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INSTITUTE ACCOUNTABILITY

Responsible self-government in a university requires a clear definition of institutional mission and a continual awareness of the consequences of institutional actions. The price of independence of action is accountability to the various "publics" with which an institution interacts and to which it is responsible. In addition to maintaining intellectual and educational standards judged appropriate by the faculty, administration and trustees, a university is accountable to diverse communities of interest within the state and federal governments, industry and business, professional societies, the tax-paying citizens, and, of course its students and their families. A university's performance is scrutinized in many ways, from the most explicit (annual independent financial audits) to the implicit (reputation in the larger community).

Thus, auditors representing federal and state governments are provided significant information relative to the details of financial management; boards of higher education, legislative committees, and financial managers of the state executive branch review carefully annual budget proposals; expert outsiders are called in to evaluate departments and degree programs; faculty render judgment on faculty; students review teachers; benefactors (both corporate and individual) make decisions on grant proposals; government agencies judge research proposals; students and their families, alumni and employers weigh academic reputation. The result is a complex and often subtle web of accountability through which an institution must constantly document its quality.

Any formal process of accountability within higher education must provide verifiable information which assures individuals and organizations that a university is doing what it purports to be doing. In examining an institution, the following questions should be addressed:

- 1. What are the goals of the institution?
- 2. Are the goals being met?
- 3. In attempting to meet these goals, are the associated costs reasonable?
- 4. Do the goals meet the needs of the institution's constituencies?

 One major purpose of this report will be to identify the Institute's "publics" and to indicate the manner in which it answers to or is accountable to each. The ultimate objective of this study is to focus attention on the goals of the Institute and to recommend improvements in methods for measuring the degree to which these goals are being met.

The goals and objectives of New Jersey Institute of Technology are delineated in its master plans. In their most basic form these goals may be summarized as striving for excellence in a threefold mission of instruction, research and public service in the context of rapid technological change. The NJIT Phase II Master Plan details institutional goals and objectives.

While it is difficult to separate the intertwined strands of the accountability web, for the sake of simplicity, this report will be divided into accountability measures as follows:

- A. Financial Accountability
 - 1. Budget
 - 2. Audits
- B. Academic Accountability
 - 1. Promotion and Tenure
 - 2. Program Evaluation and Improvement
 - 3. Accreditation
 - 4. Board of Trustee Advisory Committees
 - 5. Students and Parents
 - 6. Corporate Community
 - 7. Alumni
 - 8. State of New Jersey
 - 9. Periodic Reports

REVIEW OF ACCOUNTABILITY MEASURES

A. FINANCIAL ACCOUNTABILITY

A.1 Budget

The first, and perhaps the most important element of NJIT's financial accountability is the annual presentation of its budget request to the State Department of Higher Education (DHE), the Governor and the State Legislature. Fiscal Year budgets are planned on a three year cycle: the current or working year, the following year, and the year subsequent to that year. The budget request is a detailed documentation of programmatic goals and objectives as well as fiscal data and proposals. It includes information related to the extent to which previously stated objectives have been realized.

WORKING YEAR BUDGET

State appropriations for a current Fiscal Year are often not final until half of the Academic Year is complete and adjustments in expenditures may be required late in the Academic Year. As the Institute requires large amounts of instructional and research equipment each year, much contingency planning takes the form of preparing ordered lists of needed equipment based upon several possible final fund allocations. While this appears to be working successfully, each department has accumulated a large backlog of equipment needs and consequently the setting of priorities for a given year's expenditure is difficult.

NEXT YEAR'S BUDGET

During the Fall Semester of each Academic Year, Budget Hearings are conducted with the deans of each of the three colleges and Student Services. These hearings are designed to promote college and departmental planning.

Deans are asked to review their area's past activity, project student

enrollment for the next few years, and, in light of these projections to modify their requests for personnel, supplies, equipment, etc., based upon the Board of Higher Education (BHE) recommended budget for the next year.

Because the Governor and the Legislature have made substantial reductions in the BHE recommended budgets in recent years, these hearings are not as helpful as they might be in establishing a budget for the next year. There is a degree of skepticism on the part of the chairmen and deans that these hearings produce meaningful results. As the appropriation process is normally not concluded until late June, faculty and teaching assistants must be recruited in advance of the actual budget. The hearings, then, allow planning of personnel and to a lesser extent major equipment purchases.

SECOND YEAR PLANNING BUDGET

During the Spring Semester, (after the Governor has made known his recommended level of support for the coming Academic Year) planning begins for the Academic Year eighteen months in advance.

Two weeks after the beginning of the Spring Semester, actual enrollment figures for the current Academic Year are complete. These figures, which are audited by the State, form the basis for planning for the next Academic Year.

Using a set of program objectives, the actual enrollment for the current year and those for the past several years, application data for both graduate and undergraduate admission for the coming year, and other information concerning future plans (for example, changes in graduate recruitment techniques), the enrollment objectives for the second Academic Year are established for purposes of budget planning. An enrollment based formula,

which takes into account the differing costs associated with educating students at different levels and in different programs, determines a major portion of the asking budget.

In addition to the basic formula resources, the Institute may and does request funding for special projects and needs such as support to develop new research, special instructional equipment, basic skills instruction, special curricula development, and for the first time in FY83, funding to create centers of excellence in fields of high technology. Much of NJIT's success in receiving adequate funding of its budget requests (from enrollment targets to "above formula" funding) lies in its ability to demonstrate improving quality in its programs and its success in addressing societal needs (e.g., increasing the representation of minorities and women among the student body, faculty and staff).

A.2 Audits

Fiscal accountability begins with the budgeting process; it continues with routine monitoring, management reports, and internal audit, and it is concluded with an external audit.

The budgeting process which reflects goals and sharpens objectives and identifies the resources necessary to achieve them, forms the basis for fiscal accountability in that the standards (the objectives) for measurement are established. The budget which is reviewed, modified and approved internally is also subject to rigorous review during the State process which includes hearings before the Department and Board of Higher Education, analysis and recommendations from the Governor to the Legislature, Public Appropriations Committee hearings, and finally, the Appropriations Act.

The State budget process requires an accounting of funds disbursed as compared with the budgeted amounts and is considered in the review of requests for subsequent year appropriation.

During the fiscal year, monthly Budget/Expense reports are issued to each department. These reports are summarized in a manner reflective of the organizational structure. Financial reports are made at the monthly public meetings of the Board of Trustees. The Internal Auditor performs operational reviews of various functions which are circulated to the department concerned and to the Vice-President to whom that department reports. Follow-up studies are completed to assess the progress made in correcting deficiencies which may have been identified during the course of the audit. The Internal Auditor, a member of the administrative staff, reports to the Chief Financial Officer but may communicate directly with the President, the latter helping to assure the independence of the audit function. Copies of internal audits are sent to the President. An annual audit program is developed for the Institute so that management can focus the activities on areas that are of concern. Within the annual program there are, of course, allowances for ad-hoc reviews should the need arise.

Research grants and contracts and restricted gifts are subject to additional scrutiny from the grantor or donor. Subject to the provisions of the gift or contract, interim and final financial and programmatic reports are provided and special audits may be conducted by the program sponsor at the end of a project.

At the close of each Fiscal Year a complete set of financial statements are prepared and audited. The external audits are conducted by an
independent firm of Certified Public Accountants. This review focuses
mainly on the fiscal records, and how they relate to the achievement of

the Institute's objectives. For example, it may be necessary to certify that funds appropriated by the State for a special purpose, were used for that purpose. The financial reports produced are in accordance with the national audit guide developed jointly by the American Institute of Certified Public Accountants (AICPA), National Center for Higher Education Management Systems (NCHEMS), and National Association of College and University Business Officers (NACUBO). As such, reasonable comparisons of NJIT's financial health vis-a-vis other institutions using this standard can be made.

Several years ago the Institute's financial policies and procedures were codified into a formal manual which is updated as necessary. The sections dealing with budgeting, purchasing, and grants accounting are currently being reviewed for major update.

B. ACADEMIC ACCOUNTABILITY

Common to the expectations of NJIT's many "publics" is the maintenance of academic programs of high quality. Students and their families in selecting NJIT expect an education that will prepare one for entry into a technological profession with skills necessary to permit individual growth and adaptation as the profession changes. Employers expect NJIT graduates to be as well prepared as those of other institutions of high quality, but with perhaps greater skills in practical problem solving. Potential clients expect NJIT graduates to practice their profession with high ethical standards and expertise. The body of 18,000 alumni trusts the Institute to maintain its reputation for quality of programs so as to increase the value of their degrees. Accrediting agencies must assure the various professions and the public at large that acceptable standards are associated with the degrees awarded.

The most important element in the Institute's ability to meet the expectations of these various communities is its faculty. Hence the ways in which the Institute maintains and renews its faculty is central to a description of its accountability. Given the difficulty experienced by universities across the nation in recruiting and retaining faculty in engineering and computer science, such a discussion must include a description of how NJIT proposes to deal with this problem.

B.1 Promotion and Tenure

The quality of the university's faculty is the most important factor in determining the quality of its educational programs. As a corollary, promotion and tenure decisions, which influence the role of individual faculty for perhaps a quarter of a century, are the most important decisions made in a university. Given the importance of these decisions, it is appropriate that the faculty and administration together share responsibility in the recommending process leading to promotion and tenure decisions.

The existing procedures governing the promotion and tenure process are largely those developed during the period in which the Institute was primarily a single-purpose college (Newark College of Engineering). In this process there are three steps:

1. In the Fall, the Promotion and Tenure Committee of each department, composed of all tenured full professors in the department, makes recommendations on promotion and tenure for faculty members within their department. Their recommendations are based on their personal knowledge of the various members, the Annual Summaries of faculty activities

submitted each year by every faculty member, and other material contained in the faculty file. Upon the request of the department Promotion and Tenure Committee, an individual faculty member prepares a comprehensive resume which is forwarded to the Institute Promotion and Tenure Committee if a positive decision is reached by the Department Committee.

2. The Annual Summary, the comprehensive resume and other material an individual faculty member deems appropriate, are forwarded to the seven-member Institute Promotion and Tenure Committee. The Institute Committee membership is made up of four tenured faculty members appointed by the President who hold the rank of professor and who have been nominated by the Faculty Council, and three tenured members, who must also hold the rank of professor, selected by the President. The four seats reserved for faculty members recommended by the Faculty Council are distributed as follows: two members must be selected from the Newark College of Engineering, one member from the New Jersey School of Architecture, the Department of Humanities or the Department of Organizational and Social Sciences, and one member from the departments of Mathematics, Computer and Information Sciences, or Physics. The membership from each of these constituencies serves a three year staggered term. The Faculty Council nominates at least two members for every vacant seat at the end of the ... Spring term.

The three members chosen by the President serve one year terms and may be reappointed. They may be full-time administrators but must hold full rank and be tenured. The Institute Committee recommends for or against promotion and tenure for each nominee sent to it by the various department Promotion and Tenure Committees. If they recommend against a nominee, the department Promotion and Tenure Committee may vote to appeal directly to the President. The positive recommendations of the Institute Committee and the appeals of the Department Committees, together with all documentation, are sent to the President.

3. The final step in the formal procedure is the President's recommendations to the Board of Trustees whose decision is final. In arriving at his recommendations, the President may consult with individuals from within and without the Institute. An extended process of review and consultation with the Vice President for Academic Affairs is a critically important and routine element of the process.

While several problems with this formal procedure have become evident over the past few years, the results of the process indicate considerable selectivity. The following tables display data relative to the promotion and tenure process for the past several years:

	AAUP 1	979 -	1930 -	- RANK	DISTRI	BUTION	<u></u>	,	
	CA TECH	U. MICII.	PENN STATE	PURDUE	KPI	RUTCERS NB	TEXAS A & M	WORCESTER	F I CN
Professor	44.3	55.2	35.0	38.7	44.4	32.4	30.7	34.3	23.5
Associate Professor	29.3	20.3	28.3	30.6	29.9	24.4	31.0	37.2	36.3
Assistant Professor	26.4	21.9	25.3	25.4	21.9	36.5	35,5	23.3	26.2
Instructor	0	2.1	10.4	5.3	3.8	6.7	2.8	5.2	9*
% Tenured	64.7	74.4	64.7	69.1	64.6	58.6	55.3	64.6	63.5
% Women	6.1	19.3	15.1	13.3	4.4	27.1	9,4	7.4	6.9

^{*}Includes Special Lecturers

SUMMARY OF PROMOTION	AND TENURE RECON	MENDATIONS	+
	Number Recommended by Department Committees	Number Recommended by Institute Committee	Number Promoted
<u> 1978–79</u>			
Promotion to Professor	10	2	3
Promotion to Associate Professor	21	á	5
Tenure	20	3	9
<u> 1979–60</u>	i * !	; ; ;	•
Promotion to Professor	14	, . 3	5
Promotion to Associate Professor	24	3	ó
Tenure	23		13
1930-31			
Promotion to Professor	24	: 1	_ *
Promotion to Associate Professor	21	<u> </u>	3
Tenura	20		3

^{*}Two of the four were the result of grievance action. $$41\$

FULL-TIME FACULTY & INSTRUCTING STAFF FALL 1981 PERCENTAGES BY RANK

DEPARTMENT	DISTINCUISHED PROFESSOR AND PROFESSOR	FESSOR	ASSOCIATE	ASSOCIATE PROFESSOR	ASSISTANT	ASSISTANT PROPESSOR	INSTRUCTOR AND	R AND	I A TYON	_
	1980	1981	0861	1981	1980	1861	1980	1861	1980	1981
Architecture	7.15	2 6'2Z	7 322(36)	9 282(34)	5 222(59)	8 25%(59)	41%	13	2.7	3.2
Chemistry	6 2852	30,7%	9 45%(71)	8 34!2(65)	4 19%(90)	4 17½%(8½³2)	2,16	7,71	21	23
Chemical Engineering	502	462	12(51)	1/42(54)	3 21,12 (85,1)	(7;58) X I E	3 2152	2 15'2'X	71	Ξ
TOTAL	34%	1.3	10 28½%(85½)	9 25%(61)	7 20%(85½)	8 22½%(83½)	5 14%	0 16.2%	3	92
Civil & Environ- mental Engineering	10 38'22	705 01	7 272(65)	10 40%(80)	8 30',2(96)	5 20% (100)	77	9	56	25
Computer & Infor- mation Engineering	2 182	2 14%	2 182(36)	5 36% (50)	5 462(82)	3 21 ⁵ 2(71 ⁵ ,)	2 18%	4 28'12	Ξ	14
Electrical Laginering	71 <i>5</i> 71 <i>7</i>	15 411,2	15 527(93)	16 552(96')	2 72(100)	1 f,z(100)	0	9	53	6.
Physical Education	1 52.	1332	2 672(100)	2 6 /2(100)	0	9	0	9	~	-
Homen it ies	8 36%	282) 322(68)	7 282 (56)	5 232(91)	8 322(88)	7 9%	122	77	25
Industriat Sagineering	, 181, Z	252	3 2 5Z(61%)	ر (64) 252 (64)	ا 7؛ کر(69)	9	4 11.2	6 50%	2	2
Mithematics	5 202	7,51 15,7%	11 44%(64)	12 46Z(61½)	6 242(88)	5 19%2(81)	3 12%	5 19!,2	25	26
Mechanical Engineering	9 Zat	275	10 402(76)	10 372(74)	5 202 (96)	5 18'22(92' ₂)	1 4%	2,17	25	2.7
Organizational and Social Setence	%7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	212 212	4 222(44 <u>1</u> 23)	1 162(37)	6 34%(78)	8 422(79)	4 22%	21%	81	2
Physics	4 19 <u>2</u>	5 5 7 7 7	(11) 27/23 (11)	6 32(67)	6 28' ₂ 2(100)) 332(100)	0	0	17	51
, Totali	7 ⁷ ,67	717	89 35!2(65)	95 15!.Z(62! ₂)	56 22½(8½)	58 21!22(84)	31 12!22	4.3 16%	250	5 69

After studying the promotion and tenure procedure, the Task Force has identified the following areas in which improvement is needed:

- 1. While one of the performance areas to be evaluated in the promotion and tenure process is teaching effectiveness, there is no standard method of evaluation. Some departments use an instrument for evaluating teaching, but it is extremely difficult to compare teaching effectiveness among departments, schools, or disciplines. Furthermore, the instruments probably lack sufficient sophistication of design in view of their important purpose.
- 2. Not only does the documentation supporting departmental recommendations vary widely, but the elements comprising that documentation are so limited it is difficult for a faculty member not already familiar with the work of the candidates to judge their total contribution.
- 3. There is need for more consistency among departments with respect to the information that is communicated to unsuccessful candidates for promotion and tenure.
- 4. Better communication is needed between the Institute Promotion and Tenure Committee and department chairpersons. Such an improvement in communications will allow the department chairperson to provide better guidance to the faculty.
- 5. The promotion and tenure process does not provide a formal role for the dean of the school or college.
- Clearer definition of the criteria for promotion and/or tenure for Engineering Technology faculty are needed.

7. There is a need for a formal procedure by which a faculty member who believes that he or she should have been recommended for promotion and/or tenure by the department may appeal that decision without recourse to the formal grievance procedure. (The Board of Trustees on January 8, 1982, approved a recommended change in the process which addresses this matter.)

Faculty members not currently being considered for promotion or tenure also need guidance to assist them in their professional growth and in more fully realizing their potential. Following the submission of the annual activities report, it is recommended that department chairpersons meet with each faculty member to discuss individual accomplishments and goals, and how these relate to the mission of the departments, college or school, and the Institute.

In addition, untenured faculty eligible for tenure should be advised in writing of their status and the areas of their performance which require strengthening. By doing this, faculty members can better assess their probable success when final tenure decisions are made.

B.2 Program Evaluation and Improvement

A system of formal program and department evaluation was initiated in 1978. During the first year of operation, four evaluations took place (the Departments of Civil and Environmental Engineering, Computer and Information Science, and Organizational and Social Science, and the Bachelor of Science program in Industrial Administration). The final steps in the process were completed as recently as the Fall of 1981. The process described in this section is still evolving.

Each of NJIT's academic departments and programs is reviewed with the aid of external reviewers at least once every five years. Program reviews have been found to be most effective if they are included as part of a departmental review.

A program is expected to respond to the following questions:

- a. What are the program goals?
- b. What are the plans to achieve the goals?
- c. To what extent have goals been achieved, and what interventional steps are needed to improve departmental or program effectiveness and quality?

In the Spring and Summer of each year, those departments or programs which are to be reviewed begin a self assessment. This self-study takes the form of data gathering, reviewing goals, and preparing a document to be sent to external reviewers and the Institute Department and Program Assessment Committee. During the Fall, the Institute Assessment Committee works with the department or program committee to assist in the completion of the self assessment report, and to select and arrange for the visit of the external evaluators. Early in the Spring Semester, external evaluators spend three days on campus to meet with department and program faculty and students, members of the Institute Assessment Committee and members of the administration.

After their visit, the external evaluators prepare an evaluation report which is sent to the Institute Assessment Committee and the department or program chairperson. The department is asked for comments if they feel the external reviewers are in error or if they believe the evaluators have not fully understood the issues involved.

With the aid of the self-assessment document and the external evaluation, the Institute Assessment Committee writes a draft evaluation report which is sent to the department or program chairperson for comment. After receiving the department or program comments on the evaluation report, the Institute Assessment Committee makes changes in its report, if necessary, and forwards copies of all material to the Vice President for Academic Affairs.

The Vice President, after a discussion with the Deans Council, meets with the department faculty, a subcommittee of the Deans Council and subcommittee of the Institute Assessment Committee, to plan for the correction of deficiencies and the solution of problems identified in this process. Sometimes this involves allocation of additional resources to the department in the form of equipment, supplies, faculty lines or additional release time to free faculty members to work on the problems documented. As the assessment process is in only its third year, it is too early to comment upon its effectiveness in correcting identified weaknesses. Indications are positive, however.

The following is the schedule for the assessment of department or programs:

Academic Year	Department/Program	Status
1979 - 1980	Computer and Information Science	Complete
	Organizational and Social Sciences	Complete
	Industrial Administration	Complete
	Civil and Environmental Engineering	Complete
1980 - 1981	Chemical Engineering and Chemistry	Preparation of final
	Mathematics	evaluation reports
1981 - 1982	Environmental Engineering	Draft reports for
	Humanities	visiting teams
	Electrical Engineering	
	Research and Graduate Studies	
1982 - 1983	Industrial Engineering	Work to begin during
	Engineering Science	Spring 1982
	Physics	

Finally, a summary of each program evaluation and the steps to be taken by the administration as a result of the evaluation are submitted by the Vice President to the President and the Board of Trustees.

Concern over the evaluation process has been expressed in several quarters.

1. Some departments are concerned that members of the Institute Assessment Committee have no special expertise, and little first-hand knowledge of the field that they are evaluating. They therefore believe the Institute Assessment Committee "should write an evaluation report which is simply a summary of the findings of the external reviewers and the self-evaluation report.

- 2. As the major objective of the evaluation process is programmatic improvement, some believe that the external evaluators should spend more time with the department and those administrators responsible for the improvement of the program, relative to the time spent with the Institute Assessment Committee.
- 3. It is felt by some that the requirements for the self-evaluation report are too extensive and that, as a result, the entire process is too long and time consuming.

It is, perhaps, too early to render a judgment on the last of these comments. Recommendations relative to the other two will be made later in this section.

It should be added that outside evaluators have also been engaged to review certain non-instructional areas of operation within the last few years, e.g., food services, student services, student financial aid, computer services, campus security and auxiliary services.

B.3 Accreditation

Through demonstration that the public interest can best be protected through a process of self-evaluation and accreditation, the professions have succeeded in avoiding the introduction of governmental program evaluation and control.

NJIT's programs are accredited by the Accrediting Board for Engineering and Technology (ABET), and the National Architecture Accrediting

Board (NAAB). The university is accredited by the Middle States Association of Schools and Colleges (MSA).

Each of these groups requires a formal, written report on program and institutional activities and the steps taken to remove problems identified during a previous review. The format of the formal report required by each agency differ greatly from one another. The ABET report guidelines are highly structured, while those of the NAAB are less so, permitting reports to vary widely in style and content. The MSA approach more closely resembles that of the NAAB with respect to flexibility of format.

These evaluations are treated with the utmost seriousness by the Institute. The comments of the review committee are almost always extremely helpful to the Institute in viewing itself. Of course, the importance of the evaluation is underscored by the fact that future opportunities for graduates in employment and education are dependent on the maintenance of full accreditation by the Institute. The very process of periodic self evaluation has a salutory effect on the Institute's programs, representing critically important elements in the web of accountability.

While the focus of each agency is different, it would be useful if the visits and required reports could be more closely coordinated.

B.4 Board of Trustee's Advisory Committees

The Board of Trustees appoints an advisory committee made up of professionals in each field in which NJIT grants a degree. These advisory committees spend a minimum of one day on campus each year working with appropriate departments or program committees. The department reviews its programs with the advisory committee and discusses changes in the profession which may require changes in an academic program. The Chairman of the advisory committee writes a report directly to the Board of Trustees "

in which the committee's view of the health of the programs is discussed. Should a problem be identified, corrective approaches would be discussed by the President and the Board of Trustees.

These committees of the Board of Trustees give the Board direct insights into the vigor of the academic programs.

B.5 Students and Parents

A principal constituency to which the Institute is held accountable is composed of NJIT students and their families. As students are usually not acquainted with the requirements of their intended discipline, they rely on the Institute to provide an education which will prepare them to enter and grow with their profession. Through a variety of accountability measures, by maintaining accredited programs, and by allocating resources directed to currency of faculty and facilities in the context of rapidly developing professional fields, the Institute seeks to meet its responsibilities. There are, however, other steps, which are in process to better assure that the Institute is properly accountable to its students and their families.

In the 1981-82 Academic Year, the Institute will replace a series of random, uncorrelated student questionnaires with a set of instruments designed by the National Center for Higher Education Management Systems (NCHEMS) and the College Board. The Student Outcomes Information System (SOIS) is designed to enable an institution to "evaluate the effectiveness of...student services and facilities, to assess student needs, and to measure the impact of programs on student goals and aspirations."

The system consists of five brief questionnaires administered at five points as the students progress through their studies and enter the

work force. The five questionnaires are directed to entering students, continuing students, former students, graduating students, and recent alumni. The Institute administered these documents to three of the five groups, during the summer of 1981.

This system was selected because of its availability, national use, focus on student perceptions, and its ability to provide longitudinal information concerning changes in student perceptions as they progress in their career. The data collected should permit analysis of the following:

- 1. Pre-freshman needs and appropriate recruitment strategies.
- 2. Retention and attrition trends with the ability to examine data concerning both withdrawing and continuing students.
- Program effectiveness and placement as perceived by graduating students and alumni.

The Institute can now supplement Place Office data with graduate and alumni input through the Student Outcomes Information System. For Instance, 79.6 percent of 1981 May graduate respondents (n=221) indicated that their new jobs are directly related to their field of study at NJIT. Seventeen point six percent indicated "somewhat related" and only 2.7 percent answered "not related." This survey was distributed in June and at that time 64.4 percent of respondents (n=247) planned to work in a job recently obtained while 17.8% expected to continue with a job previously held. Less than 18% were "still looking" or "other."

In response to a question evaluating collegiate preparation for first job, recent alumni (n=241) provided the following:

College Preparation for First Job

Major Area of Study	Excellent	Good	Adequate	Inadequate	Not Appropriate
Architecture		21%	50%	29%	
Computer/ Information Science	46%	18%	9%	9%	18%
Engineering	22%	44%	24%	2%	8%
Business/ Management	11%	44%			45%

A table displaying evaluations of campus services appears as Appendix D to this report.

During the 1981-82 Academic Year, a comprehensive Student Information System (part of a more comprehensive Management Information System) will be installed and operational, providing additional ability for the Institute to track student's progress and to identify areas in which improvements in its programs are needed.

With the exception of a few departments, students have been involved in the evaluation of teaching effectiveness. While there is a danger
that too much stress placed on student evaluation could involve teachers in
a quest for popularity, there is evidence that student evaluations using
well designed instruments can be useful in both improving teaching effectiveness and in improving the process for promotion and tenure decisions.

NJIT relies heavily on its former students, its alumni, for direct and indirect support. Not only do NJIT alumni contribute substantial amounts in annual and capital fund drives, they often represent important contacts with the corporate sector in securing support for Foundation annual and capital campaigns. Approximately one-third of the Institute's 18,000

alumni contribute. Thus, accountability to its alumni and the pride and satisfaction manifested by alumni in their alma mater, are reflected in an important financial dimension. The success of NJIT alumni in their professional careers also helps to maintain a flow of well-qualified students to the Institute and to influence governmental actions including those related to appropriations. The table of starting salaries on the following page reflects but one measure of success for graduates of the Institute.

B.6 Corporate Community

There is a growing awareness on the part of the corporate community that higher education needs its help in educating sufficient numbers of personnel with the requisite skills to meet industry's needs. While there has been a tradition of corporate support for private universities, especially for capital construction, corporate support for public universities is more recent in terms of its extensiveness and the degree of acceptance.

Much of the support from individuals of substantial means (and from foundations which bear their names) are intended to provide for the general public good, or to enhance the cultural opportunities of the region. Corporate giving, on the other hand, is more often targeted to a specific corporate purpose. NJIT, as is true of other universities, expects those corporations which hire its graduates year after year, to make substantial contributions, to assist the Institute in assuring the quality of its programs. Experience indicates that State support will not be sufficient to supply the "margin of excellence." If there is to be a moderate tuition technological university of prominence in New Jersey, the funding to achieve this margin of excellence must come from private sources. But individuals,

Comparison of Placement Results and Starting Salaries of Graduates Among Selected Institutions - 1981

B.S. Degrees Only (Monthly Salaries)

Z	N.J.I.T.	V.P.I.	M.I.T.	Drexel	R.P.I.	Drexel R.P.I. Clarkson Le	ies) Lehioh	D. 1. 2.	ć
2013	_	2029	2045	2044	6706		11811127	rurdue	Stevens
1790	0	1818	1763	177.8	7407	6/61	1982	2082	1991
1914	.+	1899	1975	0 100		1/01	1790	1837	1677
1921		1005	0101	1061	1911	1918	1887	1920	1901
1	.	COCT	1978	1918	1932	1869	1903	1945	1892
1827	_	*	*	*	*	1869	1842	1899	1761
1787	7	1829	1942	1842	1810	1918	1887	1761	1904
78.9	•	79.0	*	0 01	Ç				
				0.07	0.21	90.0	58.0	78.3	78.3
95.0	0	*	*	approx. 100.0	80.0	92.0	*	*	*
354		*	907	767	109	(
					100	000	400	896	260

*School does not have these statistics.

corporations and foundations will not provide substantial support unless they believe that they are supporting programs of high quality. They often look upon their support as an investment in the economic base of the region.

The success of NJIT's current \$12 million capital campaign is predicated upon this mutually supportive relationship. The initial responses to the campaign indicate that the corporate community recognizes and strongly supports the role that NJIT plays in the success of the private sector.

B.7 The State of New Jersey

As a State-supported university, NJIT is accountable to the State of New Jersey for nearly every aspect of its operation. The Board of Higher Education and the Department of Higher Education, whose responsibilities include the planning and coordination of the State's system of higher education, review the Institute's goals and objectives as part of the annual budget process. They give final approval for all programs offered by the Institute, both on campus and off, and review progress as a part of the budget process and through periodic State mandated reviews. Approval of new degree programs by the Board of Higher Education requires a formal proposal that is reviewed by an external consultant, as well as by interested public or private universities in the State.

The DHE periodically reviews programs designed to meet the needs of special student audiences. Each year the Institute submits a budget request for special funding for educationally and economically disadvantaged students. Included are detailed program goals and objectives together with measures to determine the extent to which each is met. As part of the "Institute's regular budget, funds are requested to support courses for students who have deficiencies in such basic skills as reading, writing and

mathematics. In addition to budget documents, the Institute is required to submit an annual report that evaluates the effectiveness of the Educational Opportunity Program and the Basic Skills Program.

B.8 Periodic Reports

The BHE and DHE require annual reports concerning the Institute's Affirmative Action goals and the extent to which they are being met. The Institute sets Affirmative Action goals for students, faculty and staff. During the past year, the BHE has indicated that future budget allocations will depend, in part, on the extent to which institutions make efforts to meet realistic Affirmative Action goals.

Students whose family financial ability to contribute to their education is limited, may receive New Jersey Tuition Assistance Grants (TAG) in addition to other private, State and Federal grants, scholarships and loans. Agencies which provide student assistance require periodic reports dealing not only with financial accounting but adherence to program objectives.

Each research project conducted by Institute faculty and staff requires reports on the progress and outcome of the research. In addition, aggregate research expenditure data for research projects in various disciplines is reported to the National Science Foundation, the American Society for Engineering Education and other national agencies and institutions. The New Jersey DHE requires a quarterly report describing the progress of Separately Budgeted Research Projects. The aggregate data is often used as an indicator of the quality and professional activity of the faculty of an institution.

RECOMMENDATIONS FOR CHANGES IN METHODS AND PROCEDURES

The Task Force on Accountability has identified several areas in which improvements can be made in methods and procedures to enable the

Institute to be more responsive and accountable to its publics. The following are its recommendations for achieving a closer meshing of intent and action:

- 1. Promotion and Tenure Procedures
 - a) It is recommended that a committee with representation from the Faculty Council, the Professional Staff Association and the administration be formed to study and recommend changes in the Promotion and Tenure procedures to achieve greater (a) uniformity in faculty personnel files and, (b) to provide more useful, consistent material for the department and Institute Promotion and Tenure Committees.*

*While the Task Force on Accountability has given these questions considerable thought, it does not believe that it is properly constituted to make recommendations on these issues. However, so that the recommended committee may profit from the Task Force's study, the following recommendation is made to the special committee established to make formal recommendations.

1. There should be one Institute file for each faculty member and this file should have two parts. The first part should contain an up-to-date resumé, annual summaries of activities, letters of appointment and other letters and memoranda which affect personnel status, and other material pertaining to evaluation of performance. The second part of the file should contain any letters solicited on a confidential basis and all pre-employment information. A list of material contained in part 2 of the file as well as the contents of the first part of the file should be open to inspection by the faculty member in question at any time upon request and any other person who is authorized by the Institute to have access to faculty files. No part of the file, except as addressed in paragraph 2, shall be open to anyone other than the faculty member and those authorized to maintain the file without written authorization of the Vice President for Academic Affairs and then only for specific purposes. The pages of the file should be sequentially numbered and the faculty should be notified prior to the insertion of new material into the file.

- 2. A copy of the first part of the file may be held by the Department Chairperson of the faculty member. However, neither the Department Chairperson, nor any other person should be permitted to add or delete material from this file copy. Additions or deletions may only be made to the official (original) file. When the faculty person is being considered for merit bonus, promotion, and/or tenure, the chairperson may open this part of the file to the associate chairperson, (only when a need-to-know is demonstrated to the chairperson), and the Department Promotion and Tenure Committee. All personnel decisions should be based on the file material prepared by the candidate and confidential evaluations solicited with the knowledge and consent of the candidate.
- 3. A provision for requesting the deletion of material deemed derogatory by the concerned faculty member should be part of the file policy.

It is recommended that the faculty member who wishes to have material deleted from his/her file appeal, in writing, to the Vice President for Academic Affairs, with the decision of the Vice President subject to a final review by the President.

- b) Uniform method of evaluation of teacher effectiveness including student and peer evaluation.
- c) Appropriate involvement of the Deans of the schools in the formal promotion and tenure process.
- d) Improvement in the communication between faculty members and their chairpersons and the Institute Committee and the department committees concerning their professional development and their progress toward tenure and/or promotion.
- 2. Program and Department Evaluation.

It is recommended that the Institute Assessment Committee and the administration form a joint subcommittee to study and recommend changes in the assessment procedures which will achieve,

- a) Greater involvement of the department, dean, and Vice

 President for Academic Affairs with the outside evaluators.
- b) A modification of the required reports to focus on essential items identified by the sub-committee.
- 3. Evaluation Procedure for Administrators.

It is recommended that a committee with representation from the Faculty Council and the administration be formed to study and recommend formal procedures for the evaluation of the department chairpersons, the academic deans (including the Dean of Student Services), and the Vice President for Academic Affairs.