New Jersey Institute of Technology
Office of Institutional Research and Planning

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I. Background and Scope

The subsequent life activities of its graduates are among the most important outcomes of NJIT’s educational performance. The mission of NJIT includes preparation of students for careers and life-long learning, and evidence that these objectives have been met can only be captured after the educational experience has been completed. Strategies in use by the University for assessing alumni performance include employer surveys, graduating student surveys, and alumni surveys. This report summarizes results of the alumni survey conducted in fall 1999. Alumni from all schools and colleges of the university, and alumni graduating in 1997, 1998, and 1999 are included (earlier graduates were included in a prior survey of alumni).

Results of the study have implications for curriculum development and refinement, continuing improvement of student services, and alumni outreach and activities. Specifically, alumni are asked to reflect and comment on:

- Relative strengths and weakness in their own academic gains at NJIT
- Preparation for careers and further education received at NJIT
- Relative strengths and weaknesses of aspects of their academic programs and student services
- General recommendations about NJIT to others
- Employment status
- Continuing learning experiences
- Ongoing contact with NJIT, including knowledge of alumni activities

II. Procedures and Sample

A draft of the alumni survey form was prepared in fall 1999 by the Office of Institutional Research. Items were developed from a review of alumni survey research, prior NJIT alumni survey forms, and specific information requests from offices and individuals at NJIT. The final op-scan form was widely reviewed by academic and student affairs administrators and staff, and was completed in October 1999.

Fifty-one survey questions include scale, categorical and open comment questions as well as demographic items allowing description of the sample and analyses of data for some specific sub-groups of alumni. Additional open comments were also collected.

Forms were processed using electronic, op-scan technology. Forms were scanned into a database and processed using the SAS statistical package for categorical (frequencies) and scale items (means and distribution statistics). Numerous breakdowns by specific subgroups were conducted. Results on open-ended questions were compiled.

A total of 391 forms were returned for analysis, exceeding the desired sample for a random sampling procedure for a confidence level of 95% and a confidence interval of 5%. Of these, graduates of the Newark College of Engineering returned 211 forms.
III. Alumni Assessment of Educational Growth and Development at NJIT

The effectiveness of the university in meeting its mission is chiefly reflected in student program completion, and alumni success in developing careers and participating in higher levels of educational experiences. Alumni were given the opportunity to reflect on the NJIT educational program and student services provided, and their views are useful in reviewing curriculum, educational methodologies and strategies, and student services. Alumni were asked to rate how well NJIT prepared them to perform in 12 key learning areas on a 5-point scale. NCE alumni reported that preparation was generally good (4), and better than satisfactory (3) in all areas. Alumni rated preparation highest in mathematics and science, problem-solving, program-specific skills, critical thinking, and teamwork. Differences in preparation reported by gender are modest.

IV. Assessment of NJIT Educational Programs and Services to Students

Alumni were asked to rate educational and service programs for students. Highest ratings were given for career preparation, faculty awareness of new developments in the field, the general intellectual atmosphere, and faculty relationships with students. Curricular advisement, career advisement, and campus climate receive the most modest ratings, although they do reach satisfactory. There were no differences in results reported by men and women (by gender).

V. Alumni Recommendations to Others about NJIT

Overall, alumni have a favorable view of NJIT and NCE and the experiences they had, as reflected in their reported willingness to recommend NJIT to others. Ratings indicate that alumni would recommend NJIT strongly.

VI. Post-NJIT Experiences

The experience at NJIT clearly improved the career status of participating alumni within 3 years of graduation. The Newark College of Engineering reported the highest percentage of alumni employed among all of the colleges at NJIT, although the percentage was high for all colleges within the Institute. In addition, most reported that the degree earned improved their employment status, and most indicated that the degree improved the level of earned income. Consistent with national data on the outcomes of education, salary levels increase with an increase in the level of degree earned at NJIT.

Alumni were asked whether they were taking new courses or new degrees; over 20% of NCE alumni indicated that they were. Most courses being taken are for-credit and many alumni are taking courses or are in advanced degree programs at NJIT.

VII. Conclusions and Implications
Alumni responding to the survey are generally positive in assessing their experience at NJIT. For those responding, the educational gains were good, services were generally good, and gains in terms of employment and education have been positively impacted by completing degrees at NJIT. Outcomes include substantially good employment rates, salaries, salary and position increases, and participation in life-long learning, including at higher degree levels. Opportunities for further development of academic programs and services to students emerge in the data.

Alumni report personal educational gains in areas that are consistent with the educational mission of the university. Like employers and supervisors of NJIT graduates and students (see Survey of Employers of NJIT Students and Graduates, January 2000), alumni report highest gains in skills that are very important in their careers, including problem solving, program-specific skills, critical thinking, and team work skills. Reported gains in skills such as math, science, computer skills, and current technologies are solid.

Alumni indicate a general approval of career preparation, the quality of faculty and the intellectual and professional environment associated with academic programs, and their own relations with faculty in their experiences as NJIT.

Alumni responding to the survey generally report that they give NJIT high marks in their recommendations. This is good news as the recommendation can be viewed as a surrogate for the alumni general satisfaction with their own experiences at NJIT. This is also good news in view of the extent to which enrollment decisions of incoming students are based on the recommendations of friends and relatives (see Enrolling Student Report, Fall 1999).

Outcomes of degree completion at NJIT are consistent with the institutional mission and goals and objectives of specific degree programs. NJIT is succeeding in helping graduates achieve career goals. The employment rates are high, and a substantial proportion of alumni report position and salary increases based on their work at NJIT. Many are going on to higher-level degrees or course work, and this is especially true for graduates of undergraduate programs in fields that offer masters and doctoral degree programs. The higher the educational level of the individual, the higher the income being earned (and by implication, the higher the level of contribution in the work place as well).