research.
- By changing the mode of instruction from separate sections to address a large student demand for a particular class, the Faculty of Management moved more classes to the lecture/recitation mode.

Courses taught by PTLs are less expensive to offer because all of the salary associated with this instruction ends up in the classroom. But lower costs must be reconciled with lower expectations in the instructors who take no part in program planning or revision; are not expected to have so strong an academic background as regular faculty members; and are not expected to have the same commitment as full-time faculty members.

6. PROGRAMS AND CURRICULA: DEVELOPMENT, INNOVATION, AND ASSESSMENT

INTRODUCTION

Programs at Rutgers-Newark are distributed among six academic units: FAS-Newark, the Faculty of Management, the School of Law, the College of Nursing, the School of Criminal Justice, and the Graduate School-Newark. (A complete list of degrees offered may be found in Appendix 17.) Continuous innovation and experimentation with programs and curricula are essential if Rutgers-Newark is to continue to satisfy the campus's dual mission of excellence and access. Our undergraduate students require an extra level of such innovation because many of them are the first generation in their family to attend college, many come from failing public school systems, and for a significant proportion of our students English is a second language.

In times of expanding resources the challenge to create and maintain innovative, high- quality programs for our students would be a significant one. However, the University has had to face a prolonged decline in financial resources in the last decade, making this challenge even greater.

Despite this, our faculties have succeeded in meeting the challenge through a variety of strategies, among the most important of which are the following.

- Broad-based, sustained campus-and university-wide strategic planning which targets support of appropriate new programs.
- Collaboration among disciplines at the Rutgers-Newark Campus, cooperation with New Brunswick and Camden campuses, and consortium/collaboration with neighboring institutions of higher learning in Newark (NJIT, UMDNJ, and Essex County College). (See Appendices 18a and 18b.)
- Increased emphasis on information literacy and computer-enhanced learning.
- Creation of new research internship opportunities for undergraduate students.
- Formation of new partnerships with community, business, and cultural organizations.
- Regular assessment, including external reviews, of program quality.

UNDERGRADUATE PROGRAMS

Faculty of Arts and Sciences-Newark

FAS-Newark offers B.A. and B.S. degrees covering a broad range of disciplines in the humanities, social sciences, and sciences in two colleges: the Newark College of Arts and Sciences (NCAS) for students attending classes during the day, and University College-Newark, for students attending classes in the evenings or on weekends. The Newark College of Arts and Sciences offers 44 majors, while University College-Newark offers 15 majors. Included in these major offerings are accounting, finance, marketing, and management degrees which are awarded jointly by either the Newark College of Arts and Sciences or University College-Newark and the School of Management.

Important structural changes which have occurred since 1988 in the FAS-Newark and which have a direct impact on undergraduate programs are:

- Creation of the School of Management-Newark, an upper-division undergraduate college
- Merger of the Departments of Art and Design, Music, and Theater Arts, Speech, and Television into a single Department of Visual and Performing Arts
- Shift in responsibility for instruction in criminal justice courses from FAS-Newark to the School of Criminal Justice

- Reorganization and enlargement of the Department of Psychology.

General Education Requirements

The general education requirements for the Newark College of Arts and Sciences and University College-Newark were revised 10 years ago. A complete description can be found in the undergraduate catalog. Briefly, students are required to select specified numbers of courses among areas of writing, science and mathematics, social sciences, literature, history, and fine arts. Students who have not taken two years of foreign language in high school are required to take one year of language courses at Rutgers-Newark. In addition to the distribution requirements, all students are required to complete a course from a list of courses designated as interdisciplinary, and complete an additional 15 credits of course work outside the division that includes the student's major. Simplification of the requirements was made because many students did not complete all the requirements by the time of their anticipated graduation. Reasons for the inability to meet requirements include limited offerings of courses appropriate for the requirement, and the fact that many students wait to formally declare their majors until their third or fourth year.

New Programs

New majors offered since the last accreditation site visit are environmental science (an interdisciplinary program of geology, biological sciences, and chemistry), clinical laboratory sciences (replaces medical technology), journalism and media studies (offered jointly by the Departments of English and the Visual and Performing Arts), ancient mediterranean civilizations (draws together and replaces majors in classical civilization and hebraic studies), and women's studies. B.A. degrees in applied physics; applied mathematics; computer science; information systems; and science, technology and society are offered jointly with NJIT. Additionally, FAS-Newark and NJIT now have in place a dual major agreement whereby students at one institution may choose to declare a second major at the other institution.

Curriculum Development

In addition to offering new majors, many departments have revised the curricula of their existing majors in the past 10 years. In the humanities, extensive revisions of the English major eliminate a two-track (traditional and alternate) system and require all students to take courses in earlier periods of English and American literature while maintaining some flexibility of choice. The new major also opens up a student's options in the foreign-language requirement to include literature courses in African, Caribbean and Asian languages. The Spanish major, with concentrations in either Spanish language and literatures or in Hispanic civilization and language studies, has been revised by restructuring existing courses and introducing new courses to provide a more inclusive view of the diverse and complex Spanish-speaking world.

All of the majors offered by the Department of Visual and Performing Arts have undergone extensive revision sparked by the creation of the new department. In the early 1990s, it became clear through the external review process that our arts, theater and music departments were not capable of sustaining the critical mass of resources. Rather than abandon these important programs, the campus looked for innovative solutions. After a comprehensive self-study and the recommendation of an external panel, the Department of Visual and Performing Arts was formed. Close collaboration between the visual and performing Arts faculty and the theater staff at NJIT facilitated curriculum revisions, coordination of theater productions, and sharing of resources. Additional collaborative programs have been developed in television production and graphic design with NJIT.

Significant curricular revisions have also occurred in the sciences, particularly in the area of upgraded laboratory training. Physics won a NSF grant for its introductory courses and received state equipment funds for its advanced courses, to enhance laboratory training for undergraduates. The University awarded biological sciences a university-wide award for Programmatic Excellence in Undergraduate Education for laboratory improvement. The FAS-Newark Dean's Office has received external foundation support to examine how best to implement a generalized undergraduate research initiative in all curricula for all students.

Closely related to the increasing emphasis on undergraduate research across all curricula, is the use of new computer technologies to enhance programs and curricula, funded by a student computing fee introduced in 1993. Eight departments received funding for major projects.

The notion of information literacy, which is linked to computer-enhanced learning, is also appearing in various forms throughout FAS-Newark programs. For a typical student, information literacy begins at Rutgers-Newark with research in English 102, where the student learns about searching the Rutgers catalog and a variety of online databases. Other students receive such training in freshman seminars or in a summer orientation program for first-year students. Discipline-specific issues related to information literacy are part of senior seminars or special topics courses. Additionally, a number of courses have established Web pages to supplement classroom instruction.

The high number of FAS-Newark program development proposals each year indicates the diligence with which faculty try to supplement meager departmental budgets and serves as a measure of the creativity and high aspirations which have long characterized undergraduate educational efforts at Rutgers-Newark. Departments have been supported by the Rutgers Dialogues Grant program and the Undergraduate Curriculum Seed Grant program which support the efforts of faculty members to obtain major funding from foundations and public agencies to develop and update undergraduate curricular offerings.

A major boost to computer-enabled teaching enhancement was provided when the Strategic Resource and Opportunity Analysis (SROA) program made an initial award of \$300,000 to the FAS-Newark Dean's Office to begin implementation of an initiative to equip and prepare students and faculty to use computers more effectively for teaching, learning, and research.

Outside of the general education requirements and major requirements, the honors program continues to thrive and evolve. The Honors Program is an upper-division program involving an extensive series of colloquia in the junior and senior years, as well as a senior thesis project. Each year, 30 to 40 students complete the program. Plans are being made to increase the program to a full four-year sequence.

Internships and Research

The number of opportunities for internships and research continues to increase for undergraduates at Rutgers-Newark. Between 1993 and 1997, 2,000 internships were listed by the Rutgers-Newark Career Development Center. For many years, internships have been important in certain programs, such as social work and journalism. Recent internship courses added to the curriculum include women's studies and arts management, as well as an internship in ancient mediterranean civilization with the Newark Museum.

Research opportunities for undergraduates are provided through programs sponsored by the National

Institute of Health Minority Biomedical Research Support Program, by the Howard Hughes Medical Institute, and by the National Science Foundation. In addition, Rutgers-Newark's Center for Molecular and Behavioral Neuroscience has developed programs which since 1991 have provided more than 45 undergraduates with hands-on research experiences with some of the world's leading investigators in the rapidly growing field of neuroscience and related disciplines.

University College-Newark

Major requirements and general education requirements for University College-Newark students are nearly identical to requirements for Newark College of Arts and Sciences students. Detailed descriptions of degree requirements are listed on pages 41-42 of the undergraduate catalog. Typically, changes in programs and curricula at University College-Newark follow changes at the Newark College of Arts and Sciences.

With diminishing resources in recent years, it has become increasingly difficult to offer a desirable level of services to University College-Newark students. In response to this condition, a task force was convened by the dean during fall 1994 term to review the extent and quality of academic and nonacademic services available to evening students. The task-force, composed of deans, faculty, students, and staff, documented a series of grievances among the student population and made recommendations to address the problems. In response to the task-force report, academic departments have committed, with no additional resources, to increasing the number of courses offered during the evening hours, to increasing the proportion of full-time faculty teaching evening courses, and to increasing advising time for University College-Newark students. Student-services offices are now maintaining later hours during critical times in the semester, and a student-run University College-Newark newsletter has been created.

One strategy for improving the University College-Newark programs has involved building enrollments in evening courses with Newark College of Arts and Sciences students by listing University College-Newark courses and Newark College of Arts and Sciences courses together. Total enrollment in evening courses has increased from 10,749 credit hours in spring 1995 to 12,504 in spring 1997 with no increase in the size of the University College student body. If enrollments and demand continue to grow, departments can more easily justify increased teaching in the evening.

School of Management

After the School of Management was formed in 1993, changes in the core curriculum were approved by the Faculty of Management. The four departments offering majors met and revised their requirements, and implementation of the new programs began in Fall 1997. Capstone courses have been added which include external, team-organized projects as well as internship courses offered in the accounting and marketing programs. In all courses, teaching methodology now incorporates more use of the computer.

College of Nursing

The undergraduate program has been revised to reflect what is largely an upper-division B.S. program in which students take a majority of their nursing courses, and all of their professional practice (intervention) courses in the junior and senior years. In the first and second years, students concentrate on the general education requirements. These changes affect students who want to transfer from other disciplines into nursing in their third year, as well as students with associate degrees in nursing from two-year colleges who want to work towards a baccalaureate degree. Although there have been curricular changes in the

undergraduate program, the overall thrust of the program remains the same, focusing on health promotion, acute-care health problems, and chronic-care health problems. Additionally, the program remains integrated in its approach to health care and nursing care. The undergraduate program is also offered at the Rutgers-New Brunswick campus under the aegis of the College of Nursing in Newark. The program was accredited unconditionally by the National League for Nursing in 1993. The number of graduates each year from 1989 to 1996 has ranged from 87 to 126.

In the past year and a half, a federally-funded nurse-managed center was launched in the Port of Elizabeth to meet the health-care needs of the underserved population in this area. This nurse-managed center is a collaborative venture between the College of Nursing and the Visiting Nurse Agency of Elizabeth. Baccalaureate and master's students are assigned to the center for clinical experience and work under the tutelage of faculty and a nurse practitioner. Additional nurse-managed centers are planned for three new sites; all are in Newark and all are associated with a Visiting Nurse Agency.

School of Criminal Justice

Beginning in fall 1995 the faculty of the School of Criminal Justice assumed responsibility for the undergraduate criminal justice major at Newark College of Arts and Sciences and made substantial revisions to the curriculum, advisement, and administration of the program. The students enrolled in the program, many of whom live daily with the high rates of crime that characterize the urban neighborhoods of northern New Jersey, were now able to study with the country's leading academic experts on crime. They also had access to many of the innovative programs that have been introduced at the School of Criminal Justice in the last 10 years. For example, the Center for Crime Prevention Studies was established in 1990-1991 to work with communities, businesses, and criminal justice agencies to develop practical solutions to crime. The center has developed special links with the Jersey City (New Jersey) Police Department for testing some of these ideas. The School of Criminal Justice has also signed B.A./M.A. articulation agreements with Stockton State (1992/93) and New Jersey State (1993/94) which allow students to receive both degrees in a four and a half year period. A similar program is available to Newark College of Arts and Sciences and University College-Newark students.

In spring 1997, the school became the first at Rutgers-Newark to participate in Rutgers University's Citizen and Service Education (CASE) program. This community service program establishes a number of special internships in the courts and prosecutors' offices in Newark that provide a public service to the community and opportunities for student learning.

GRADUATE AND GRADUATE-PROFESSIONAL PROGRAMS

There are now 10 Ph.D. degree granting and 19 master's degree granting programs at Rutgers-Newark. As of fall 1996, there were 1,175 students enrolled in the programs of the Graduate School-Newark. Of these, 440 (37.4%) were enrolled in Ph.D. programs, 504 (42.9%) were enrolled in master's programs, and 231 (19.7%) had non-matriculated status. For the Law Schools J.D. degree, there were 787 students enrolled in fall 1996, 76 enrolled for the master's in criminal justice and 1,496 enrolled for M.B.A. degrees at the Graduate School of Management. Several of the graduate programs have been added since the last evaluation conducted in 1988. Two master's programs were temporarily suspended when faculty resources were stretched too thin, but these programs have since been reactivated with new resources: the master's in economics and the master's in geology (which has been renamed environmental geology).

**Graduate School-Newark
New Programs**

The program in applied physics, a Ph.D. program, was established jointly with the physics departments of NJIT and Rutgers-Newark in 1995. The two universities also established, in 1995, a joint Ph.D. program in mathematical sciences and a master's in history.

The behavioral and neural sciences graduate program is offered by the faculty of the Center for Molecular and Behavioral Neuroscience (CMBN) and the Institute of Animal Behavior (which merged with the Department of Psychology in 1996), with adjunct faculty from the Departments of Biological Sciences and Psychology, UMDNJ, Bell Labs, and local pharmaceutical companies. Since it began accepting students in 1988, the program has awarded 16 Ph.D. degrees and nine M.S. degrees. Admission is extremely competitive. There are currently 42 graduate students in the program.

Although not a degree granting entity, a new graduate program in cellular and molecular biodynamics was created in 1995 under the aegis of the graduate programs in behavioral and neural sciences, biology, chemistry and physics. This program, funded in large part by a five-year training grant from the NSF, is a novel multi- and interdisciplinary program designed to give graduate students in the sciences the opportunity to experience the techniques and ways of thinking of a variety of disciplines before eventually selecting one of the four participating graduate programs in which to take the Ph.D. There are currently six full-time Ph.D. students enrolled in the program. The program also accepts up to 10 well-qualified undergraduate students from Rutgers and other schools in the summer of their junior or senior year. These undergraduates conduct research for a 10-week period in laboratories of Rutgers-Newark faculty members.

The Center for Global Change and Governance was also established in 1995. The center includes faculty from the Schools of Management, Law, and Criminal Justice, as well as faculty from the FAS-Newark departments of political science, public administration, history, and sociology and anthropology, and from NJIT. These faculty were assembled to study international shifts and patterns of cooperation as they relate to global processes. The center will serve as an innovative center for analysis and understanding of international economic and political restructuring, as it also prepares leaders and scholars to analyze global processes and their impacts. In fall 1996 an M.S. degree program in International Studies and an M.A. degree in global studies were established. The M.A. degree is part of a joint degree program with other graduate-professional programs at Rutgers-Newark.

Established Programs

The graduate program in biology awarded 26 Ph.D.s between 1992 and 1997, and 37 M.S. degrees during that period. The graduate program in chemistry awarded 32 Ph.D.s and 30 M.S. degrees during those same years. The master's program in english awarded 50 M.A. degrees during 1992-1997, and political science awarded 63 M.A. degrees.

In 1996 the psychology department hired a new chair whose primary responsibility will be to revitalize and reorganize the graduate program. There will be an emphasis on modern state-of-the-art computational modeling in psychology. The graduate program awarded 14 Ph.D.s and 13 M.A.s between 1992 and 1997.

The program in public administration was expanded from a master's- only program to one that also offered a Ph.D. in 1993/94. Many of the first class of Ph.D. students have subsequently passed the qualifying examination for advancement to candidacy for the Ph.D. degree. The doctoral program has more than 25 students, and the first Ph.D. was awarded in 1996/97.

There are currently more than 200 students in the graduate program, most of whom are part-time masters degree students. The masters program awarded 258 M.P.A. degrees during 1992/97. All masters program offerings in public administration (M.P.A.) (including the off-campus Executive M.P.A. offerings in Princeton) were recently reviewed by the National Association of Schools of Public Affairs and Administration.

Graduate School of Management

The newly merged Faculty of Management consists of six academic departments: accounting and information services; finance and economics; organization management; management science and information systems; marketing; and international business and business environments.

The M.B.A. program is accredited by the American Assembly of Collegiate Schools of Business, a status it has held since 1941. In addition, the program's unique integrative experience (interfunctional management) has just been endorsed by the National Bureau of Professional Management Consultants.

M.B.A Program

The M.B.A. program is offered on a full-time basis in Newark and New Brunswick, and on a part-time basis in Newark and New Brunswick, and also off-site at Plainsboro, Morristown, and Somerset. Total M.B.A. enrollment is about 1,500, of whom about 250 students are enrolled full time. The curriculum requires a minimum of 60 credits. A new core curriculum will be implemented for full-time students in fall 1997.

Executive M.B.A. Program

The Executive M.B.A. Program was initiated in 1980 and currently enrolls approximately 100 students. This program is geared towards individuals with 10 or more years of experience, which includes at least three years in a managerial position. Classes are held on alternate Fridays and Saturdays, in addition to one week in residence during each of the four semesters. The curriculum consists of 54 credits.

M.B.A. in Professional Accounting

The M.B.A. in Professional Accounting is a full-time program preparing students for the public accounting profession and qualifying students for the Uniform CPA Examination.

Master of Accountancy in Accounting

The Master of Accountancy in Accounting has a number of specializations including: professional accounting; professional taxation; and governmental accounting. The professional taxation specialization, offered in cooperation with Rutgers School of Law-Newark, started in 1996, and currently has an enrollment of 15.

Joint Degree Programs

Joint degree programs which lead to the M.B.A./M.P.H. are offered in conjunction with the Graduate Program in Public Health, itself a joint effort of UMDNJ and Rutgers. The first of its kind in New Jersey, the

program recognizes the increasing need for highly trained professional health-care managers whose skills encompass the economic, social, and political arenas of public health and public administration, as well as management, finance, marketing, and accounting expertise.

Joint B.A./M.B.A. and B.S./M.B.A. Programs

Joint B.A./M.B.A. and B.S./M.B.A. programs are offered with the Rutgers-Newark and Rutgers-New Brunswick undergraduate colleges.

Ph.D. in Management

The Ph.D. in Management, offered in cooperation with the NJIT, is a research-oriented degree designed to produce management professors, researchers and consultants. Students may elect concentrations in accounting, applied economics, computer applications and information systems in management, finance, international business, marketing, operations management, and organizational management. During the 1995/96 academic year the program had 153 registered students. The doctoral program awarded 68 Ph.D. degrees in Management between 1992 and 1997. Admission to the Graduate School of Management is extremely competitive.

School of Criminal Justice

The School of Criminal Justice offers M.A. and Ph.D. degrees. The graduate curriculum was revised in 1992/93 to improve the Ph.D. program. The faculty determined that students' energies were consumed by their efforts to pass large numbers of qualifying examinations, and that they gave too little attention, too late, to an area of specialization and to a dissertation topic. After exhausting their financial support, many students were leaving for employment before defending their prospectuses. The new curriculum moves students more quickly through course work and associated qualifying exams, allowing them to concentrate on a core area of specialization leading to a dissertation topic.

Enrollment in the School of Criminal Justice has continued to increase since the school was started in 1974. Total enrollment in fall 1996 was 163 students compared with 112 in 1988. Between 1988 and 1997, the School has awarded 135 M.A. degrees and 55 Ph.D. degrees.

The Ph.D. program in criminal justice, along with the master's program (which is administered exclusively by the School of Criminal Justice) received an outstanding external evaluation in 1992/93 and a top rating from the Committee on Standards and Priorities in Academic Development during 1993/94.

College of Nursing

In the past 10 years, the College of Nursing faculty has revised masters programs, and expanded program offerings. As of 1990, the college offered the first (and still only) nursing Ph.D. program in New Jersey.

Master's Program in Nursing

During 1986/87, the curriculum was revised and reduced to a 36-credit masters program. The College of Nursing offers the masters program on the Newark and Camden campuses. In Spring 1996, the masters curriculum was revised and increased to a 42-credit master's program that prepares advanced-

practice nurses who can function as nurse practitioners or clinical nurse specialists in a rapidly changing health-care system. The revision was based on, and is consistent with, national trends in graduate education at the masters level of nursing education. Courses such as advanced pathophysiology, advanced health assessment, and pharmacodynamics for primary health care have been added to the core curriculum taken by students in all clinical specialty options. Clinical specialty options have been tailored to meet the current market needs for advanced-practice nurses who work in a variety of hospital and community-based settings.

Ph.D. Program in Nursing

The first class of Ph.D. students entered the program in the fall of 1990, and from the inception of the program through 1997 there have been four graduates. Currently, there are more than 30 students matriculated in the program. The nursing curriculum, which focuses on research, statistics, theory development, and the evolution of nursing knowledge, has been refined over time. Minor course revisions have been undertaken, and policy changes have been made as needed; the program remains a 59-credit curriculum. Emphasis is currently being placed on student recruitment and student progression in the program.

Distance Learning in Nursing

In spring 1997, baccalaureate graduates of nursing in southern New Jersey took a master's course that was beamed from Newark to a classroom at Atlantic Community College. Also, the college is offering a master's course, pharmacodynamics in primary health care, to nurses in the Visiting Nurses' Agency of Central New Jersey, as an off-site offering.

R.N. to M.S. Bridge Program

A new program is being developed to attract nurses who have graduated from two-year programs and diploma-school programs who wish to further their education. Prospective students can apply to the baccalaureate program only, or to both the baccalaureate and masters program with their initial application.

Nursing Continuing Education and Educational Opportunity Foundation (EOF) Programs

The College of Nursing maintains an accredited continuing education department and an EOF program that primarily involves baccalaureate students. As of fall 1996, the continuing education department is offering a post-master's certificate program designed to meet the needs of master's-prepared nurses who want to pursue prescriptive practice in New Jersey.

School of Law

The curriculum is designed generally to provide training in the skills identified by the McCrate Report (R. McCrate ed., *Legal Education and Professional Development-An Educational Continuum*, 1992) as being fundamental to successful lawyering: problem solving, legal analysis and reasoning (with special emphasis on analysis of a complex statutory scheme), legal research, factual investigation, communication, counseling, negotiation, litigation and alternative dispute resolution, organization and management of legal work, and recognizing and resolving ethical dilemmas.

The required curriculum (contracts, torts, property, criminal law, constitutional law, civil procedure, legal research and writing) is supplemented by a first-year elective designed to expose students early in their legal studies to a non-doctrinal perspective (in contrast to the other common-law subjects that constitute most of the required curriculum). In spring 1997, these electives included feminist jurisprudence, American legal history, alternative dispute resolution, law and humanities, as well as statutory courses in legislation and

federal income tax.

The upper-class curriculum is completely elective. The Law School has offered and will continue to offer electives in those subjects considered as core subjects in: public interest law (e.g. civil rights); criminal law and procedure; corporate, tax and commercial law; international law; dispute resolution methods (such as evidence, mediation, negotiations); and nonbusiness private relationships (such as family law).

The Law School also cooperates with the Faculty of Management in a new certificate program in conflict management which has quickly drawn a sizable enrollment. This program highlights the potential benefits of dispute resolution other than through traditional litigation, and includes modules on mediation and negotiation, as well as the existing course in alternative dispute resolution.

The clinical program has historically been the distinctive hallmark of the upper-class curriculum, as has been a long-standing dedication to public interest law. The Constitutional Litigation Clinic, and the Women's Rights Clinic have been in existence for over 20 years and have handled cases of national importance in the furtherance of protections of individual rights. The Urban Legal Clinic provides legal representation in civil matters for those who cannot otherwise afford a lawyer. Within the last 10 years, the Law School has supplemented the clinical program with four new clinics: Environmental Law Clinic, the Special Education Law Clinic, the Animal-Rights Law Clinic, and the Federal Tax Law Clinic. Although all of the clinics can accurately be described as "public interest" oriented, the Urban Legal Clinic, Special Education Clinic, and the Federal Tax Clinic also provide service to the immediate community by representing individual clients in civil matters, in obtaining adequate educational opportunities for students with special needs, and representing individuals before the IRS and the Tax Court. Third- year students, under New Jersey Supreme Court rules, are permitted to make appearances in court under the supervision of a member of the Bar. The student body of the School of Law is described in Section 4.

OUTCOMES AND ASSESSMENT

Campus, University, and External Assessments of Programs and Curricula

The faculty of every academic unit on the Newark campus discusses the question of assessment on a regular basis. Every unit has studied its curriculum since the last accreditation visit, and several important curricular changes and improvements resulting from these internal reviews have been described earlier in this section.

Evaluation of the academic enterprise reaches the faculty from a variety of sources. From students these sources include: the annual student assessment of courses; the annual FAS senior survey; and periodic surveys of alumni/ae, students and employers of graduates by the College of Nursing. Assessment from outside the university comes from the external evaluation of academic programs, with additional assessment from Rutgers University's Committee on Standards and Priorities in Academic Development (see below); rankings of programs by institutions, scholarly or otherwise; and evaluations leading to accreditation of professional programs. Faculty members are individually assessed, as are their departments indirectly, through evaluations for reappointment and promotion, and in the post tenure review of tenured faculty members.

Academic support services receive periodic evaluations. The administrative and professional staff of these departments are assessed through annual performance reviews and the merit award program.

An important university-wide mechanism for program assessment is implemented by the Committee on Standards and Priorities in Academic Development (CSPAD). At the Newark campus these reviews often have been found to be useful in reinforcing strategic planning decisions about where to target growth and have also been helpful in identifying new directions for development or consolidation. The reviews have led to major changes (e.g., assumption of the criminal justice major by the School of Criminal Justice, consolidation of the three arts departments into a single Department of Visual and Performing Arts, reintroduction of Institute of Animal Behavior faculty members into the Department of Psychology). (For a list of reviews, see Appendix 19.)

Evaluating and Improving Teaching: The Role of the Teaching Excellence Center-Newark

Since 1992, the Teaching Excellence Center-Newark (TEC) has had the responsibility for conducting student course evaluations. The center has also worked with individual faculty members and with selected arts and sciences departments to assess areas needing improvement and to help departments make improvements.

The most innovative aspect of this departmental outreach is the departmental self-study, a confidential process in which the director interviews all members of a given department concerning the instructional services offered by the department. Several TEC recommendations for curricular experimentation have been adopted, and the process has led to ongoing consultation with two of these departments. The TEC also conducted focus groups with faculty and used classroom debriefings and a questionnaire survey to assess student experiences as well as teaching and learning practices that distinguish the new curriculum effort, the freshman seminars.

The TEC is also working with the Faculty of Management and the Teaching Excellence Center-New Brunswick to implement a three year grant from the General Electric Fund for Learning Excellence Project. The grant allows the Faculty of Management to solicit, implement, evaluate, and reward innovative teaching proposals in management education.

Measures of Student Performance

Retention Rates

Retention rates measure success of the academic enterprise by counting the number of students returning each academic year (minus those graduating). Retention rates are a weak outcomes measure in that only a minimal level of accomplishment and satisfaction on the part of students is measured.

Retention rates for most academic units on the Newark campus are high and have generally remained constant or have risen during the five year period cited (Appendix 20). University College-Newark stands out as ranking far lower than any other of the Newark schools. However, this can be explained by several factors. The University College student body has been predominantly part-time, ranging from 75% in 1992 to 62.3% in 1996. The student body is also predominantly non-traditional age, with 60% of the students over 25 years of age during the past several years. Despite the low retention rate, the 1993 Senior Survey of University College-Newark students indicates that 90% of students surveyed would recommend Rutgers to someone else, and that 63% of the respondents had very positive attitudes about the Rutgers-Newark campus. However, only 37% of University College students approved of the way their classes were scheduled, compared to 47% of students in the Newark College of Arts and Sciences. 53% and 55% of the students respectively approved of the faculty.

The program in the College of Nursing is more focused than the liberal arts programs. Undergraduate nursing students were asked to comment on how well their professional objectives were met. Students gave very positive ratings to their academic program when asked to evaluate 16 measures of professional achievement. Master's graduates of the nursing program rank their program very highly and report a great deal of satisfaction. One significant measure of success was the ability to apply theoretical concepts learned during their studies to practical concerns of nursing.

Passing of Professional Competency Tests

National or regional tests are taken by graduates of the School of Law and the College of Nursing. 84% of the regularly admitted students of the class of 1995 passed the New Jersey bar exam the first time, and 57% of Minority Student Program students also passed the first time. College of Nursing graduates had a success rate in the National Council Licensing Exam in 1994 of 86%, and 84% in 1995.

Employer Satisfaction Surveys

The College of Nursing surveyed employers of its 1994 graduating class. The employers responded that the Rutgers students were at "least average," with a majority of respondents citing preparation as "above average." The School of Law surveys its graduates within six months of graduation to determine their success in beginning legal careers (Appendix 21).

Conclusion and Recommendations

As indicated by the available measures, most of the academic units fulfill their missions of preparing students to find satisfactory employment, to advance to the next stage of their academic careers, or to satisfy some other goal the student has set.

There is ambivalence toward more testing and the concern that tests such as those which measure academic development between admission and graduation will alienate potential students. However, Jacobi, Astin and Ayala⁴ list several standard tests that might be used to measure "talent development." An appropriate faculty committee should determine whether any of the available tests are desirable instruments and if the application of any of them might be feasible.

There is no comprehensive survey of the academic programs of the several schools by students about to graduate. The College of Nursing provides more information from its graduates than any other school regarding the meeting of academic objectives. No school asks all the questions that could reasonably inform the administration and school about the effectiveness of its educational enterprise. The Newark Faculty Council might be given the charge of developing a comprehensive instrument for evaluating effectiveness and the several faculties might be given the additional task of adding a limited number of questions to assess the effectiveness of their own programs.

⁴ Jacobi, Maryann, Alexander Astin and Frank Ayala, Jr. *College Student Outcomes Assessment: A Talent Development Perspective*. ASHE-ERIC Higher Education Report No. 7, Washington D.C., 1987.

7. LIBRARY RESOURCES

THE JOHN COTTON DANA LIBRARY

The library resources on the Rutgers-Newark campus consist of the John Cotton Dana Library and its two branch research collections (the Institute of Jazz Studies and the Criminal Justice Library), which are part of the Rutgers University Libraries, and the Henry E. Ackerson Law Library, which is part of the Rutgers School of Law-Newark. The Dana Library is the third largest library of the 18 libraries of the Rutgers Libraries, with its collection of 314,000 volumes, 2,360 current periodical titles, 762,000 microforms, among other materials, as well as the more than 108,000 recordings and 7,500 books at the Institute of Jazz Studies, and the 70,000 books, research reports, and dissertations at the Criminal Justice Library.

The Dana Library shares fully in the information systems, policies, and services of the Rutgers Libraries, and its holdings are included in the Libraries online systems. The resources of the other Rutgers libraries in New Brunswick and Camden are regularly made available to the Newark campus through the heavily used intralibrary loan and delivery systems, and, in turn, its resources are regularly lent out to or otherwise made available to students and faculty on the other two campuses. The University Libraries offer a wide array of networked and other bibliographical databases and a variety of full-text resources to both local and remote users. The library is open 93 hours per week throughout most of the semester, and is heavily used by the campus and the broader community.

Dana Library is a government depository for federal and state documents. There are resource-sharing arrangements and mutual borrowing privileges with the other Council for Higher Education in Newark (CHEN) libraries - the NJIT, the UMDNJ, and Essex County College. There are also borrowing privileges for members of the community through the Essex County Reciprocal Borrowing Program. The Rutgers Libraries participate in other resource-sharing arrangements with the Research Libraries Group (RLG), with Metro (the New York Metropolitan Reference and Resource Agency), OCLC, and the Center for Research Libraries (CRL), which are also available for faculty and students on the Newark Campus. There is a staff of 12 library faculty members (including the director) and 36 support staff for the Dana Library and its two research branches.

The Dana Library's mission is to provide resources and services in support of the instructional and research programs on the Newark campus. The library's strategic plan (1993) outlined four strategic directions for the period through 2000: a focused collection development in accordance with campus needs and priorities; increased access to and the increased availability of an array of print and electronic resources; enhanced educational and instructional services; and strengthened linkages with the library's multiple constituencies.

The library's strategic planning moved forward in 1996 with the development, with others on the campus, of a proposal for a Center for Instructional Information Technologies, a technology-enabling learning environment intended to facilitate the exploration, teaching, and learning of new information technologies and the integration of this learning into campus curricula. The recent award of \$165,000 to the Center for Instructional Information Technologies, by the university's SROA program for the initial

implementation of one of the Center's activities - a Cognitive Sciences Initiative - reflects the way that the library is linked into campus research, instructional, and outreach activities.

Information Infrastructure

The new \$7.4 million library addition, which added two floors to the library (1994), was built in response to the significant increases in library usage and to the need to address the emerging information and multimedia technologies, to accommodate new ways of teaching and a new interest in group-based learning, and to provide an appropriate facility for the Institute of Jazz Studies with its renowned archival and other resources.

The new reference computing lab, which is located in the library's reference room, is supported by Newark campus student computing fee funds, and is open seven days a week. Because of its location, its relatively long opening hours, and its full integration into the library's reference function, it is a very popular campus resource. Apart from the lab itself, the reference room computing facility includes additional workstations, several supporting networked CD-ROMs, and others dedicated to single use services. The two building-wide Novell network servers and the 21-drive CD-ROM server provide the infrastructure for most of the library's computing services.

In accordance with the library's strategic plan, the new addition was designed, in part, to provide a new focus on media and multimedia in response to the growing interest in visual imagery, sound, and digitally based text, and the rapidly changing educational technology environment. The new media complex has a state-of-the-art media retrieval system that distributes video and sound signals throughout the floor and to the new electronic/multimedia classroom located elsewhere in the building.

Information Access

Access to the library's holdings is largely obtained through the Rutgers University Libraries online catalog, which was recently replaced by an integrated SIRSI "Unicorn" Library Information System. Some 68% of the library's monograph holdings are listed in the online catalog, which is up from 54% in 1990/91, when a retrospective conversion program was initiated. The library's periodical holdings are listed in the system-wide database. With the intake of several new major collections over the past two years, a multi-year project was undertaken to weed and shift the periodical collections, to conduct inventories, and to make corrections in the local and system-wide database. This project, which has resulted in considerably improved access to these collections, will continue over the next few years.

The library's federal documents are accessible through a computer-based shelf list (FEDS) developed in conjunction with the Newark Public Library, the regional depository library. The library's media holdings are cataloged, and there are listings available for consultation at the media services desk. For the Institute of Jazz Studies, primary access to the audio collections is through a computerized shelf list that was begun five years ago, which includes 50,000 items. In 1996/97, a plan was developed to address the institute's access, preservation, and other needs; and a \$135,000 grant from a private donor should allow the institute to initiate some of these projects. The holdings of the Criminal Justice Library are in *Criminal Justice Abstracts*, which is available in print, online, and CD-ROM formats. There is a need to continue the access improvement projects, including the continuation and completion of the retrospective conversion project undertaken at Dana and its two branch collections, so that the collections, in all formats, are more accessible.

Funding needs to be made available to enable this work to move faster than has been possible in the past few years.

User Services and Usage

The library's array of user services range over a wide variety of functions such as reference, circulation, reserve, intra- and interlibrary loan, bibliographic instruction/information literacy programs, serials and documents services, fee-based searching, media creation, and distribution and Web-related services, exhibits and cultural programs, and photocopying and computer services. The Dana Library is a heavily used facility, with usage in almost all of these areas showing marked increases over the past decade. For example, the 10-year period saw a 315% increase in intralibrary loan and a 117% increase in classes taught. (See Appendix 22.) An exit survey of graduating seniors in the Newark College of Arts and Sciences and University College-Newark in spring 1997 indicated that the library was the service area used most and highest-ranked in terms of satisfaction among 32 services on the campus.

Information Literacy/User Education Programs

There were 154 classes (reaching more than 2,860 students and others) given by the Dana librarians in 1995/96, reflecting the major commitment made by the library to teaching information research skills, strategies, protocols, and related information management skills. In addition to the classes, the instructional program consists of documentation on the use of the various systems, databases, printed resources, and strategies, including new course-based Web material under development for working with business information. Assistance to individuals, provided at the library's reference desk, reinforces skills learned in group sessions. Support (1995/96) by the Academic Foundations Department of a part-time temporary librarian to assist with the Summer program, the active engagement by faculty members in chemistry (with the physical sciences librarian) in the development of a program on chemical information searching, and receipt of a recent (1995/96) grant to acquire portable computing equipment to bring to classes reflect the high regard for this program by many campus units. Moreover, a 1996 senior survey indicated that 94% of the respondents considered the library's instructional program to be either satisfactory or very satisfactory. There is a need, however, to integrate further the library's information skills teaching program into the undergraduate curricula.

This year, with the assistance of funding from many sources (the Higher Education Facilities Trust Fund, the Coca-Cola Initiative, the Equipment Leasing Fund, and the Instructional Computing Initiative), a new electronic/multimedia classroom was developed so that students and others could have hands-on instruction and training in searching databases and in working with electronic information.

Collections: Relevance, Availability, and Usage

The library's collections are focused on the particular programs on the Newark campus, with strengths in business, the sciences, nursing, criminal justice, and jazz, and, to a lesser degree, in English and history. The recent receipt of two major retrospective periodical collections in public administration and in mathematics added new strength to the new doctoral programs in these areas. The receipt of a collection of United Nations and European Union materials should also provide a new strength to the two new international and global studies master's programs. With the availability of a five-year grant of \$10,000 each year from the Howard Hughes Medical Institute to the campus for three science areas - the biological sciences, chemistry, and physics - supplemented by a 1:1 match from Dana, the library was able to upgrade its monographic collections in the sciences. The recent move of the Chemistry Library, which had been

housed in the department, and its integration into the Dana facility allowed for closer review of the collections and acquisition of needed reference works and other key monographs in chemistry.

In business and nursing, where the library is designated as having the research collections for the university, there has been a systematic receipt of current monographs of interest to students and faculty. Nevertheless, there is a great deal of business information, in both electronic and print form, that the library has not been able to acquire. Business is one of the areas singled out for further strengthening in the university's strategic plan, and it will be important to build an endowment for electronic business information to provide appropriate support for this essential academic area.

In neuroscience, another area singled out for further strengthening in the university's strategic plan, the neuroscience faculty have noted that the Library's collections need further strengthening. The Criminal Justice Library, with its extensive interdisciplinary book, periodical, and research report collections, provides strong support for this important international program. The Institute of Jazz Studies supports the research needs of the scholarly international jazz community as well as the goals of the campus' undergraduate and new master's jazz research programs.

A major problem faced by the library is that the past eight years have seen a level (or slightly declining) acquisitions budget during a period when the prices of journals, particularly in the sciences, have increased dramatically, and at exactly the time when the amount of information being published, whatever its format, has grown exponentially, and when it has been important to make major investments in information infrastructure. These issues will continue to present challenges for maintenance and development of collections. (See Appendices 23, 24, 25, and 26.)

The library's collections are heavily used. The business, nursing, black studies, women's studies, computer science, literature (and literary criticism), psychology, social work, and reference book collections are in continuous demand. The periodicals in the biological sciences and chemistry, business, nursing, and social work are also heavily used. The lending of the library's materials to other libraries within Rutgers has steadily risen to the point where it now exceeds the borrowing of items from the other Rutgers libraries, an indication of the usefulness of the Dana collections to programs elsewhere within the University. The library's collections are also heavily used by students and faculty at neighboring colleges and schools.

Usage of the criminal justice collection has increased some 400% over the past eight years, with the collection serving large numbers of Rutgers students from all over the university in addition to students and faculty at the School of Criminal Justice. Finally, usage of the Institute of Jazz Studies has also experienced a significant increase.

Staffing and Budget

The Dana librarians and staff are highly respected on the campus and in the University Libraries for their service-mindedness, professional and technological expertise, and their commitment to the role of the library in the educational process. They are involved in campus and university activities, and a Newark librarian recently chaired the University Senate.

Sufficient staffing, however, continues to be a critical concern for the library. The need for more reference desk coverage, for assistance with information literacy teaching, and for instructional

technology/multimedia support is considerable, with the eight public service librarians who work with the students, faculty, and members of the community days, evenings, and weekends seriously stretched. There is a critical need for additional librarians, for local computing support staff, and for a much larger percentage of the hourly (voucher) help available for staffing the service points in circulation, reserve, media, serials, copy services, and interlibrary loan. The librarian and staff lines are also fewer than at the other campuses in terms of lines per campus population served. The need for an appropriate adjustment is pressing.

The critical impact of the library's long-term level acquisitions budget also needs to be attended to. The digital era requires funding for subscriptions to electronic journals and databases, and for document delivery and other kinds of information access arrangements. Many print-based journals, particularly in the sciences and business, will shortly be replaced by electronic versions, but new monies will have to be made available to facilitate this transition. Since the information environment is still very much a hybrid one, and print materials will still be important resources in many areas for much of the coming decade, it will be necessary to provide these materials to the campus. As a campus-based operation in close contact with faculty and students, Dana must continue to make crucial decisions about new acquisitions and electronic resources for the campus to insure that the most appropriate materials are being acquired and the needed information made accessible.

Campus and Community Relationships

The library is well integrated into the campus' programs, with many cooperative and collaborative projects undertaken with faculty, for example, joint collection development, major gift acquisition initiatives, joint planning of instructional technology, and information support activities. There are also many joint programs with the college honors program, with instructional and cultural programs, and by exhibit openings developed with faculty involved in community outreach.

The relationship with the NJIT library has facilitated the support of the many new joint programs between the two neighboring institutions. NJIT library, for example, supports the "applied" areas in the two new doctoral programs in physics and mathematics, while Dana (with the other Rutgers libraries) supports the "pure" areas. The past decade has seen extensive attention directed at the two library collections. As a result, the number of duplicate titles has been greatly reduced and is now minimal. More work needs to be done to clarify the nature of the support for the recent and rapidly emerging joint programs and to provide additional resources to Dana in support of its role as a major information/reference service provider to the NJIT community. Work also needs to be done to facilitate the provision of biomedical information to the campus by the Smith Library of the UMDNJ. Additionally, the library has long had an important public presence with the schools and colleges in northern New Jersey, with students from these institutions (particularly from the NJIT, Essex County College, and local high schools) using the library on a daily basis. The library has strong relationships with the other cultural and educational institutions in Newark.

With respect to the use by the public of the library's federal depository collection, a recent Government Printing Office inspection (December 1995) singled out Dana's public access policies, noting: "Free and unrestricted access to all depository resources by the public is the fundamental obligation of each depository library. This urban academic library provides such access in an exemplary fashion and can serve as a model nationally." And finally, both of the library's specialized branches - the Criminal Justice Library and the Institute of Jazz Studies - play a significant role in providing resources and services to larger, international communities.

JUSTICE HENRY E. ACKERSON LAW LIBRARY

The Justice Henry E. Ackerson Law Library, with a collection of 269,000 hardcopy volumes and 146,000 volume-equivalents of microforms, primarily serves the School of Law, with a faculty of approximately 40 and a student body of about 800. The library is also frequently used by students of the School of Criminal Justice, members of the bar, and members of the general public, and has less frequent but regular use by Rutgers undergraduates, other Rutgers faculty, paralegal students, and high school students. The Law Library has 24 staff lines, of which eight have faculty status and three others are regarded as professional positions. Most of the librarians have law degrees as well as library degrees. Two positions are presently vacant, and an additional position will be added as of next fiscal year.

Services Offered

The Law Library is open 107 hours per week during the academic year, and about 70 hours per week during the summer and intersessions. Circulation services are provided during all open hours. Reference service is offered 56 hours per week during the academic year. Each law faculty member has one librarian designated as a liaison for special reference and bibliographic research assistance. The librarians also prepare “pathfinders,” other informational handouts, and exhibits on a regular basis, and occasionally provide bibliographic instruction sessions for non-law-school classes.

Budget Information

The Law Library currently has a state-supported annual budget of \$1,660,000, of which 62% goes for salaries of regular employees. In addition to that budget, the library receives about \$20,000 per year in revenue, has endowment funds earning interest of about \$5,000 per year, and in the last two years has received grants totaling about \$40,000. Unfortunately, the budget has shown no increase over the past six years. Since 1994, about 800 subscriptions have had to have been canceled, reducing the total number by about 20%. The purchase of monographs also had to be curtailed. Again, this year, the budget remains static and further cuts will have to be made.

Law Collections

The Law Library has an almost complete collection of U.S. case law (both federal and state), with its associated digests and citators, a complete collection of federal statute law (both current and historical), the current statutes of all 50 states, and substantial historical holdings of state statutes (including session laws on microfiche for all states up to about 1994). As a depository for both federal and New Jersey government documents, the library has strong holdings of federal and New Jersey regulatory materials and legislative history. Other strengths of the collection include the essentially complete Anglo-American law journals, primary sources of international law, older caselaw of England, and U.S. Supreme Court briefs in microform. The library also has extensive holdings of monographs on constitutional law, constitutional history, supreme court history and biography, and philosophy of law. Special collections include the law library of U.S. Supreme Court Justice Joseph P. Bradley, together with his manuscript docket books.

Law Library Computing Services

The Computing Services Department is housed in the Law Library and provides service to the Law School faculty, administrators, and staff as well as to the library staff. The chief information officer reports to the director of the Law Library and is currently supported by one full-time assistant plus student assistants. The school maintains a 131-user Novell network. Student computing services are provided by the campus.

The Law Library houses two RUCS-Newark student labs--a 20-person lab on the fifth floor and a 10-person lab on the fourth floor. The latter is designed as a teaching lab, is shared with the School of Criminal Justice, and is available for general student use when training classes are not in session. The library also provides law students with 20 terminals dedicated for legal databases such as LEXIS and Westlaw. In addition there are several terminals for CD-ROM-based legal programs and databases. Recently the Law Library and Dana Library received a major grant to set up a jointly accessed CD-ROM tower. The two libraries intend to develop a cooperative acquisition plan to make maximum use of the tower.

8. COMPUTING AND OTHER LEARNING RESOURCES

INTRODUCTION: ACADEMIC AND ADMINISTRATIVE COMPUTING

The campus computing environment is a complex one, with wide area and local area networks linked to the university network. There are open-access and instructional computing laboratories, departmental laboratories, and other computing facilities that support instructional and research computing, and provide a wide range of information-technology capabilities. The student computing fee initiated in 1993 enabled the campus to increase the number of publicly available computer workstations and laser printers and to increase the hours of availability of the public computing facilities. As of June 1997, there were 8,000 student accounts on the UNIX system server (Pegasus), and 1,500 faculty and staff accounts on the second UNIX system server (Andromeda). Access to these accounts is also available through 120 dial-up lines with up to 28.8 kbs.

Information-technology planning on the campus is carried out through the Newark Campus Computing Planning Committee, with representatives from all of the schools and colleges. The committee works with the director and associate director of RUCS-Newark and with the Provost's Office on the development and implementation of key computing initiatives, including the use of the Instructional Computing Initiative monies.

The central divisions of RUCS provide support for the campus backbone and university-wide administrative computing, with campus representation on university-wide advisory and computing planning committees, such as the steering committee for RUNet 2000.

Preliminary responses from Newark faculty and staff to the computing services survey (February 1997) indicated that 59% of the Newark respondents were either dissatisfied or very dissatisfied with RUCS. Respondents asked for more computing support staff in their department (66%), for more support for departments that provide information on RUCS Web servers (39%), for tools for backing up PCs or workstations over the network (28%), and for more computers in public computing facilities (27%).

Many faculty members on the campus believe that RUCS-Newark needs to support the same level of services available on the other campuses. These services include end-user and departmental consulting, network planning, installation, and maintenance. Currently these services are fragmented across the campuses, making maintenance and trouble shooting difficult.

NETWORK EQUIPMENT

At Newark, an aging campus network infrastructure the network was one of the first in the university to be put into place is less and less able to handle increases in network traffic, with negative effects on delivery of computing services. In response to infrastructure issues, the Provost's Office and RUCS have replaced critical network gateways and routers, and have redesigned the fiber backbone infrastructure. There have also been upgrades in the campus' UNIX systems servers.

The Faculty of Management has a strong presence on both the Newark and New Brunswick campuses and has many infrastructure needs to facilitate interactions within each campus as well between them. The need is for new high-capacity servers, new hubs, and the rewiring of buildings. A new network will increase the capacity and reliability of the system for all users, will permit the introduction of newer generations of software, and will increase the ability to interact with the business community. A start has been made on addressing these issues with SROA funding.

STUDENT COMPUTING FACILITIES

As noted above, RUCS-Newark maintain a series of coordinated instructional facilities in several buildings across the campus as the primary means of supporting student access to computing. These include walk-in facilities (110 PCs, 50 Macs and 2 Suns), walk-in and instructional facilities (98 PCs, 5 Suns and 94 Macs), and instructional-use only facilities (82 PCs). There is currently one computer for every 21 students. The Coordinated Instructional Facilities (CIF) labs at the Dana and Law Libraries are open the entire time the two libraries are open, seven days a week. The other Coordinated Instructional Facilities labs are open for shorter periods.

It will also be important to review the technological capabilities of the computing equipment and the available software in the labs. Most of the labs, whether open access or instructional, contain underpowered 486-class PCs and run the "Windows 3.1" operating system. It will be critical to upgrade the PCs to Pentium-class multimedia PCs that run either the "Windows 95" or NT operating system and the upgraded software now available.

In terms of software availability, both the "Microsoft Office" and "Corel Office" suites must be more generally available for student use. Available technical support will also have to be extended to include staffing through the weekends and semester breaks. Students and researchers typically do not halt their work at these times, and the networks and computing facilities should remain available at all times. The few campus labs that are open on the weekends are very heavily used and require additional support, including possible double coverage by student lab- assistants during peak use hours.

TECHNICAL SUPPORT

Apart from RUCS-Newark staff, there are computing coordinators or lab managers with varying levels of computing expertise, sophistication and responsibilities in the various schools, colleges, and other academic and administrative units on the campus. Better coordination is essential between RUCS-Newark and the unit representatives to ensure that satisfactory levels of service are given to all units.

As the academic departments and research centers become more sophisticated in their computing resource demands, some of the burden of end-user training and maintenance of equipment will undoubtedly be shared by department staff designated as facilitators or coordinators. Problem reports and requests for

more advanced installation and support could be filtered through the designated coordinator to RUCS-Newark.

TECHNOLOGY AND TEACHING

It is increasingly clear that faculty in every discipline are actively using computer technology as tools both inside and outside the classroom. Many faculty are making class assignments and notes available on the Web and holding classes in computer labs for demonstrations and simulations of processes and physical phenomena (e.g., neuroscience, biology, chemistry, and physics), programming exercises, creative writing exercises, etc. Others are developing Web sites with class schedules, listings of requirements for majors, or providing sample problems, practice exams, and assignments and links to related Web sites.

For example, the computer lab/classroom in the Department of Biological Sciences reflects the way that undergraduate students in introductory biology, developmental biology, and molecular biology are being introduced to computing applications such as ecology simulations, multimedia resources for biotechniques, and scanning electron micrographs for studying animal development. The biology computing lab, which in many ways is a model for innovative computing lab work, allows students independently to research topics from class, to study open-ended simulations that are not possible in the lab, and to view and manipulate images (also unavailable in the standard lab), as well as to follow links to sites on the Internet. Other disciplines on campus are also, through their computing labs or through their curriculum planning, focusing on ways to integrate technology into teaching and learning.

Plans are currently being developed to put into place a series of “smart” classrooms with computing and audiovisual capabilities that should provide a new and considerably expanded level of technological support for teaching. The “smart” station placed in the large lecture room in Boyden Hall and the new distance-learning facility in Ackerson Hall are among the first facilities on the campus. There is a smaller distance learning facility in the Law School building, and two rooms in the Dana Library have audiovisual and computing projection capabilities. Planning for additional facilities is a priority for the Campus Computing Planning Committee this year.

Despite the many innovative efforts at integrating technologies into the curriculum, there is unquestionably a need for significant support for assisting faculty and students in this process over the next few years. Many faculty members, particularly in the Newark College of Arts and Sciences, do not have networked workstations at their desktops or easy access to servers that are part of the necessary technological infrastructure. Nor is there currently available the kind of campus-wide instructional support that will be necessary on a large scale to help faculty address the pedagogical issues that the new technology-enabling teaching will require.

The interest of the Newark College of Arts and Sciences in computer-enabling teaching enhancement, which has received support through the university’s SROA initiative, reflects the desire to begin to attend to some of these issues. There are, for example, plans to restructure the college’s writing program to include an electronic dimension. Moreover, the initial plans for the Center for Instructional Information Technologies, (CIIT), a joint planning effort of the Dana Library, the Newark College of Arts and Sciences, the Teaching Excellence Center-Newark, and RUCS-Newark; focus on the efforts that need to be made to help the campus in the transition to teaching and learning in the new information environment. The CIIT will ensure that undergraduate and graduate students acquire well developed information literacy and information

management skills, that faculty are able to determine the most appropriate curriculum content for electronic and distance learning, and that members of the broader community, including teachers and students in the local schools, are able to explore and learn from the new multimedia technologies. We need to complete the third floor of the Library as the housing space for the CIIT and to initiate planning for the next phase of the library's extension for expanded assistance with information and instructional technologies.

RESEARCH AND SUPERCOMPUTING

As part of RUCS' centralized research computing resources, there are clusters of general-purpose UNIX-based timesharing systems. These systems provide support for large dataset statistical analysis, programming language support, and numerically intensive computation, as well as general purpose software, e-mail, and Web support for faculty and departments. However, several Newark research centers and departments have been expressing a need for a high level of computing power to support their research. The recent award of SROA funds to support the beginnings of high-performance parallel computation for use by faculty associated with the Center for Molecular and Behavioral Neuroscience, as well as by faculty in psychology, biology, chemistry, physics, and management, will move the campus a long way forward in its research endeavors. The new supercomputer will facilitate the work of the Center for Computational Neuroscience and the work of the Center for Information Management, Integration and Connectivity (CIMIC), including the latter's NASA-supported project to monitor environmental conditions in the Hackensack meadowlands. With the high-speed communications which have been made available through a grant to the university from the NSF, researchers will be able to advance the study of a range of issues.

ADMINISTRATIVE COMPUTING

Computing support for the administrative departments at Rutgers-Newark is provided by central RUCS-Administrative Computing Services (RUCS/ACS). RUCS-Newark has never been allocated resources to provide this support. While most of the systems supporting administrative functions are on the university's IBM mainframe, there are local departments that have developed subsystems, or "shadow systems," to supplement or enhance the university system in order to get the level of service necessary for effective operations. These systems are not supported by the university and require both departmental attention and the diversion of departmental resources.

Because administrative computing support is fragmented on the Newark campus, a number of issues arise which have an impact on service delivery to faculty, staff, and students. Some of these issues are: downloading student information, developing and maintaining departmental Web pages that comply with campus and university standards, and the ongoing need for training and support.

FUTURE DIRECTIONS

The present networking infrastructure includes Ethernet local area networks (10 megabits per second capacity). Plans for new LANs in computer labs or departments will incorporate 100 megabit per second Ethernet ("fast Ethernet") and switching Ethernet hubs.

Advanced LAN technologies will also pave the way for innovative instructional applications, such as the display of full-motion video and the ability to exchange large data sets. Clearly, it will be important to share resources across the three campuses and to take advantage of emerging technologies, such as asynchronous transfer mode (ATM), which will provide the guaranteed bandwidth required for real-time video and voice communications.

It is, of course, recognized that many of these needs will be addressed through the university-wide RUNet 2000 initiative, which will be extremely important for the campus as it moves ahead toward the achievement of its strategic planning goals and objectives. High-speed video pilot projects are planned for implementation on the Newark Campus.

LEARNING RESOURCE CENTER

The Learning Resource Center (LRC), the Academic Foundations Department, and the Language Laboratory all contribute to the broad range of learning resources the university provides. They provide important supplemental learning and support outside of the classroom.

The primary mission of the LRC is to offer enrichment programming through learning assistance services. The LRC offers a wide variety of services using differing methodologies in order to provide students with opportunities to maximize their academic potential. (See Appendix 27.)

Tutoring is provided for communication skills courses. There is currently no writing center, but in cooperation with the Writing Program in the English department, tutoring is provided for students in the required expository writing course. Because of the high demand for this service and limited LRC resources, assistance in the spring 1996 semester was focused on students who received a temporary grade of F on the final in English 101 or 102. There were 360 writing assistance contacts with 114 students in the spring semester, while 102 remained on the waiting list. Tutoring and supplemental instruction sessions provide needed support for large numbers of students (Appendix 28). Additional resources are needed to accommodate those who need these services.

Academic support given through the LRC has proven to be effective. In fall 1995, 90 of 170 students enrolled in general physics participated in supplemental instruction; 64% of the participants passed with a C or better. Of those receiving D, F, or W, 38% had supplemental instruction and 52% non-supplemental instruction. In biochemistry, 60% of supplemental instruction students passed with a C or better, as compared to 40% non-supplemental instruction students. Similar statistics hold true for physics, genetics, and organic chemistry courses.

Other strengths of the LRC include students helping students and the thorough training of student tutors who are certified by the College Reading and Learning Association.

ACADEMIC FOUNDATIONS DEPARTMENT

The Academic Foundations Department, which cooperates with the Educational Opportunity Fund program (EOF), the LRC, and the Precollege Program, provides developmental instruction in basic reading and writing, mathematics, and science. Originally, the mandate of the department was to serve the academic needs of students admitted to the Newark College of Arts and Sciences through the EOF program. Over the past several years an increased number of students admitted to the Newark College of Arts and Sciences and University College-Newark populate the department's courses. Approximately 35% of first-year Newark College of Arts and Sciences students take courses in the Academic Foundations Department. Regularly admitted students constitute approximately 60% of enrollment in developmental mathematics and communication skills courses. The curriculum support program is in three units: communication skills, mathematics skills, and science skills.

Communication Skills

This provides students with support and developmental study activities to enhance performance in reading, writing, and study tasks required in college. The unit has recently revised its curriculum. The revision stresses reinforcing the importance of using pedagogical tools as devices to assist in raising assignment and instructional activities above those generally associated with developmental writing courses.

Mathematics Skills

This provides support and courses to help students develop awareness and facility in mathematical thinking. In addition to courses, the unit has instituted a research group for faculty on collaborative problem-solving, as well as weekly seminars for tutors who lead workshops in mathematics, physics, and geology.

Science Skills

This provides students academically underprepared for science with effective study skills and learning strategies that will enable them successfully to complete laboratory science courses in biology, chemistry, and geology.

The Academic Foundations Department has no science laboratory. Students who receive support in the sciences through science-skills courses or tutoring are, therefore, unable to have hands-on experience in the lab setting. Another issue related to the science curriculum is that students do not receive college credit for taking the science skills course. Many students, while needing the course, do not continue because they receive no credit towards graduation.

LANGUAGE LABORATORY

There is a need for a multimedia computing environment with Internet access for language learning that incorporates recent technological changes and is coordinated with the distance-learning networks. The current Language Laboratory located in Bradley Hall is woefully inadequate to support current student needs or the envisioned language program. Equipment consists of 20 wood carrels that are 25 years old, with 1960s-model Wollensack tape players. There are approximately 20 newer cassette players mounted to the old carrels that contain the Wollensacks. Desk space and visibility are poor in the carrels. The facilities do not lend themselves to group instruction or student supervision. Recent support from SROA funds will begin to address these problems.

SCIENCE INSTRUCTIONAL LABORATORIES AND INSTRUMENTATION

The Departments of Biological Sciences, Chemistry, Geology, and Physics are the principal Rutgers-Newark units providing hands-on laboratory experience for undergraduate students. In total, there are approximately 17 teaching “wet labs” and additional computer labs that serve as the backbone of the learning experience in the sciences. On average, approximately 1,000 students enroll in laboratory based courses each semester. The teaching labs are housed in three separate buildings that are 20 to 30 years old and which have seen only minor renovations and upgrades over that time period. The Newark campus has identified development of an Integrated Science Teaching Complex as a major strategic planning goal.

Department of Biological Sciences

There are currently six instructional laboratories located in Boyden and Smith Halls for 15-20 laboratory and field courses ranging from molecular biotechniques to marine biology. The Biology Learning Center, a self-paced laboratory, supplements the General Biology Course which enrolls approximately 500

students per semester. A fully networked computer laboratory equipped with 20 “Power” PCs is located in Smith Hall.

Lab equipment for teaching is generally satisfactory. The molecular biotechniques and analytical and quantitative light microscopy/laboratory courses make use of research-grade instrumentation, including computer-assisted video microscopy, gene cloning, automated DNA sequencing, PCR amplification, and computer image analysis to teach a small cohort of students research strategies and methods. Given the fast pace of technological advancement, it is imperative to serve larger numbers of students in future years.

To maintain strong research capability, biological sciences has a number of core research facilities that provide multiple users access to advanced instrumentation. Further, the department has devoted considerable energy and resources establishing computer network links among student labs, faculty labs, and core facilities, generating an environment capable of rapidly accessing and sharing data.

Department of Chemistry

There are four dedicated teaching laboratories used to teach five to six laboratories each semester. The labs are typically overcrowded and require upgrades. Two labs for upper-level courses are located in the basement. They are appropriately equipped, but some of the advanced student instrumentation is in need of modernization or replacement. There is a stock room that manages chemical and glass stocks for all of the teaching labs. While most laboratories have some access to computers, there is no single large computer to interface with either the lecture or lab courses. However, the department supports two SGI Indigo 2 workstations for instructional and research purposes.

Department of Geology

The Department of Geology has two dedicated teaching labs and two labs that double as teaching/faculty research facilities located on the fourth floor of Boyden Hall. The labs serve the courses, in introductory geology and planet earth.

Department of Physics

The department has three primary teaching laboratories, two for introductory physics and one for advanced physics courses. Introductory labs are equipped with 16 microcomputer-based learning (MBL) workstations that are integrated with standard physics apparatus for performing and analyzing conventional physics experiments. The department houses a \$1.5 million far-infrared free electron laser.

9. CAMPUS PHYSICAL PLANT AND SECURITY

INTRODUCTION

The physical plant of the Rutgers-Newark campus consists of 21 buildings on 37 acres in the University Heights district, the state’s largest urban center. It is located primarily adjacent to the city’s central business district, and to NJIT and Essex County College. In addition, the university campus has a separate facility which houses the School of Law, the School of Criminal Justice, and campus administrative offices four blocks from the central portion of the campus.

DEVELOPMENT OF THE SCIENCE DISCIPLINE FACILITIES

A major new research focus was initiated ten years ago in the Center for Molecular and Behavioral Neuroscience (CMBN), and a new state-of-the-art building was constructed (the Aidekman Research Center) to support this effort. A new animal vivarium was built into the Aidekman facility, and a portion of the original facility in Smith Hall was completely renovated. Since these buildings are immediately adjacent to each other, the support facilities were integrated and a bridge was constructed to connect them. The vivarium facility and program are fully accredited by the American Association for the Accreditation of Laboratory Animal Care.

In addition to this new construction, other teaching and research facilities of the core science departments on campus have also undergone renovations. For example, facilities to support a merger of the botany and zoology departments into the Department of Biological Sciences were renovated in Boyden and Smith Halls. Infrastructure improvements to Olson Hall, which houses the chemistry department, support a safer and healthier teaching and research environment. A long-standing problem of inadequate cooling in the summer months in Olson was resolved with the addition of a major piece of cooling equipment in the central plant. Also, as new faculty were hired in the physics department, renovations to existing space were made to accommodate the use of lasers. In order to accommodate the free electron laser research program, a laboratory was constructed below grade and connected to the basement level of Smith Hall. Full commissioning of the laser and its housing is underway and a New Jersey operating license is expected. Renovations to teaching and research space in the psychology department are now underway with funding from a major state bond issue, the Equipment Leasing Fund. Computing technology has been introduced and a new student lab has been constructed.

In order to help institutions keep pace with advances in scientific and instructional equipment, the New Jersey Legislature created the Equipment Leasing Fund (ELF) in 1992. State support pays three-quarters of the debt service on ELF bonds, and the colleges pay the remaining share. This new revolving fund has paid major dividends in Newark, especially in the sciences. Of the nearly \$3 million available in Newark, more than two-thirds was spent on strengthening the sciences. The remainder was spent on networking, fiber installations, and other technology/media enhancements. (See Appendix 29.)

ENHANCING THE QUALITY OF STUDENT LIFE ON THE CAMPUS

During the late 1980s, the campus witnessed the construction of two major residence halls, Talbott Apartments and Woodward Hall. These facilities accommodate nearly 700 graduate and undergraduate students. In addition, two period apartment buildings were purchased and renovated at 29 James Street and 77 Bleeker Street. These facilities provide accommodations for family housing in a total of 20 apartments. Finally, the campus' first dining hall opened as an adjunct to Woodward Hall. Stonsby Commons meets the food service needs of Rutgers undergraduates living on campus, and is open to NJIT students as well. Taken together, these facilities have introduced a new character to campus life by allowing students a residential experience. Occupancy levels have exceeded expectations and approach 100% every semester.

A second component of student life in which there has been notable improvement is the development of a wider range of athletic and recreational programs and facilities. During the last 10 years, the campus opened its first outdoor athletic facility, Alumni Field. It supports intercollegiate soccer, softball and baseball programs. There is a two-lane recreational track around the soccer field. Also, Alumni Field is used for

planned and unplanned recreational activities by groups and individuals, and it is a very popular spot for walkers from dawn to dusk.

Another major development was the opening of a new indoor recreational facility. It contains a second all-purpose gymnasium for organized team practice and recreation, a 25-yard swimming pool, racquet court facilities and conference/meeting room space. On the site, five lighted outdoor tennis courts were built to accommodate intercollegiate men's and women's tennis teams and recreational tennis. These new facilities are physically connected to the 1976 gymnasium, and now form the "Golden Dome Athletic Center," one of the finest sets of facilities in an urban center around the country.

Third, the quality of student and faculty life has been significantly improved with recent renovations to the Robeson Campus Center, the hub of student life on campus. The 1994 addition extended the food service/cafeteria space; added meeting/ conference facilities; the University Club used primarily for faculty and staff dining was opened; and additional game room space was added. These additions allowed a major reorganization of the center's facilities in order to improve its efficiency and respond to student demand. In so doing, food service is prominent at the first level (plaza), a major conference center is clearly evident at the Martin Luther King Boulevard level, and other student activity spaces are organized on the upper level.

The Rutgers-Newark campus is largely focused on the needs of commuter students. Accordingly, parking facilities are necessary to support their needs. In the late 1980s, additional parking capacity was added by the purchase of a 600-space parking garage on the southeast corner of the campus. In addition, more surface parking was purchased near the Newhouse Center to accommodate the needs of law and criminal justice students. The nature of the commuter population is such, however, that the amount of parking is always insufficient, especially at peak class-hour periods on Tuesdays and Thursdays between 9:30 a.m. and 1:30 p.m. Adjacent commercial parking supplements campus parking facilities, and together provide sufficient supply. The financing of the parking program is very problematic and has caused reductions in hours and operating expenses. Students are paying daily parking fees of \$2.75, or more than \$400 per year. In comparison to students at other peer institutions and on other campuses in the university, this is a serious inequity that impacts on student retention. The parking program also suffers from a structural deficit in its financing. It is a heavily debt-laden program and the fee structure is highly inelastic. Work is in progress to distribute parking costs more rationally across student and faculty users by benchmarking it against other peer institutions around the country. While parking is a necessary component of campus life, it is insufficiently capitalized and a serious financial drain on campus resources. (See Appendix 30.)

STRATEGIC PLAN GOALS

The Rutgers-Newark campus is the home of the Faculty of Management and many of its programs. A recent addition to Ackerson Hall, the Management Education Center, has provided much needed faculty office space and classrooms for graduate and undergraduate students. The Faculty of Management now resides in three adjacent buildings-Ackerson, Engelhard and Management Education Center-at a prominent entry point to the campus on the east. Renovations to Ackerson Hall and Engelhard Hall are now underway to improve the quality of life for faculty and students.

The Faculty of Management is also the home of the Center for Entrepreneurial Management, which contains several unique outreach programs to foster small business development. These include the New

Jersey Small Business Development Center (SBDC), the Rutgers Technical Assistance Program, the Rutgers Minority Investment Company and the Center for Demanufacturing. Renovations were recently completed at 49 Bleeker Street, a recently purchased rowhouse that will house the headquarters of the SBDC. Funding for this renovation was provided by a \$500,000 grant from the Stillman Trust of First Fidelity Bank. Funds are also available for purchase of another rowhouse at 43 Bleeker Street, which will house the remaining Center for Entrepreneurial Management programs. A grant from the Prudential Foundation has made this purchase possible and will allow minor renovations prior to occupancy.

In 1995 the merger of management programs in Newark and New Brunswick was completed, with Dean Benson appointed as dean of the expanded Faculty of Management. Space in the Janice Levin Building on the Livingston Campus is incorporated into the campus inventory, and an overall assessment of management resources is underway.

In 1994, the New Jersey legislature passed the Higher Education Facilities Trust Fund Act (HEFT). This legislation provided New Jersey colleges and universities with an allotment of \$220 million to address their most urgent academic needs. Of that amount, \$58 million was designated for Rutgers University and \$27.5 million, nearly 50%, was earmarked for two Rutgers-Newark projects. Of this amount, the largest sum of \$20 million is budgeted for partial funding of the new Center for Law and Justice (CLJ). This new facility will replace the S. I. Newhouse Center, and accommodate its four major occupants: the School of Law, the School of Criminal Justice, the Office of the Provost, and the Center for Global Change and Governance.

The total project cost is \$49 million and represents the largest single academic building project in Rutgers's history. It will be constructed at the southwest corner of New and Washington Streets (across from the Management Education Center).

The Center for Law and Justice design will accommodate all of the functions needed to support the academic units: state-of-the-art classroom/case study rooms, the Ackerson Law Library, and the Criminal Justice Library collection, faculty and staff offices, conference rooms, seminar rooms, a distance-learning classroom and other computing media rooms, lounge, food service, and student activity spaces. Construction began in August 1997 and is scheduled to be completed for occupancy in August 1999.

Finally, the Center for Law and Justice site allows the campus to meet three additional objectives. First, additional land for parking has been purchased on a 70,000 square foot plot of land on the east side of Washington Street. It is directly across the street from the Center for Law and Justice site and will be used for faculty/staff parking. (Student parking will be accommodated by the more efficient use of existing decks and commercial lots.) Second, the site now allows the Campus to move its major gateway entry another full city block eastward. Rutgers has asked the City of Newark to vacate a portion of New Street, which will permit the creation of a new campus entrance and pedestrian streetscape improvements. Third, interaction between students and faculty of the School of Law and the School of Criminal Justice and the faculties and students of other Campus schools will be greatly facilitated.

The second project funded by the HEFT is a major renovation to Bradley Hall, which currently houses the Department of Visual and Performing Arts, the campus bookstore, campus post office, the Technical Training Program (outreach), classrooms and art studios. Bradley Hall was acquired in 1973 from the Prudential Corporation; it was a 1930s vintage warehouse and printing plant. Rutgers adapted the building to

academic and support functions; but the basic structural facilities and its infrastructure remained largely untouched. The \$7 million renovation is designed to replace all of the warehouse-style windows with new energy-efficient glazing and to incorporate a new exterior wall system. The plan also provides for major improvements to heating and cooling systems. The renovations began in June 1997 and are scheduled to be completed in August 1998.

In 1994 the university completed a \$7.4 million addition to the Dana Library. The addition serves student and faculty needs in information and multimedia technologies and provides a proper home for the world-renowned Institute of Jazz Studies.

THE NEWARK CAMPUS PHYSICAL ENVIRONMENT

In 1995 the provost created a Campus Beautification Committee which oversaw several projects to completion. For example, new signage and period brickwork was installed at important campus boundaries, specifically at the corner of Washington Street and Bleeker Street, and at the corner of University Avenue and Central Avenue. Clear campus identification strengthens the sense of arrival at a special place and heightens the sense of personal safety. In addition, major new tree and shrub plantings were installed in tree-wells at the southern edge of Dana Library. Along with new seating and the installation of a carillon, the Campus Plaza has taken on an even greater sense of community space than it had earlier. During 1996/97, new tree plantings were installed along Warren Street, adjacent to Alumni Field and at the northeast side of Dana Library. Future plans call for additional landscaping in the central portion of the Campus Plaza, adjacent to Robeson Center, a new landscaped entry to Bradley Hall, and recapturing of New Street as a pedestrian plaza upon the completion of the Center for Law and Justice.

Large classrooms on campus with seating in excess of eighty seats have been identified as planned improvements. Work was completed in Hill Hall to upgrade several tiered lecture rooms. Funding is also available to renovate and upgrade the Engelhard Hall lecture hall, a major resource for Faculty of Management faculty and students. Likewise, funding is available for the modernization and renovation of the Boyden Hall, 240-seat lecture room. This room is one of four 240-seat lecture halls on campus, all built between 1965 and 1968. As funds become available, the plan is to upgrade seating, refinish floors and walls, and install network cabling and electricity to each seat where appropriate.

Renewed efforts to strengthen maintenance and custodial services have been instituted by the director of the Physical Plant Department. Baseline data was developed in 1994 by surveying faculty about their satisfaction with maintenance and custodial support. A January 1997 survey of tenured faculty and administrative staff indicates that customer satisfaction levels are generally increasing to better than "adequate" levels. The survey results also indicate areas and buildings where improvements are needed.

DEFERRED MAINTENANCE

In 1992 Rutgers engaged a consultant to survey all buildings and systems on the Newark campus and most buildings elsewhere within Rutgers University. When completed, these surveys substantiated the volume of deferred maintenance and prioritized a program for each building. At Rutgers-Newark alone, the deferred maintenance deficit exceeds \$58 million.

Since then, annual funding in the operating budget has been inadequate except for remediation of emergent conditions, for asbestos abatement, and for underground storage tank removals and cleanup. In

fiscal year 1997, however, an allotment of \$10 million was funded to repair the worst conditions around the university. In Newark, an allocation of \$2.2 million (out of \$10 million) was made. These funds will repair the worst roofs, will install new fire alarm systems in some buildings, will seal building facades, and will replace controls on central heating plant equipment. Requests for an additional \$8 million in deferred maintenance, and infrastructure replacements of decayed and obsolete underground heating pipes are pending. Renovations to Bradley Hall and the new Center for Law and Justice will also further reduce deferred maintenance; but the deficit between maintenance and remediation continues to grow.

One strategy that seems to be working is providing custodial services at lower cost, lower cleaning frequencies, and reducing fixed costs. Savings are allocated to other maintenance efforts. Through an experimental program, an outside vendor provides custodial supervision and custodial worker fill-ins. As a result, it appears that buildings are cleaner and actual budget savings are generated. Creative budgeting strategies will be needed to allocated actual savings into other maintenance support.

Finally, the installation of energy-saving fluorescent lighting, ballasts, pumps and motors is starting to generate significant reductions in electricity bills. Through creative loan arrangements with the university treasurer, the campus has the ability to recycle net electricity savings into repairs and upgrades of mechanical systems. In the first two years of the program, net savings have amounted to nearly \$400,000 after loan repayments.

CAMPUS SECURITY

Safety and security have always been a priority and the hiring of a new director has increased this focus. While serious crimes against the person have dropped dramatically, the university campus remains a target for property crimes. A new identification card system has been implemented for faculty, staff and students to provide access to parking, library privileges, food services, etc. In addition, a new central alarm monitoring system at police headquarters has been installed, and individual buildings or departments will become attached as funds permit. Close collaboration exists with the NJIT Police Department, and police officers from each institution regularly patrol both campuses on foot, on bicycles and in vehicles. An enhanced joint shuttle-bus service operates between the two campuses, the train stations, and student apartments in Kearny after dark on weekdays. An escort service is also available on-call, with assistance from a volunteer Student Marshall Club. Not unexpectedly, Rutgers police also have a close working relationship with the Newark Police Department, New Jersey Transit Police Department, Essex County Sheriff's Department, and other police departments at Essex County College and UMDNJ. All in all, safety and security are at a very high level, due to both the close cooperation of police and security units, and to a sensitive academic community.

CAMPUS ENVIRONS

Rutgers, among other CHEN institutions (described in section 3.3) has taken the lead in the University Heights Planning Group (UHPG). The UHPG provides street-sweeping in the area bounded its constituent institutions. This voluntary "service district" has greatly improved the cleanliness of the district and raised each partner's image.

Rutgers also participates in Connection Newark, a public/private partnership that is working with New Jersey Department of Transportation to install new highway trailblazer signage and intracity directional

signage to each of the major institutions in the city. New signs advertising the New Jersey Performing Arts Center, Rutgers, and other higher education and cultural institutions were installed in October 1997.

Another major development sponsored by CHEN is the University Heights Science Park (UHSP). Working with corporate partners and officials from all levels of government, University Heights Science Park is developing a 50-acre urban park between NJIT and UMDNJ. The park's goal is to attract commercial enterprise which can transfer technology created by the universities faculties into profitable goods and products. In addition, community representatives sit on the University Heights Science Park Board of Trustees ensuring that park development is consistent with neighborhood goals for educational improvements, recreational areas, housing, retail, and streetscape improvements. To date, the Park has opened two new buildings: the CHEN Building and the NJIT Economic Development Center II. The latter is an incubator facility for small business development managed by New Jersey Institute of Technology, and it includes a 100-child Day Care Center open to children of Park residents and CHEN students and employees. A \$60 million International Center for Public Health is in development which will house the Public Health Research Institute, the Department of Microbiology and Molecular Genetics and the National Tuberculosis Center. Both of the latter are departments of the UMDNJ. Projects planned and partially funded include additional housing, a third incubator for information technology (new media small business), a science and technology-based high school, and commercial space for biomaterials and medical device companies.

A great opportunity for the city of Newark has presented itself in the opening of the New Jersey Performing Arts Center. Since the late 1980s, planning has been underway for the state's major performing arts center, and Newark was chosen as its host. At the embryonic stage, the Council for Higher Education in Newark played a major role in facilitating the choice of Newark as the site of the center. The center consists of three major elements: the 2,700-seat Prudential Hall, the 500-seat Victoria Theater, and the Outdoor Theater Square. There is great anticipation of the significant economic engine this center can provide for Newark and New Jersey.

Since the last Middle States visit in 1988, Rutgers-Newark has been an active participant in institutional development. Its role in helping to spur growth and economic development in its host city is equally strong.

10. COMMUNITY OUTREACH AND PUBLIC SERVICE

INTRODUCTION

Rutgers-Newark has a particular and long-standing commitment to the revitalization of the city in which it is located. Faculty, administrators, staff, and students have increasingly contributed to community-oriented activities during the past decade. Some indication of the breadth of Rutgers-Newark's community outreach and public service activities in the areas of K-12 partnerships, economic development of University Heights and the city of Newark, assistance to businesses, health care and social work, legal assistance, government and public affairs, and culture and the arts are indicated in the following sections. (For a list of outreach programs see Appendix 31.)

K-12 PARTNERSHIPS

The Faculty of Arts and Science-Newark supports several programs geared to improving the local urban schools. For example, the Academic Foundations Center, in conjunction with the LRC, involves about 50 Newark College of Arts and Sciences undergraduates in tutoring Newark high-school students in math and English. The Center for Precollege Education offers a Saturday Academy, including an 18-week training series on the SAT, and free professional tutoring in English and mathematics. Rutgers-Newark's small Department of Education has been an active participant in efforts to reform Newark's public schools through sponsorship of summer institutes for Newark school teachers and administrators, mentoring and computer software training for K-12 students, and diagnosis of students' reading problems.

The Academic Foundations Center and the Education Department are working towards development of a Center for Change in Urban Education, with greatly enhanced and better coordinated community outreach activities. This initiative has received seed funding from the SROA program, and should be a funding target for Newark in the upcoming capital campaign.

Science faculty participate in outreach activities through programs such as FASE One⁵ (which brings Newark school children, parents, and teachers together as teams to carry out hands-on science experiments in campus laboratories), the Howard Hughes Medical Institute Grant (which provides funding to bring high-school students to campus for laboratory demonstrations and hands-on experimental exercises), and the Micro-computer Introductory Physics Laboratory Program (which trains teachers in computer-based physics laboratory instruction and runs a laboratory course for Science High School in Newark).

There have also been collaborative efforts between Rutgers-Newark and other institutions of higher education in the city. These collaborations include a joint admissions agreement which guarantees admission with junior standing for qualified Essex County College students to Rutgers-Newark. The Faculty Alliance for Education (funded by the Ford Foundation Urban Partnership Program) includes Rutgers-Newark, New Jersey Institute of Technology, Essex County College, and local high schools (Malcolm X Shabazz and Central High School), and works to increase opportunities for minority students in higher education.

Under the auspices of the Office of Student Development, undergraduates participate in a variety of community service projects. The Black Organization of Students, Portuguese Club, Progreso Hispano, Cuban Cultural Center, the Filipino Student Organization, the Inter-Fraternity/Sorority Council, Kappa Epsilon Fraternity, LUNA, the the Rutgers Student Marshall Club, and many others each year participate in toy and food drives, voter registration, assistance to AIDS victims, mentoring school children, Pre-Kwanza programs, and information services.

ECONOMIC DEVELOPMENT AND ASSISTANCE TO BUSINESSES IN THE REGION

Administrators and faculty members at Rutgers-Newark actively participate in more than twenty programs and task forces involved in economic development of the city of Newark, some of which include: the University Heights Science Park initiative which seeks to revitalize a 50-acre site in the central ward (between NJIT and the UMDNJ); Washington Commons Development Corporation (a subsidiary of the Regional Partnership to address development issues in the central business district area around Washington Park); University Heights Cleaning District (a partnership with six other institutions to supplement cleaning efforts in the area); and Newark

⁵ "FASE One" is the acronym for the program, Future American Scientists Elementary Outreach-Newark.

Educational Partnership Executive Committee (an organization involving local school districts, community organizations, businesses, and university student groups which addresses some of the problems that confront youth in the region's urban school system).

One of the most important goals of the Faculty of Management has been to integrate its existing outreach programs to promote economic development and entrepreneurship in Newark and in the region. These programs include: Small Business Development Corporation (provides management and technical assistance through workshops, counseling and training); Rutgers Minority Investment Corporation (a federally licensed small-business investment company that has made 250 investments totaling more than \$5 million in its 25-year history); Rutgers University Technical Assistance Program; New Jersey Center for Research in Financial Services; volunteers in Tax Assistance program (provides assistance to low-income residents in preparation of tax forms). The Center for International Business Education and Research and the Center for Global Change and Governance collaborate in reaching out to business, public-sector, and educational constituencies interested in globalization issues. The Faculty of Management is in the process of expanding the Center for Entrepreneurial Management and developing a Center for Demanufacturing.

HEALTH CARE AND SOCIAL WORK

The College of Nursing and the Department of Social Work integrate community service into the curriculum. The College of Nursing operates a nurse-managed community health center in the Elizabeth Port section of Elizabeth, and is actively involved with health agencies in examining the feasibility of opening more such facilities in minority communities. Development is underway for a Rutgers-Newark Center for Families and Communities. The new center will address health, social, and legal needs of urban families and provide clinical and social welfare experiences for students. The Department of Social Work is engaged in an array of social service delivery systems throughout New Jersey and works with governmental and civic agencies concerned with social and economic issues, cultural diversity, racial equality, and child welfare.

LEGAL ASSISTANCE AND CRIME PREVENTION

Through its legal clinics, faculty at the School of Law-Newark argued before the New Jersey supreme court in the continuing *Abbott v. Burke* litigation over financing of public schools; represented successful plaintiffs in New Jersey supreme court in which the right to engage in open expression in private shopping malls was upheld; and presented briefs in the area of affordable housing for low number and moderate-income families in the aftermath of the Mount Laurel litigation, among other significant actions. The School of Law-Newark operates: the Constitutional Litigation Clinic, which provides legal representation and research on civil rights and civil liberty; the Prison Law Clinic which works to improve prison conditions and address issues such as prison guard misconduct, rights of visitation, denial of medical benefits or religion practices of inmates; the Women's Rights Litigation Clinic, which provides information and advice on what legal action to pursue on cases such as women suffering from the use of defective Dalkon Shield intrauterine devices, championing equal access for women to Princeton University's eating clubs, and formulating regulations for the Family Leave Act; the Environmental Law Clinic, which has been advocating the reduction of toxic discharges, cleaning the water and beaches, as well as improving air quality. The Rutgers School of Law-Newark pioneered the nation's first Street Law program (fall 1996) in Montclair, where middle-school and high-school students are taught about human rights.

Through its Center for Crime Prevention, the School of Criminal Justice has been helping the Jersey City Police Department to identify drug market "hot spots" in the city as well as to evaluate the effectiveness of law-

enforcement efforts to close the drug markets down. The school works on other crime prevention issues in New Jersey.

GOVERNMENT AND PUBLIC AFFAIRS

The public administration master's program plays an important part in enrolling state government employees, training government managers at a location convenient to state employees (the State of New Jersey Department of Personnel's Human Resource Institute near Princeton) and initiating innovative projects such as a joint program (the New Jersey Certified Public Manager Program) between Rutgers-Newark and the New Jersey Department of Personnel which provides practical training for state and local government officials. The National Center for Public Productivity assists public officials in providing citizens with more responsive local government.

CULTURAL AND ARTISTIC ACTIVITIES AND PARTNERSHIPS

During the past 10 years Rutgers-Newark has continued its promotion of cultural events which foster appreciation for the humanities and the arts. Events are geared to a broad audience and contribute to the improvement of the image of the city. Rutgers-Newark has sought to become the cultural window on the ethnic, social and cultural diversity not only of the student population but on the communities it serves in Essex, Hudson and surrounding counties. Faculty members serve on many cultural organizations such as the New Jersey Council for Humanities and New Jersey State Arts Council. The Office of Multicultural Affairs has sponsored activities such as Black Heritage Month, Women's History Month, and World Week. Dana Library and the Department of Classical and Modern Languages and Literatures have sponsored many activities which showcase New Jersey artists and have highlighted Portuguese and Latin-American culture for the benefit of the university and local communities.

The university's SROA program has provided seed funding to establish at Newark the Rutgers Institute for Ethnicity, Culture, and the Modern Experience. This institute, now in its first year of operation, has scheduled events such as "The African-American Spirit in Classical Music" and "Memory and Newark, July 1967."

The Newark campus, in collaboration with the New Jersey Performing Arts Center and the Consulate General of Portugals is sponsoring an International Conference on Portuguese Literature in April 1998. Funding for a conference on "Arts Transforming the Urban Environment" has also been received by the Department of Visual and Performing Arts through the SROA program. We are also working with other cultural institutions to develop our Internet site for the display and promotion of cultural and artistic events, persons, and places in Newark. Initiatives such as this conference are a means of developing collaborations with the New Jersey Performing Arts Center as well as the Newark Museum.

While pleased with the results of our outreach activities, we are nevertheless mindful that the outreach activities do not engage the campus to the degree that they could. Therefore, our next phase in outreach activities is to devise (1) a comprehensive approach to identifying outreach activities, (2) more effective means of coordinating and publicizing outreach activities, and (3) better means of recruiting student and faculty participation.

11. FUTURE DIRECTIONS FOR RUTGERS-NEWARK

INTRODUCTION

The campus strategic plan has inspired growth at Rutgers-Newark and has helped mobilize resources for the future. We also acknowledge that we are continually motivated and shaped by our presence in an international gateway city in the midst of one of the most densely populated and racially, ethnically and economically diverse metropolitan areas in the nation.

ACHIEVING OUR GOALS

This self-study has highlighted the successful linking of campus-and university-wide strategic planning to effect implementation of the campus' ambitious, yet attainable goals. We are pleased to note that a great deal of the campus strategic plan has already been implemented, including:

- Merger of the Graduate School of Management, School of Management, and School of Business into a unified Faculty of Management headquartered in Newark;
- Construction of the new Center for Law and Justice;
- Development of the Center for Molecular and Behavioral Neuroscience into an internationally recognized research and training center;
- Assumption of responsibility for the undergraduate criminal justice major by the School of Criminal Justice;
- Creation of the Center for Global Change and Governance;
- Establishment of a nurse-managed community health center;
- Development of five new doctoral programs (behavioral and neural sciences, public Administration, nursing, and joint doctoral programs in applied physics and mathematical sciences with NJIT).

We conclude this report by suggesting specific steps that can be taken to complete implementation of the Rutgers-Newark strategic plan and ensure continued development of a University Center at Newark. These suggestions are consistent with the mission, goals and objectives discussed in Chapter 1 of this report, and they are organized under four main headings:

Increase enrollment at Rutgers-Newark;
Accelerate movement of Rutgers-Newark towards Research University II status;
Develop strength through partnerships;
Make strategic use of the capital campaign to enhance visibility of Rutgers-Newark.

These priorities build on, and are consistent with, the campus' traditional and continuing commitment to strong, innovative educational programs in the humanities, social sciences and arts.

INCREASE ENROLLMENT AT RUTGERS-NEWARK

There are several interlocking approaches that should be taken to achieve this aim

- Improve the way in which the Newark Admissions Office functions; enhance enrollment management procedures; develop more campus-specific recruitment materials (a new director of admissions has been recruited).
- Significantly increase campus-designated merit scholarships available to students interested in enrolling at Rutgers-Newark in three targeted areas: business; criminal justice; the sciences (a first step has been taken through the designation of several Carr Scholarships for the Rutgers-Newark campus).
- As a recruitment tool, link incoming students awarded merit scholarships to the campus' various centers and institutes where a student may, with the help of a faculty advisor, map out a plan of study including a research and/or public service component.
- Continue development of an honors college to provide a rigorous academic environment for able students.
- Further develop articulation and joint enrollment programs with county colleges to enhance transfer-student preparation and recruitment (this will build on Ford Foundation and National Institutes of Health supported programs already in place at the campus).
- Develop (and advertise) University College-Newark majors in the area of preprofessional studies and place greater emphasis on attracting adult learners to these programs at University College-Newark.
- Develop (and advertise) new interdisciplinary undergraduate majors/programs in the humanities, social sciences, sciences, and professional studies to strengthen linkages between graduate and undergraduate education.
- Increase graduate-student support (university-wide) along the lines suggested in the strategic planning process.
- Construct a new residence hall for undergraduates and new housing for graduate/married students.

MOVE TOWARDS RESEARCH UNIVERSITY II STATUS

An attainable, long-term goal is to move Rutgers-Newark to Research University II status. Over the course of the next several years, the doctoral programs recently established at the campus can be expected to increase gradually the numbers of Ph.D.s awarded at the campus. We can facilitate movement toward Research University II status by:

- Strengthening the 10 existing Ph.D. programs at Rutgers-Newark (this is also essential for continuing to attract top-flight faculty who bring in external research funding);

- Developing a small number of new, interdisciplinary Ph.D. programs built on current strengths: international studies; environmental sciences (with NJIT); applied economics.
- Focusing increased attention and sponsored program staff support on units/programs where grant-funding opportunities may not have yet been fully exploited (psychology, nursing, criminal justice, environmental sciences, and management).

Ensuring that the Newark campus' professional and doctoral programs are vibrant and growing will enhance the university's AAU status and affirm the state-wide nature of Rutgers. If Rutgers-Newark can move towards meeting the criteria of a Research University II in the course of the next decade, this will position the campus to contribute more effectively to the revitalization and economic development of the city of Newark and the region.

DEVELOP STRENGTH THROUGH PARTNERSHIPS

The campus understands the current competitive environment among New Jersey academic institutions, and that new resources from the state of New Jersey to higher education are unlikely. However, in order to meet our goals (which means, in part, remaining attractive to students, their parents and future faculty members) we must continue to develop new strengths through partnerships with the NJIT, the UMDNJ, Essex County College (and other county colleges); with the Newark arts community; and, last but certainly not least, with New Jersey's business and industry.

The association between Rutgers and NJIT has certainly shown how both institutions can expand their offerings and opportunities for research. Interactions between UMDNJ and Rutgers-Newark are still at a formative level and there is every reason to believe that our graduate and research programs in health sciences can complement each another to our mutual advantage.

Strengthening the campus's relationships with the New Jersey Performing Arts Center, the Newark Museum, radio station WBGO, the Newark Public Library, the New Jersey Historical Society, and the New Jersey Network will further enhance the creative and performing arts in Newark.

An important recent partnership effort has been the creation of Science Park, a joint venture of Rutgers-Newark, NJIT, UMDNJ, Essex County College, the city of Newark, the state of New Jersey, and New Jersey business and industry. The Park has completed its first two buildings, which house its headquarters, a day care center, and small-business incubators. Laboratories and offices, a new high school, housing, recreation areas, markets, and stores will eventually be added to the existing complex. It is expected that investment in Science Park will exceed \$250 million and move Newark another step toward achieving its former vitality.

Business has been a willing partner in the development of programs and offerings in the Faculty of Management. Prior to the merger of the schools in Newark and New Brunswick, New Jersey business and industry leaders were often confused about where business graduate education was being offered at Rutgers University. The answer is now clear: the center for business education in New Jersey is Newark.

USE CAPITAL CAMPAIGN TO ENHANCE VISIBILITY OF THE CAMPUS

The university is about to launch the largest capital campaign in its history. As we have heard from the university's consultants, one of the most important questions that a potential sponsor poses is how his or her

contribution will make a difference. To those who work at Rutgers-Newark, it sometimes seems that the quality of the faculty and the quality of academic programs at the campus are almost invisible to the outside world. We are continually challenged to address a perspective which remains focused on the urban problems associated with Newark and the racial disturbances that shook the city thirty years ago. Visitors often expect to find a campus of about 3,000 students, with classrooms in warehouses and brownstones scattered about the city, and with no professional or graduate programs. Although coming to the campus usually changes visitors' minds, outdated perceptions may persist with those who do not have the opportunity to see Rutgers-Newark at firsthand, yet may be asked to rank, judge or contribute money to the cCampus.

We and our academic partners have long been working toward the economic and social revitalization of the city of Newark. Our fifty-year tradition has, indeed, been one of involvement and engagement. We intend to intensify and expand the campus's involvement.

Capital Campaign Priorities

The most visible strengths of the Rutgers-Newark campus are its professional programs, its science programs, and its outreach programs-and it is precisely these strengths which are most needed to help drive economic development in Newark and northern New Jersey. Campus plans for the future focus on these important projects for which we hope to garner university and sponsor support.

- Make the headquarters of the Faculty of Management at Rutgers-Newark a world-class complex through addition of a major conference/meeting center, upgrading and expansion of office space, development of "smart" classrooms, and faculty recruitment packages that attract "the best in the business" to the Faculty of Management.
- Develop a state-of-the-art science teaching complex at the campus. The message to be conveyed is that Rutgers-Newark values the connection between teaching and preparation for research careers in the sciences, and is the beacon for northern New Jersey students attracted to that connection.
- Develop campus facilities to support the outreach activities of the faculty and students in Newark:

Center for Change in Urban Education
 Center for Instructional Information Technologies
 Rutgers Institute for Ethnicity, Culture and the Modern Experience
 Rutgers-Newark Center for Families and Communities
 Law School clinics
 Center for Crime Prevention
 National Center for Public Productivity; among others.

These projects make a clear, bold statement about the quality and aspirations of the Rutgers-Newark campus. Their implementation would enhance immeasurably the visibility of Rutgers University in northern New Jersey and beyond. This would be a convincing answer to potential individual and corporate sponsors about how their contribution to the capital campaign would make a real difference.

Note: See Appendix 32 for a list of additional resources; these materials are available upon request as Newark Campus Resource Documents.

APPENDIX 1

NEWARK CAMPUS

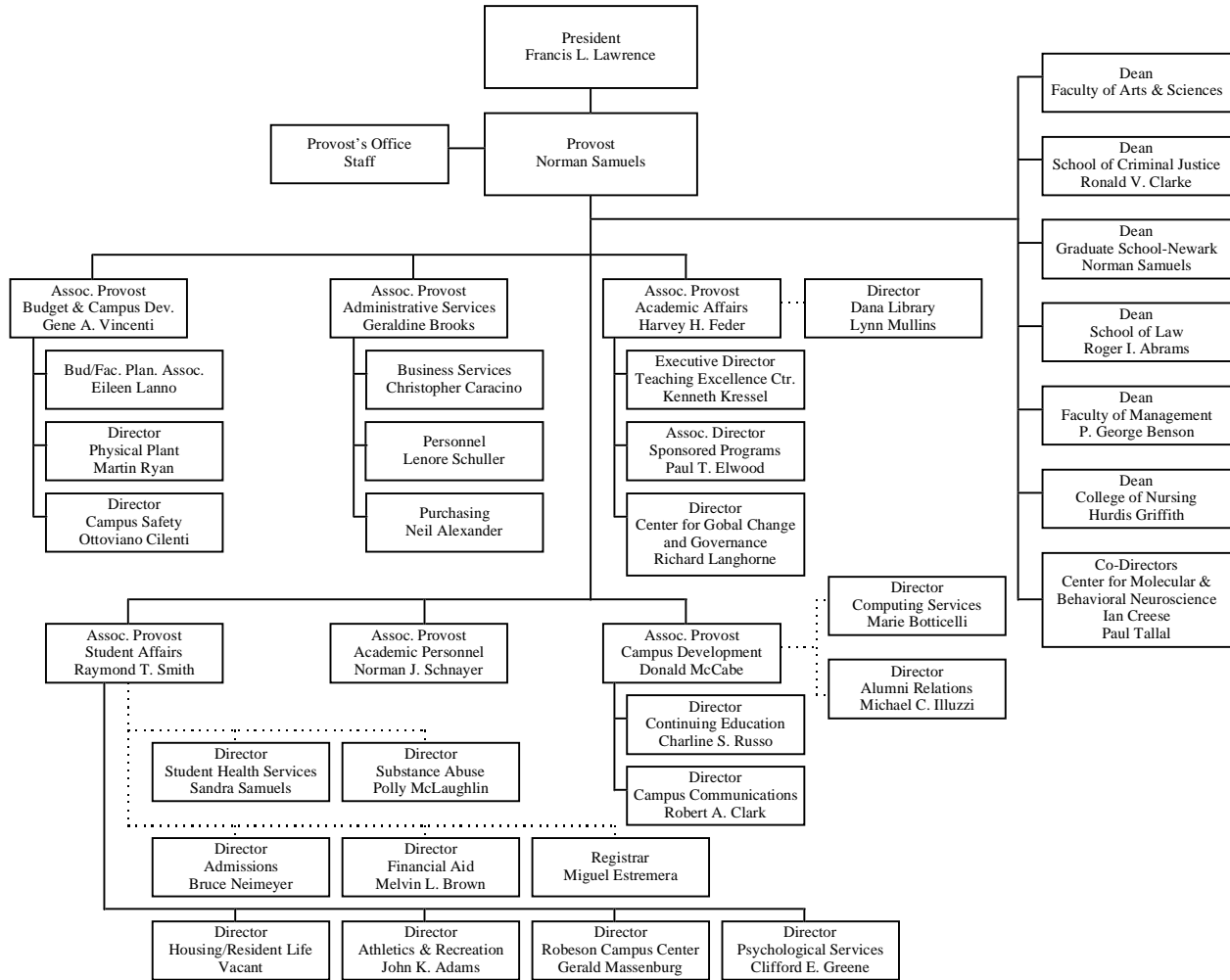
MIDDLE STATES ASSOCIATION OVERVIEW COMMITTEE MEMBERSHIP

Nabil Adam	Rina Majumdar (student)
John K. Adams	Donald L. McCabe
Nicole Berliner (student)	Lynn Mullins
Edward Bonder	Elizabeth M. Norman
Regina Brisgone (student)	Rosa Oppenheim
Geraldine Brooks	Dan Palmon
Karl Buch (student)	Phylis J. Peterman
Charles E. Campbell (student)	Clement A. Price
Maria Canino	John Randall
Tracy Cherry (student)	Janice Robinson
Sunday DiPalma	Lydia Rodriguez
Elaine Dolinsky	Jerry Rosenberg
Miguel Estremera	Alexander J. Sannella
Harvey H. Feder	Norman Schnayer
Carolyn Gerdes (student)	Mary Ann Scoloveno
Edward T. Hollander	Alfred Slocum, Esq.
Phillip Huskey	Raymond T. Smith
Gene Miller Jonakait	David Spencer (student)
Annette Juliano	Heather St. John (student)
Asela Laguna-Diaz	James M. Tepper
Elpidio Laguna-Diaz	Gene A. Vincenti
Jan Ellen Lewis	Marcia Whicker
Jonathan Lurie	

APPENDIX 2

Organization Chart

Campus at Newark



Appendix 3

Geographical Distribution of the Student Body, 1992-1996

Neighboring Counties	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
NCAS	81.1%	80.6%	80.0%	79.4%	80.3%
CN	46.5%	48.1%	50.8%	51.2%	52.7%
UC-N	80.8%	80.7%	76.9%	78.4%	83.7%
Grad	52.6%	47.1%	45.8%	43.2%	46.0%
GSM	51.2%	48.1%	42.7%	37.6%	43.1%
Law	58.5%	56.9%	51.6%	50.4%	60.1%
SCJ	40.4%	42.4%	43.9%	48.1%	52.6%
International	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
NCAS	6.0%	3.9%	3.5%	3.8%	3.4%
CN	0.9%	1.7%	0.8%	1.0%	0.8%
UC-N	1.0%	1.1%	1.3%	1.0%	1.0%
Grad	9.2%	13.9%	13.9%	15.6%	15.6%
GSM	4.6%	7.9%	7.0%	6.2%	6.0%
Law	0.1%	0.3%	0.0%	0.3%	0.2%
SCJ	0.0%	1.5%	1.2%	1.3%	3.9%
Out of State	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
NCAS	9.7%	5.4%	5.7%	6.0%	5.7%
CN	5.3%	2.6%	7.8%	6.7%	1.9%
UC-N	2.5%	2.1%	2.1%	2.6%	4.3%
Grad	17.5%	20.9%	23.0%	26.0%	23.0%
GSM	9.7%	11.6%	24.0%	32.5%	22.1%
Law	17.8%	19.1%	26.6%	30.8%	11.4%
SCJ	10.6%	13.7%	17.1%	22.1%	15.8%
All Students	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
NCAS	3782	3643	3724	3726	3684
CN	391	428	372	371	372
UC-N	2000	1820	1865	1915	1776
Grad	1252	1323	1263	1211	1175
GSM	1491	1409	1348	1546	1496
Law	805	770	802	796	787
SCJ	47	66	82	77	76

Neighboring Counties refer to Essex County and its four contiguous counties: Bergen, Hudson, Passaic, and Union. *All students* refers to all part-time and all full-time students.

Appendix 4
Undergraduate SAT Scores, 1992-1996

	<u>1992</u>		<u>1993</u>		<u>1994</u>		<u>1995</u>		<u>1996</u>	
	Verbal	Math	Verbal	Math	Verbal	Math	Verbal	Math	Verbal	Math
NCAS										
Mean	50.4	50.3	50.7	51.9	49.3	50.9	49.0	51.3	49.6	50.9
Median	51.0	50.4	51.1	52.6	50.4	51.6	49.4	51.4	49.8	51.0
CN										
Mean	53.2	52.7	53.9	54.0	52.3	52.9	52.5	52.0	51.7	52.8
Median	54.5	53.1	55.2	55.2	53.5	53.5	52.7	51.8	51.8	53.4
UC										
Mean	44.0	45.7	42.1	43.6	41.9	44.2	42.9	43.8	41.8	42.8
Median	44.2	44.4	41.9	43.8	40.9	44.3	42.9	43.7	42.0	42.7

Appendix 5
Student Aid, 1992-1996

	NCAS				
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Grants	1773	1754	1704	1853	1954
Scholarships	91	74	55	63	72
Loans	712	873	1290	1408	1584
	GSM				
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Gants	37	32	24	24	25
Scholarships	61	54	41	42	22
Loans	161	168	177	184	186
	Law				
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Grants	106	108	110	79	131
Scholarships	84	73	62	72	78
Loans	419	427	466	512	550
	Nursing				
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Grants	158	154	156	177	168
Scholarships	24	14	12	14	15
Loans	91	104	154	171	169
	Graduate School				
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Grants	1	3	5	7	2
Scholarships	18	20	28	7	10
Loans	46	56	73	92	91
	SCJ				
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Grants	1	0	0	2	0
Scholarships	4	8	12	7	4
Loans	6	14	20	17	11
	University College				
	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Grants	349	349	380	501	536
Sholarships	43	43	20	10	11
Loans	192	192	385	495	541

Appendix 6
Age of the Undergraduate Student Body (NCAS and UCN, 1992-1995)

Newark College of Arts and Sciences				
	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>	<u>FY95</u>
25 and over	23%	18%	20%	22%
Under 25	76%	82%	80%	78%

University College - Newark				
	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>	<u>FY95</u>
25 and over	69%	62%	61%	59%
Under 25	31%	38%	39%	41%

Appendix 7
Student Enrollment, 1992-1996

	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
NCAS					
TOTAL	3782	3643	3724	3726	3684
% Min.	48.3%	51.0%	53.4%	55.6%	58.6%
% Female	51.1%	51.7%	50.2%	51.0%	52.7%
% PT	10.8%	14.3%	15.1%	17.2%	15.9%
CN					
TOTAL	391	428	372	371	370
% Min.	48.1%	49.1%	50.0%	50.9%	52.7%
% Female	88.8%	89.0%	89.2%	89.2%	89.7%
% PT	11.3%	9.4%	10.0%	9.0%	8.3%
UC					
TOTAL	2000	1820	1865	1915	1776
% Min.	54.2%	54.1%	55.4%	59.1%	59.7%
% Female	51.2%	50.2%	47.7%	49.7%	53.8%
% PT	51.2%	2.8%	72.4%	66.4%	62.3%
GSM (MBA)					
TOTAL	1491	1409	1348	1546	1496
% Min.	20.9%	23.0%	25.5%	26.3%	28.9%
% Female	34.9%	35.3%	33.5%	35.8%	35.2%
% PT	69.8%	71.4%	74.2%	77.7%	77.2%
GS					
TOTAL	1252	1323	1263	1211	1175
% Min.	26.2%	25.8%	27.3%	29.3%	27.2%
% Female	53.5%	57.3%	58.5%	57.0%	58.6%
% PT	76.0%	80.0%	79.2%	76.8%	76.1%
SCJ (Master's)					
TOTAL	47	66	82	77	76
% Min.	14.9%	21.2%	22.0%	20.1%	17.1%
% Female	48.9%	36.4%	47.5%	51.9%	60.5%
% PT	72.3%	72.3%	79.2%	84.5%	80.2%
Law					
TOTAL	805	770	802	796	787
% Min.	27.7%	29.7%	30.9%	30.9%	33.4%
% Female	41.9%	43.3%	44.7%	43.5%	44.9%
% PT	29.2%	30.4%	30.9%	30.1%	28.5%

Appendix 8
Admitted Students, 1989-1996

	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Newark College of Arts and Sciences								
1st year	500	504	509	502	466	462	470	464
Transfer	366	323	400	416	424	461	441	448
Total	866	827	909	918	890	923	911	912
College of Nursing								
1st Year	55	46	59	42	43	56	48	51
Transfer	55	48	57	17	63	25	43	50
Total	110	94	116	59	106	81	91	101
University College - Newark								
1st Year	128	152	198	109	79	96	111	98
Transfer	214	141	123	141	197	224	266	212
Total	342	293	321	250	276	320	377	310
Graduate School of Management								
Total	417	421	494	359	363	342	386	371
Graduate School - Newark								
Total	214	186	206	224	195	209	207	206
School of Criminal Justice								
Total	11	17	20	19	23	19	18	11
School of Law - Newark								
Total	300	266	264	263	242	277	241	242
Campus								
Totals	2260	2104	2330	2095	2171	2231	2153	2153

Appendix 9
Baccalaureate Degrees, 1989-1996: University College

	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>8 year</u>
Account	37	41	58	51	51	77	38	59	412
Manage	34	41	33	37	35	32	17	18	247
Psychol	6	10	8	12	14	16	5	18	89
Market	14	9	15	13	8	14	8	15	96
Poli Sci	4	8	9	5	12	5	2	7	53
English	13	6	15	8	13	10	3	14	62
Finance				1	4	16	5	14	40
Econ	8	9	5	12	8	5	3	3	53
Cr. Just	13	17	9	12	15	15	6	20	107
Info Syst	5	6	8	1	10	3	6	6	45
Comp Sci	2	3	8	4	5	3	2	7	34
History	4	2	2	4	2	3	2	4	23
Sociol.		3	3	5	5	2	1	4	23
SocWrk	1	6	1	4	5	1	2	8	28
Math	3		1		1			2	7
Anthro									
Spanish	2		1	1					4
French	1								1
Philos			1			1	1		3
Totals	147	161	177	170	188	203	101	199	1346

Appendix 10
Baccalaureate Degrees, 1989-1996: Newark College of Arts and Sciences

	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>
Account	162	145	149	156	172	157	156	117
Manage	84	97	77	77	69	71	71	61
Biology	47	56	57	53	69	68	68	94
Psychol	58	53	45	54	54	70	65	84
Market	71	63	64	60	54	51	52	42
Poli Sci	51	45	34	26	31	19	39	24
English	36	45	40	30	34	23	21	16
Finance		9	28	39	41	40	36	34
Economic	30	41	29	25	18	16	14	2
Crim Just				7	20	22	45	43
Info Syst	28	21	18	17	11	15	15	8
Comp Sci	15	24	16	9	16	18	13	18
History	19	19	13	17	17	12	16	14
Art	13	9	5	14	11	14	13	13
Sociology	9	7	19	13	14	9	7	9
Th Arts/Sp	11	13	14	3	11	8	20	7
Soc Work	11	7	9	6	8	9	19	10
Chemistry	18	9	7	9	10	9	4	12
Journalism				5	9	10	17	11
Math	6	6	4	2	9	5	6	5
Anthro	4	6	4	6	7	8	1	3
Spanish	3	6	2	4	5	3	3	6
French	6	4	1	3	1	4	3	3
Geology	2	3		1	6	2	3	8
Physics	4	3		2	6	3	3	2
Af Studies	2	1	1		1	6	4	3
Music	4	1		3	2	2	2	4
Clin Sci		2	3	6	3		3	
Philos	2	3	1	3			2	4
Bus Ad	7	1		1		2		
Urb Studies	3		4		1		1	
Italian			1	3	1		1	2
Med Tech	6	1		1				
Botany		2		2		2	1	
Appl Phys				2		1	0	2
Am Studie	1	1			1		1	
App Math					1	1		1
Wom Stud						1		1
German						1		1
Slavic								1
Totals	713	703	645	659	713	682	725	665

Appendix 11
Senior Survey - Student Satisfaction
Newark College of Arts and Sciences
1996

ASPECTS	TOTAL # OF RESPONSES	VERY POSITIVE % OF RESPONSES	VERY NEGATIVE % OF RESPONSES
OFFICE OF THE DEAN OF STUDENT AFFAIRS	399	65%	6%
FINANCIAL AID	376	29%	38%
PSYCHOLOGICAL SERVICES	194	42%	12%
LEARNING CENTER	300	65%	7%
CAREER DEVELOPMENT CTR.	368	65%	9%
PARKING FACILITIES	407	18%	55%
WORK STUDY EMPLOYMENT	226	35%	24%
ROBESON FOOD SERVICES	438	34%	28%
STONESBY FOOD SERVICES	259	32%	29%
DANA LIBRARY	472	67%	6%
RUTGERS BOOKSTORE	463	61%	6%
STUDENT HEALTH SERVICES	398	62%	11%
CAMPUS SECURITY	343	55%	15%
STUDENT ACTIVITIES	365	61%	24%
SCHEDULING CLASSES	467	47%	20%
VARIETY OF MAJORS	448	61%	13%
REGISTRATION PROCEDURES	453	57%	13%
DEPARTMENT ADVISING	412	44%	25%
FACULTY	442	55%	8%
REGISTRAR'S OFFICE	436	43%	21%
BUSINESS OFFICE (CASHIER)	409	36%	22%
ALCOHOL & DRUG COUNSELING	147	31%	8%
HOUSING OFFICE	173	28%	17%

RESIDENCE HALL	176	10%	15%
UNIVERSITY POLICE	318	48%	14%
COMPUTER LABS	416	46%	21%
RUTGERS-NEWARK IN GENERAL	442	64%	7%
WOULD YOU RECOMMEND RUTGERS-NEWARK	428	85%	15%

**UNIVERSITY COLLEGE
1996**

ASPECTS	TOTAL # OF RESPONSES	VERY POSITIVE % OF RESPONSES	VERY NEGATIVE % OF RESPONSES
OFFICE OF THE DEAN OF STUDENT AFFAIRS	104	76%	4%
FINANCIAL AID	73	42%	23%
PSYCHOLOGICAL SERVICES	33	33%	18%
LEARNING CENTER	54	56%	7%
CAREER DEVELOPMENT CTR.	75	56%	12%
PARKING FACILITIES	87	21%	48%
WORK STUDY EMPLOYMENT	37	19%	16%
ROBESON FOOD SERVICES	87	24%	30%
STONESBY FOOD SERVICES	39	15%	31%
DANA LIBRARY	109	78%	6%
RUTGERS BOOKSTORE	105	62%	10%
STUDENT HEALTH SERVICES	67	40%	13%
CAMPUS SECURITY	80	40%	20%
STUDENT ACTIVITIES	61	33%	23%
SCHEDULING CLASSES	110	37%	25%
ASPECTS	TOTAL # OF RESPONSES	VERY POSITIVE % OF RESPONSES	VERY NEGATIVE % OF RESPONSES
VARIETY OF MAJORS	100	48%	11%

REGISTRATION PROCEDURES	105	68%	13%
DEPARTMENT ADVISING	93	46%	24%
FACULTY	104	53%	11%
REGISTRAR'S OFFICE	103	48%	14%
BUSINESS OFFICE (CASHIER)	97	50%	20%
ALCOHOL & DRUG COUNSELING	26	8%	23%
HOUSING OFFICE	24	13%	25%
RESIDENCE HALL	24	4%	33%
UNIVERSITY POLICE	58	31%	24%
COMPUTER LABS	81	41%	23%
RUTGERS-NEWARK IN GENERAL	91	63%	11%
WOULD YOU RECOMMEND RUTGERS-NEWARK	100	90%	10%

**Appendix 12
Grant Awards
Fiscal Years 1989, 1993, and 1997**

	Awards	\$ Millions
FY 89	103	7.2
FY 93	129	13.6
FY 97	122	12.2

**Appendix 13
Comparisons of Full-time Faculty
Fall 1988 and Fall 1996**

	1988		1996	
	N	%	N	%
Full-time Faculty	420	100%	449	100%
Women	140	33%	149	33%
African Amer/Black	28	7%	32	7%
Latino/a	8	2%	9	2%
Asian/Pacific Isl	27	6%	43	10%

**Appendix 14
Promotion and Tenure Results, 1992 -1997**

Rank Considered	Associate Professor		Professor		Professor II	
	number of candidates	number promoted	number of candidates	number promoted	number of candidates	number promoted
1996-1997	5	5	8	5	7	5
1995-1996	10	6	9	8	2	1
1994-1995	3	1	9	8	3	3
1993-1994	11	9	16	7	2	0
1992-1993	17	13	8	7	1	1
Totals	46	34	50	35	15	10
% Promoted	74%		70%		67%	

Appendix 15
Newark Campus Faculty Academic Study Leave Program

Year of Application	<u>1996/97</u>		<u>1995/96</u>		<u>1994/1995</u>	
	one	two	one	two	one	two
Duration of Leave(Semesters)						
Center for Molecular and Behavioral Neuroscience	0	1	0	0	0	1
College of Nursing	2	0	2	0	0	2
Faculty of Arts and Sciences	15	6	15	8	18	8
Faculty of Management	8	3	8	3	9	3
Graduate School	0	0	0	2	0	0
School of Law	8	3	3	3	6	2
School of Criminal Justice	0	0	1	0	0	0
Category Totals	33	13	29	16	33	16
Total for Year	46		45		49	

Appendix 16
Instruction by Part-Time Lecturers
Number of Courses Taught by Unit and % Instruction by PTLs

Academic Year	<u>1992-93</u>		<u>1993-94</u>		<u>1994-95</u>		<u>1995-96</u>		<u>1996-97</u>	
	n	%	n	%	n	%	n	%	n	%
Faculty of Arts and Sciences	--	--	--	--	--	--	--	--	952	33
Faculty of Management	725	41	726	37	706	31	719	28	723	24
School of Law	102	31	89	51	99	44	114	26	116	36
School of Criminal Justice	27	7	31	0	30	7	30	3	28	11

**Appendix 17
Degrees Offered**

**GRADUATE DEGREES
Ph.D.**

Graduate School-Newark

Behavioral and Neural Sciences
Biology
Chemistry
Criminal Justice
Management
Mathematical Sciences (joint with NJIT)
Nursing
Physics, Applied (joint with NJIT)
Psychology
Public Administration

First-Professional

School of Law-Newark

Law (JD)

Master's

Graduate School-Newark

Behavioral and Neural Sciences (terminal MS)
Biology
Chemistry
Economics
English
Environmental Geology
Global Studies
International Studies
History (MA and MAT) (joint with NJIT)
Jazz History and Research (pending)
Liberal Studies (MALS)
Nursing
Physics, Applied (joint with NJIT)
Political Science
Psychology
Public Administration (MPA)

School of Criminal Justice

MA in Criminal Justice
BA or BS/MA (with NCAS or UC-N)

Graduate School of Management

MBA
Executive MBA (Newark/Princeton; Singapore)
BA or BS/MBA (with NCAS or UC-N)
BS in Engineering/MBA (with College of Engineering)
MBA in Professional Accounting
Master of Accountancy in Taxation
Master of Accountancy in Governmental Accounting
Master's in Public Health/MBA (with EJBSPPP/UMDNJ)

JD/MBA (with School of Law-Newark)

II. Bachelor's Degrees

College of Nursing

BS in Nursing

School of Management and Newark College of Arts and Sciences or University College-Newark

Accounting

Finance

Management

Marketing

Newark College of Arts and Sciences

Afro-American and African Studies

American Studies

Ancient Mediterranean Civilizations

Anthropology

Art

Biology

Botany

Chemistry

Clinical Laboratory Sciences (joint with UMDNJ)

Computer Science (joint with NJIT)

Criminal Justice

Economics

English

Environmental Sciences

French

Geology

Geoscience Engineering (pending; joint with NJIT)

German

History (joint with NJIT)

Information Systems (joint with NJIT)

Italian

Journalism

Mathematics

Mathematics, Applied (joint with NJIT)

Medical Technology (see Clinical Laboratory Sciences)

Music

Philosophy

Physics

Physics, Applied (joint with NJIT)

Political Science

Psychology

Puerto Rican Studies

Science, Technology, and Society (joint with NJIT)

Slavic

Social Work

Sociology

Spanish

Theater Arts and Speech

Women's Studies

Zoology

University College-Newark

Computer Science (joint with NJIT)

Criminal Justice

Economics

English

History (joint with NJIT)

Information Systems (joint with NJIT)

Mathematics, Applied (joint with NJIT)

Philosophy

Political Science

Psychology

Social Work

Sociology

Appendix 18a
CHEN Cooperative Academic Programs

Rutgers-Newark with New Jersey Institute of Technology

I. Joint Degree Programs

Physics, Applied		PhD	MS	BA
Mathematical Sciences		PhD	-	-
Mathematics, Applied		-	-	BA
Computer Science	-	-		BA
Information Systems		-	-	BA
History		-	MA,MAT	BA
Biology (pending)	PhD	MS		BA
Botany (pending)	-	-		BA
Zoology (pending)	-	-		BA
Science, Technology, and Society		-	-	BA
Environmental Sciences (pending)		PhD	MS	BA
Geoscience Engineering (pending)		-	-	BS
Telecommunications Management (planned)-		MS		-
Integrated Arts (planned)		-	MFA	-
Dual Major Option in select fields		-	-	BA or BS

II. Federated/Joint Academic Departments

Biological Sciences
History
Physics

III. Additional Joint Faculty Participation

Management
Visual and Performing Arts, including Theater
Environmental Sciences (current BA)
Honors Projects
Geology and Civil Engineering
Global Change and Governance
Behavioral and Neural Sciences

Rutgers-Newark with UMDNJ

I. Joint Degree Program

Clinical Laboratory Sciences (Medical Technology) BS

II. Articulated Degree Programs

BA or BS/MD
MPH/MBA (dual degree)

Rutgers-Newark with New Jersey Institute of Technology

I. Academic Support Affiliations

Dana/Van Houten Libraries Shared Borrowing & Lending
Common Academic Calendar
Common Class Hour Schedule
Program in American Language (PALS)
Joint Cultural Programs/Celebrations

2. Cross Registrations (Fall '96)

312 Rutgers-Newark students took 1698 credit hours at New Jersey Institute of Technology (undergraduate and graduate)
284 New Jersey Institute of Technology students took 1134 credit hours at Rutgers (undergraduate and graduate)

3. Coordinated TA and Research Assistant Appointments

Management
Applied Physics
Mathematical Sciences
Biological Sciences

4. Mentoring of Ph.D. Candidates

5. Student Life/Services

Joint Cultural Programming

6. Joint Honors Colloquia and Other Events

7. Joint Research Activities

Environmental Research
Multimedia
Computational Neuroscience

Rutgers-Newark with Essex County College

Bridges to the Baccalaureate Degree (National Institute of Health Grant)

2 + 2 Transfer Agreement in Criminal Justice

Joint Enrollment Agreement in all areas in which we have majors

Rutgers-Newark w/University of Medicine and Dentistry of New Jersey (Newark)

1. Joint Degree or Certificate Program

Clinical Laboratory Sciences: B.S. (joint) with University of Medicine and Dentistry-School of Health Related Professions
 B.A./M.D. Articulated Student Program (pending)
 M.D./M.B.A. (planned)
 M.D./J.D. (planned)
 M.D./Ph.D. (planned)

2. Academic Department Affiliations

Behavioral and Neural Sciences
 Biology
 Dual Faculty Appointments: Radiology/Psychology (pending)

3. Cross Registration

One Rutgers-Newark student
 Three University of Medicine and Dentistry of New Jersey students⁴.

4. Mentoring of Ph.D. Candidates

Behavioral and Neural Sciences
 Biology

Rutgers-Newark w/Essex County College and New Jersey Institute of Technology

1. Newark Educational Partnership

To coordinate academic course work and facilitate the transfer of students between Rutgers-Newark, New Jersey Institute of Technology and Essex County College.

2. Fund for Improvement of Post Secondary Education (FIPSE) Grant

U. S. Department of Education – – to set up interinstitutional learning communities of faculty and students from Rutgers-Newark, New Jersey Institute of Technology, Essex County College, Shabazz High School, and Central High School, (both in Newark), in core areas of English, Mathematics, History and Science, in order to encourage students from the participating high schools to attend college and to better prepare the faculty to teach those students who do enroll.

**University of Medicine and Dentistry of New Jersey (Newark)
 w/New Jersey Institute of Technology**

1. Articulated Student Programs

BS/MD Program w/University of Medicine and Dentistry of New Jersey Medical School

B.S./D.M.D. Program w/University of Medicine and Dentistry of New Jersey Dental School

2. Joint Degree Programs

Biomedical Informatics: M.S. (joint) and Ph.D. (joint) w/University of Medicine and Dentistry of New Jersey-School of Health Related Professions (SHRP)

Nursing B.S.N. (joint) with University of Medicine and Dentistry of New Jersey-School of Nursing (at Technology and Engineering Center in Mt. Laurel)

Nursing Informatics: M.S.N. (joint) with University of Medicine and Dentistry-School of Nursing and University of Medicine and Dentistry-School of Health Related Professions

3. Collaborative Research

Biomaterials research with University of Medicine and Dentistry of New Jersey-New Jersey Dental School, Department of Orthodontics

4. Cross Registrations of Students

93 University of Medicine and Dentistry of New Jersey course registrations

**University of Medicine and Dentistry of New Jersey (Newark)
w/Essex County College**

Joint Degree or Certificate Programs

Dental Assisting: Certificate (joint) with University of Medicine and Dentistry of New Jersey-School of Health Related Professions

Dental Hygiene: Joint Associate and Applied Science

EMT-Paramedic: Certificate from University of Medicine and Dentistry of New Jersey-School of Health Related Professions; Associate and Applied Science from Essex County College

Respiratory Therapy: Associate in Science Degree (joint) with University of Medicine and Dentistry of New Jersey-School of Health Related Professions

Respiratory Care Technician: Certificate (joint) with University of Medicine and Dentistry of New Jersey-School of Health Related Professions

**University of Medicine and Dentistry of New Jersey (Newark)
w/Rutgers-Newark and New Jersey Institute of Technology**

Occupational Health Nurse Practitioner track: MSN from University of Medicine and Dentistry of New Jersey-School of Nursing; track requirements are fulfilled through course enrollment at University of Medicine and Dentistry of New Jersey/Rutgers EOHSI in Piscataway, and at New Jersey Institute of Technology (Newark).

Master's in Public Health (planned).

Newark Educational Partnership

University of Medicine and Dentistry of New Jersey focuses specifically on health related programs, working with students, faculty and parents at Malcolm X Shabazz High School.

New Jersey Institute of Technology with Essex County College

Joint Admissions

Appendix 18b
CHEN Economic/Community Development Projects

Past Initiatives Completed
(* items continuing)

University Heights Program Initiatives:

Urban Initiative Grant Activities:

- Refinement of land use/demographic data*
- Housing preferences/commuter patterns of CHEN populations
- Development of joint CHEN-community plan
- Area marketing
- Provision of technical assistance to developers*
- Staff support to University Heights Community Council*, University Heights Neighborhood Development Corporation, and University Heights Condominium Association
- CHEN Pre-College Program*
- Skidmore, Owens, Merrill-Polshek Study (University Heights Master Planning) providing framework for future development

Science Park concept document and organization of University Heights Science Park Board of Trustees

Essex County College “Newark Education Partnership” program with Shabazz High School.

Note: *CHEN education initiatives laid foundation for successful launch of this program.

Central business district planning initiatives; the establishment of a Special Improvement District (SID)*

Neighborhood Development Projects

- CHEN Building*
- Movie Theater
- 66 Unit Upper University Heights Estates housing
- Implementation of revolving loan programs supporting low income housing

Information Dissemination

- Presentations before New Jersey Department of Higher Education, Society for College and University Planning, and others on University Heights development process.*
- CHEN Economic Impact Study

Present Activities

University Heights Science Park

- Public Health Research Institute/International Center for Public Health (\$60M funded project)
- Science Park High School (planning committee formed)
- Housing (planning committee considering developers)
- Additional Small Business Incubator Space (study underway)
- Biomaterials & Medical Devices Laboratory (faculty search underway)
- Day Care Center (open and operating)

Participate in the Central High School Break-the-Mold Project

Participate in the Connections Newark Project, working with New Jersey Performing Arts Center and New Jersey Department of Transportation to design and install highway and intra-city signage

Participate on Regional Business Partnership's "Downtown Security Alliance" (to foster heightened security coordination between the city police department and all other police departments and security agencies)

Joint grant proposals

Items that are starred in the CHEN Economic/Community Development Projects

Appendix 19
Reviews by the Committee on Standards and Priorities in Academic Development

Review	Year
Academic Foundations Center	1996
Art and Design	1990
Biological Sciences	1990
Chemistry	1988
Classical and Modern Lang. and Lit.	1991
Criminal Justice	1991
Economics	1996
English	1996
Geology	1984
History	1988
Law School	1994
Management (M.B.A.)	1981
Management (Ph.D.)	1985
Mathematics and Computer Science	1990
Nursing	1994
Philosophy	1996
Physics	1992
Political Science	1995
Psychology	1984
Public Administration (M.P.A.)	1997
Sociology and Anthropology	1996

Appendix 20
Retention Rates for Newark Campus Academic Units

School	<u>Fall 1990</u>	<u>Fall 1991</u>	<u>Fall 1992</u>	<u>Fall 1993</u>	<u>Fall 1994</u>
	%	%	%	%	%
NCAS	82.9	84.1	84.5	84.7	87.5
Nursing	89.4	88.6	88.4	94.9	97.8
UC	63.6	57.6	62.3	56.6	61.1
GSM	93.3	86.4	91.5	90.3	98.5
Graduate School	80.7	86.1	80.9	79.8	79.1
SCJ	93.9	60.9	61.0	94.7	100.00
Law	96.0	96.5	93.5	96.8	94.5

Appendix 21
Newark Law Graduate Employment, By Percent

	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>
	%	%	%	%	%
Year of graduation total	63.9	44.7	87.0	90.1	78.0
Grads employed	89.6	98.4	70.5	66.7	74.3
Grads looking for work	10.4	10.7	27.3	33.4	28.2
Employed other than as clerks	60.1	60.0	65.0	65.6	62.7
Employed as clerks	29.7	35.0	33.0	31.3	28.2

Appendix 22
Library Resources

Usage	1986/1987	1995/1996	% Change
Users in facility	433,382	535,907	24
Items circulated	55,050	80,317	46
Reserve items circulated	3,202	13,678	327
Reference Queries	28,023	36,467	30
Interlibrary loan (items requested from and by other Rutgers libraries)	6,984	29,001	315
Interlibrary loan (items borrowed from and lent to non-Rutgers libraries)	2,861	3,025	6
Bibliographic instruction (classes taught)	71	154	117
Fee-based searches	139	22	(84)

Appendix 23
Rutgers University Libraries
Science Libraries Journal and Standing Order Cancellations, 1989-1996

Subscription Year	Titles Added	Titles Canceled	Net Change
1991	58	220	(162)
1992	70	210	(140)
1993	80	123	(43)
1994	27	361	(334)
1995	31	464	(433)
1996	28	266	(238)
1997	0	295	(295)
Totals	294	1,939	(1645)

Appendix 24
Rutgers University Libraries
Science Library Allocations Compared to Journal Price Increases, 1992-1996

1. Allocation; 2. Agricultural Sciences; 3. Biology; 4. Chemistry; 5. Earth Sciences; 6. Engineering; 7. Environmental Sciences; 8. General; 9. Medicine; 10. Nutrition; 11. Pharmaceutical Sciences; 12. Physics; 13. Psychology

Note: Data derived from a five-year price history provided by Ebsco, the primary vendor for the Rutgers Science Libraries for domestic, Asian, and a portion of the European serials received.

Appendix 25
Rutgers University Libraries
Publisher Price Increases for Science Journals, 1992-1996

Note: Data derived from a five-year price history provided by Ebsco, the primary vendor for the Rutgers Science Libraries for domestic, Asian, and a portion of the European serials received.

Appendix 26
Rutgers University Libraries
Libraries Pay More for Subscriptions than Individuals

Appendix 27
Programs and Services
of the Learning Resource Center

Collaboration with Academic Foundations Center

Services to the Educational Opportunity Fund (EOF)

Writing assistance and the writing program

Supplemental instruction in the sciences

Outreach activities

Academic success workshops

Probation workshop series

Support for student athletes

Assistance for the School of Management, the College of Nursing,
and Law School

Extended computer hours for Learning Resource Center computer
laboratory

Faculty Alliance for Education (mentor project)

Outreach to pre-college students

Student Leadership Symposium

Appendix 28
Learning Resource Center Tutoring Sessions 1995-
1996

Area	Individuals	Total Contacts
Course support	552	1,286
Learning assistance	392	1,075
Peer tutoring	827	2,278
Supplemental instruction	484	1,870
Writing Assistance	274	852

Appendix 29
Equipment Leasing Fund Distribution Plan

NEWARK

Proposal	Cost	Description
Biotechnology T-Lab Improvement	169,500	Phosphor imaging system, automated DNA sequencer, Gene Scan Kit
Chemistry 200 Mhz NMR Repl	172,000	Replace existing w/Bruker Instruments AC200 or equal
Physics UG T-Lab Equipment	101,198	Computers, voltage/current probes, digital multimeters, Oscilloscopes, Network, etc.
Vis&Perf Arts Graphics T-Lab	240,779	Computers, scanners, printers, software, for art making, carpentry power and hand tools for performing arts, sound equipment
Satellite Downlink	92,130	To equip Student Center to receive satellite transmissions
BioSci Light Microscopes	241,598	4 inverted light microscopes w/fluorescence optics, cameras, time-lapse video recorders, frame grabber boards for Macs, computerized management & op
Bio Cell Biodynamics Equipment	271,760	Laser confocal microscope, 12 bit cooled CCD camera for low light level image acquisition, etc
Chemistry 400 MHz NMR Upgrade	364,000	NMRs are a basic tool for advanced UG research & Instruction
Chemistry Organic T-Lab Equip	90,000	Vacuum apparatus, evaporators, micro-glassware, etc
Geophysics Computers	23,267	Hi-end PC's for Geology Dept:12 channel Seismograph System
Physics Scanning Tunnel MS	14,000	Specialized microscope
Physics Observatory Upgrade	16,332	Camera, computer, portable telescope
IAB Labwater System	10,695	Provides distilled laboratory water for the Institute of Animal Behavior
IAB Microscope	31,988	Research Fluorescence Microscope for the Institute of Animal Behavior

Equipment Leasing Fund Distribution Plan

NEWARK

Proposal	Cost	Description
IAB Computer	63,000	MCID System 2 Interactive Computer System
BioSci MultiMedia T-Lab	95,482	Creates computer based multimedia teaching for UG, 25 Mac PC's, printer, network
Boyden Lect Hall Proj Syst	22,123	Matrix Display Tablets, PC, projection system, VCR
Dana CompuLab Upgrade	35,000	8 PCs 2 printers for Dana Reference Section
RUCS Compulab Upgrade	300,000	Replaces PC's in RUCS UG Compulab
Fiberlink to 15 Washington St	100,000	Links Law School, School of Criminal Justice, to campus fiber optic network
Net Ext/Talbott & Woodward	259,104	Links the campus dormitories to the campus network
Chemistry Computer Upgrade	49,720	For training program in Molecular/Macromolecular modeling; 3 computer workstations
BioPhysics Computer Workstation	65,342	Provides hi-end computing for BioPhysics program
IAB Electrophysiology Set-Up	88,772	Microscope, digital simulator, preamp, biphasic simulator, micropositioner
RUCS Hill Lecture Imps	15,400	Projector and computer kit for lecture hall
RUCS Multimedia Computers	27,800	Multimedia Computers for instructional development
Management SUN Repl	78,300	Upgrades hi-end computing capability for Faculty of Management
Total	3,039,290	

Appendix 30
Rutgers-Newark
Parking Revenues and Expenses

Appendix 31 Rutgers-Newark Outreach Programs

K-12 Partnerships

Among the K-12 partnerships in which Rutgers-Newark is involved are:

1. **The Consortium for Pre-College Education** (an agreement between the colleges and universities in Newark and the Newark Board of Education) allows high school students early exposure to a college environment.
2. **FASN Academic Foundations Center**, involves nearly 50 students in nine different service programs through its Hispanic Images Projects. In conjunction with the **Learning Resource Center** it runs a mentoring/community service project which sends NCAS students into Newark High Schools to tutor in Math and English.
3. **The Department of Education:** administers mentoring of students at Central High School by undergraduates majoring in Education; works with a cohort of Newark principals and vice principals to improve their leadership and administrative skills (Newark Principals Leadership Institute); participates in the Arthur Ashe program tutoring local elementary school students; developed computer software program training for students in a Newark K-8 School; developed a program in which every semester 60-70 Education Department students work in Newark, Irvington, Hillside and Kearny schools diagnosing K-12 students' reading problems and providing remediation; established a computer link and multimedia video transmission connection to Newark's Central High School to provide for upgrading computer skills of high school teachers and students.
4. **The Algebra Project**, designed and initiated at Rutgers-Newark and based in Trenton, offers training for K-12 teachers to improve their math teaching strategies to make Algebra more accessible. During a single year as many as 7,000 students from 60 school districts are taught according to this method.
5. **The Minority High School Student Research Apprentice Program**, funded by the National Institutes of Health, seeks to stimulate minority high school students to pursue careers in biomedical research and the health professions.
6. Under the auspices of the Office of Student Development undergraduates participate in a variety of community service projects. The **Black Organization of Students**, the **Cuban Cultural Center**, the **Filipino Student Organization**, the **Portuguese Club**, the **Inter-Fraternity/Sorority Council**, **LUNA**, the **Student Marshall Program**, **PRO**, and many others each year participate in activities such as toy and food drives, voter registration, helping AIDS victims, and mentoring school children.
7. **The Latino Scholars Program** was developed to encourage Puerto Ricans and other Latinos to pursue careers in the Humanities.
8. The **Micro-Computer Introductory Physics Laboratory Program** runs a laboratory course for Science High School students at the Rutgers-Newark Campus.
9. The **Howard Hughes Medical Institute-sponsored Undergraduate Science Discovery Program and Project Seed**, sponsored by the American Chemical Society, provide opportunities for urban and minority high school students to visit the campus for hands-on-science experiences and to engage in summer internships.
10. **Chad Academy/Rutgers:Math/Science Partnership**, brings advanced minority students to Rutgers-Newark where they enroll in math and science courses for college credit.
11. **The Faculty Alliance for Education** (consisting of Rutgers-Newark, NJIT, Essex County College, Central High School and Shabazz High School) has five inter-institutional teams, including a Business/Accounting team. As one

component of the Alliance's Program, selected Shabazz High School juniors attend business classes at Rutgers-Newark for college credit, with tuition remission.

Economic Development of the University Heights Area and City

Members of the Rutgers-Newark faculty and staff serve on a variety of communities including:

Boys and Girls Clubs	One to One/New Jersey
Central High Initiative	New Jersey Performing Arts Center
Council on Higher Education (CHEN)	Planning Task Force with the Deputy Mayor for Economic Development
Connection Newark	Regional Business Partnership
Downtown Business Corridors Task Force	Transit Plus Advisory Board
Downtown Security Council; Fighting Back	United Way of Essex and West Hudson Counties
Mayor's Task Force on James Street Commons	University Heights Community Council
Multi-Users Sessions in Community (MUSIC)	University Heights Planning Group
Newark Arts Council	Washington Commons Development Corporation
The Newark Museum Council	WBGO Radio

The Faculty of Management is involved in economic development through various programs including:

Rutgers Minority Investment Corporation, assists Essex County business communities. RMIC is a federally licensed small business investment company which has made 250 investments of more than \$5 million.

New Jersey Small Business Development Center, a national partnership between the state and federal governments, the private sector and colleges and universities, has provided statewide management and technical assistance to established and new small businesses through workshops, counseling and training services.

The **Interfunctional Management Consulting Program**, provides strategic management consulting services to a large and varied client base, such as publicly traded firms, private organizations, government agencies and other not-for-profits. It works with 60-70 clients per year.

Health Care and Social Work

In addition to the College of Nursing's health care center in Elizabeth Port and the Department of Social Work's many activities throughout the State, students contribute individually and as student groups to the health and welfare of our neighbors. Examples include: the Annual Health Fair (at Hillside High School); the Middlesex County Healthy Heart program; Children and Hospital Week at St. Michael's Hospital in Newark. Students conduct a toy drive for two social agencies in Essex County and a Campus fraternity annually holds a bike-a-thon to raise funds for pediatric AIDS. As part of the Social Work department's field program, 37 student externs spend 16 hours per week throughout the typical academic year in 20 or more agencies in Essex, Bergen and Passaic counties in New Jersey and in New York City.

Business and Legal Assistance

Our law and criminal justice faculty are involved in numerous ways with the life of our communities. The most wide-ranging initiative has come from the Education Law Center which culminated 25 years of effort in changing the way the State funds education in poorer school districts. Our legal clinics are in partnership with PSE&G in its Urban Initiative program; in the CASE program (Citizenship and Service Education) in the courts and prosecutor's office; and in the Center for Crime Prevention Studies with the Jersey City Police Department.

Graduate business students work with the Rutgers Urban Legal Clinic to provide business and legal assistance and students of the Volunteers in Tax Assistance (VITA) at Rutgers-Newark provide tax assistance to low income persons in the community.

Government and Public Affairs Assistance

In addition to its numerous programs working with State agencies, the Department of Public Administration houses the National Center for Public Productivity. The Center has recently received a grant of \$875,000 from the Sloan Foundation to assist the governments of Montclair, NJ and Dayton, Ohio.

Cultural and Artistic Activities and Partnerships

Rutgers and NJIT have joint theater arts programs and all presentations are open to the public. Admission fees are nominal. Programs often reflect the rich cultural diversity of the Newark Campus and the City of Newark.

The Campus celebrates the wealth of African-American heritage and culture in the Newark and Campus community through year-round events starting with Black History Month in February. Many films, lectures and programs occur during the month, often with the members of the local community in attendance. African-American heritage is also richly represented in the activities of the Institute of Jazz Studies.

Newark is home to vibrant Hispanic and Portuguese cultures. Local and international artists have been represented in Campus shows and there have also been plays, performance art, lectures and films. Campus organizations have worked with community groups such as Portuguese Congress, the Cuban Cultural Club and the Cuban American Heritage Society, Inc. in these endeavors.

Asian cultures are represented on the Campus by the activities of the many organizations representing diverse cultural groups and also by the collective activities with the local community during World Month.

The Rutgers Art Gallery works closely with the Newark Museum and an association between the Department of Visual and Performing Arts, other academic departments and the New Jersey Performing Arts Center will be initiated by a jointly sponsored international conference during the spring semester 1998.

Appendix 32
List of Resource Documents

Newark Campus Strategic Plan
Rutgers Newark Campus Map/Rutgers Buildings
University Heights Science Park Area Map