

DOCUMENT RESUME

ED 136 864

95

JC 770 203

AUTHOR Ehrlich, Dan J.; Heinemann, Harry N.  
 TITLE The Impact of a Community College Cooperative Education Program on the Performance of its Graduates.  
 INSTITUTION La Guardia Community Coll., Long Island City, N.Y.  
 SPONS AGENCY Office of Education (DHEW), Washington, D.C.  
 PUB DATE Mar 77  
 GRANT G007500917  
 NOTE 178p.

EDRS PRICE MF-\$0.83 HC-\$10.03 Plus Postage.  
 DESCRIPTORS College Graduates; College Majors; Community Colleges; \*Cooperative Education; Dropouts; \*Employer Attitudes; Employment Patterns; \*Followup Studies; \*Junior Colleges; \*Program Effectiveness; Program Evaluation; Salaries; Student Attitudes; Student Characteristics; Surveys; Vocational Adjustment  
 IDENTIFIERS LaGuardia Community College

ABSTRACT

A study was conducted for the purpose of determining the impact of cooperative education (CE) on the experiences of community college students subsequent to their graduation. Comprehensive normative data on graduates and non-completers of LaGuardia Community College, which has a universal CE program, were collected by means of surveys. Performance-related information concerning CE and non-CE graduates of two other City University of New York (CUNY) community colleges with optional CE programs, and participating employers' evaluations of the overall CE program, its products, and their relative performance were also obtained. Results of data analysis showed: (1) type of curriculum from which a student graduated had a significant relationship to subsequent earnings; (2) within individual curriculum clusters, LaGuardia graduates consistently earned more than students who graduated from one of the other two colleges included in the study; (3) employers unequivocally rated LaGuardia graduates highly and perceived these graduates as superior to other employees relative to motivation, job skills, and abilities; (4) LaGuardia graduates did not represent a highly selective component of CUNY community college output; and (5) LaGuardia graduates were differentiated from other groups most by their cooperativeness, personal maturity, and attendance records. Extensive tabular data is included in the report and study-related materials are appended. (JDS)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

ED136864

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

THE IMPACT OF A COMMUNITY COLLEGE  
COOPERATIVE EDUCATION PROGRAM  
ON THE  
PERFORMANCE OF ITS GRADUATES

by

Dan J. Ehrlich  
and  
Harry N. Heinemann

March, 1977

RESEARCH GRANT NO. G007500917  
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE  
OFFICE OF EDUCATION  
COOPERATIVE EDUCATION BRANCH  
DIVISION OF TRAINING AND FACILITIES

PROJECT PERSONNEL

Dan J. Ehrlich, *Director of Institutional Research  
and Professor of Social Sciences, LaGuardia  
Community College*  
Harry N. Heinemann, *Dean of Cooperative Education,  
LaGuardia Community College*  
Susan S. Abrams, *Project Coordinator*  
Stephen B. Ellis, *Institutional Research Data Manager,  
LaGuardia Community College*  
Allen S. Reynolds, *Research Assistant*

JC 770 203

# THE IMPACT OF A COMMUNITY COLLEGE COOPERATIVE EDUCATION PROGRAM ON THE PERFORMANCE OF ITS GRADUATES

*In order that people may be happy in their work, three things are needed: They must be fit for it. They must not do too much of it. And they must have a sense of success in it.*

-- John Ruskin

## Table of Contents

List of tables. . . . .	ii
Introduction. . . . .	1
Administrative overview . . . . .	4
Method. . . . .	7
The cooperative education program at LaGuardia. . . . .	7
Participants. . . . .	8
Students. . . . .	8
Employers . . . . .	11
Instruments . . . . .	12
Questionnaire mailed to students. . . . .	12
Interview questionnaire for employers . . . . .	14
Data processing and statistical analysis. . . . .	16
Questionnaires returned by students . . . . .	16
Employer interview questionnaires . . . . .	19
Results . . . . .	19
Questionnaire-based and related findings. . . . .	20
Demographic data and sample characteristics . . . . .	20
Comparison of the colleges on school-related issues . . . . .	23
Comparison of the colleges on work-related issues . . . . .	24
Freshman demographics, performance factors, and a comparison of LaGuardia graduates and non-completers. . . . .	28
Findings based on employer interview questionnaires . . . . .	30
Discussion. . . . .	34
Tables. . . . .	following p. 46
Appendix A: Questionnaires for former students	
Appendix B: Questionnaire for employers	
Appendix C: Demographic questionnaire for 1971 LaGuardia freshmen	

## List of Tables

Table	Title
1	Sample Specifications
2	Curricula at Participating Colleges
3	Questionnaire Mailout and Response Statistics
4	Age at Graduation or at Last Attendance
5	Sex
6	Date of Admission
7	Date of Graduation or of Last Attendance
8	Time-in-Residence: Elapsed Time From Admission to Graduation/Termination
9	Graduates: Distribution of College Residence Duration as a Function of Curriculum
10	Annual Income From All Sources, Respondents Living Alone
11	Living Arrangements
12	Number of People in Household
13	Number of Family Members Who Are Employed
14	Total Annual Household Income, Respondents Living With Other Individuals
15	Father's Occupation
16	Mother's Occupation
17	Student's Primary Reason for Selecting His/Her Community College
18	Curriculum at Matriculation
19	Curriculum at Graduation/Termination
20	Stability of Community-College Curriculum From First Enrollment to Graduation/Termination
21	At Time of Community College Matriculation Was Respondent Certain About His/Her Preferred Career Field After Graduation?
22	Financial Assistance Received Since Graduation or Termination
23	LaGuardia Cohort: Number of Internships and Internship Exemptions
24	Activity After Graduation/Termination (Original Data)
25	Activity After Graduation/Termination (Synthesized Version)
26	Senior College Entered (Transfer Students Only)
27	Current College Status (Transfer Students Only)
28	Number of Senior College Credits Earned (Terminated Transfer Students Only)
29	Major at Transfer Institutions (Transfer Students Only)
30	Plans to Attend Graduate School (Transfer Students Only)
31	Graduate Degree Planned (Transfer Students with Advanced Study Plans Only)
32	Area of Planned Graduate Study (Transfer Students with Advanced Study Plans Only)
33	Full-Time Jobs of More Than Three Months' Duration Held During Period of Attendance
34	Reason for Terminating Studies (LaGuardia Non-Graduates Only)
35	Work Since Graduation or Termination
36	Working Alumni: Continuity of Employment
37	Non-Continuously-Employed Working Alumni: Duration of Unemployment

## List of Tables (continued)

Table	Title
38	Working Alumni: Classification of First Employment Following Graduation/Termination
39	Working LaGuardia Alumni: Relation of First Post-Graduation/Termination Employment to Prior Cooperative Education Internships
40	Working Alumni: Duration of Employment in First Post-Graduation/Termination Position
41	Working Alumni: Duration of Service with First Employer Compared With Time Since Graduation or Termination
42	Working Alumni: Weekly Time-on-Job in First Post-Graduation/Termination Position
43	Working Alumni: Job-Title Classification in First Post-Graduation/Termination Position
44	Working Alumni: Starting Annual Salary in First Post-Graduation/Termination Position
45	Graduates: Distribution of Starting Salaries as a Function of Curriculum
46	Working Alumni: Classification of Current Employment
47	Working Alumni: Change-of-Type-of-Employer Status Since First Post-Graduation/Termination Position
48	Working Alumni: Job-Title Mobility Since First Post-Graduation/Termination Position
49	Working Alumni: Weekly Time-on-Job in Current Position
50	Working Alumni: Job-Title Classification in Current Position
51	Working Alumni: Current Annual Salary
52	Graduates: Distribution of Current Salaries as a Function of Curriculum
53	Working Alumni: Duration of Employment in Current Position
54	Working Alumni: Number of Different Employers Since Graduation/Termination
55	LaGuardia Students: Admission Status
56	LaGuardia Students: California Achievement Test
57	LaGuardia Students: Credits Attempted at LaGuardia
58	LaGuardia Students: Credits Earned at LaGuardia
59	LaGuardia Students: Efficiency Ratio (Percentage of Attempted Credits Passed) at LaGuardia
60	LaGuardia Students: Grade-Point Average at LaGuardia
61	LaGuardia Students: Number of Quarters Active
62	1972 LaGuardia Cohort: Diploma Type
63	1972 LaGuardia Cohort: Marital, Citizenship, and Veteran Status
64	1972 LaGuardia Cohort: Occupation Prior to Matriculation
65	1972 LaGuardia Cohort: Ethnic Derivation
66	1972 LaGuardia Cohort: Primary Language Spoken at Home
67	1972 LaGuardia Cohort: Major Reason for Going to College
68	1972 LaGuardia Cohort: Family Income
69	1972 LaGuardia Cohort: Income Sources and Responsibilities
70	1972 LaGuardia Cohort: Importance to Parents of Student's Attending College
71	1972 LaGuardia Cohort: Education of Students' Parents
72	1972 LaGuardia Cohort: Plans for the Future
73	1972 LaGuardia Cohort: Future Occupational Preference

## List of Tables (continued)

<u>Table</u>	<u>Title</u>
74	Participating Employers: Types of Agencies
75	Size of Participating Agencies
76	Employing Agencies: Internship Statistics
77	Attitudes of Management Towards Cooperative Education (CE)
78	Management Attitudes: Summary of Positive Responses to Statements about Cooperative Education
79	Attitudes of Management Towards Cooperative Education: Effects of Company Type, Size, and Longevity as CE Participant
80	Employers' Ratings of Employees: Rating Indexes for Various Groups
81	Performance Ratings of LaGuardia Interns: Effects of Company Type, Size, and CE History
82	Correlation Coefficients for Major Variables
83	Ratings of LaGuardia Interns: Correlation Coefficients
84	LaGuardia Graduates: Current Annual Salaries Over \$10,000 as a Function of High School Average, Grade-Point Average, and Performance on the California Achievement Test
85	Community College Graduation Rates (Percent)

THE IMPACT OF A COMMUNITY COLLEGE COOPERATIVE EDUCATION  
PROGRAM ON THE PERFORMANCE OF ITS GRADUATES

Dan J. Ehrlich

Harry N. Heinemann

LaGuardia Community College

The past decade has seen a remarkable growth in cooperative education (CE), both in the numbers of students involved and in the numbers of institutions offering CE programs. The advantages of providing students with a structured experience in the work place as an integral part of their education have frequently been stated. Educational leaders and decision makers from the private sector are showing increased interest in CE, which they see as a means of achieving various objectives more effectively than has been attained by the traditional approach to higher education. Yet, little has been done by way of researching the extent to which these beliefs are substantiated.

It has been suggested by some educators (e.g., Cross, 1973<sup>1</sup>) that CE might be one effective way to enhance the educative process

---

<sup>1</sup>K. Patricia Cross, The integration of learning and earning: Cooperative education, a non-traditional study (Washington: American Association for Higher Education, 1973).

for the so-called "new student" in higher education. The term refers to that population of students who up until the last ten years or so did not intend to go on to college. In general, these students are from lower-income families, are more likely to be from a minority group, have fathers who are in blue-collar or service-oriented positions, are the first in their family to attend college, and have not performed well academically in high school. Almost invariably they go on to college in order to move upward on the economic ladder. They are the students that tend to enroll in the community colleges. They are like the typical LaGuardia Community College student.

Comprehensiveness is the key concept which distinguishes community colleges from other institutions. This term subsumes several characteristics: admissions policies that provide all students the opportunity to attend regardless of qualifications; a wide range of curricula including developmental programs for students with weak educational backgrounds; a program to prepare students interested in the baccalaureate degree to transfer successfully; and career programs for those students who wish to enter the labor market on a technical or paraprofessional level after graduation. As entry into the labor market is a stated objective of almost all community colleges, this was the key factor in the authors' decision to make a comparison of the effectiveness of CE and non-CE educational programs.

In November of 1974, LaGuardia Community College of the City University of New York (CUNY) made application for Title IV-D DHEWEOE funds for the purpose of studying "...the impact of LaGuardia's



Cooperative Education program on the performance of its graduates..."<sup>1</sup>  
 An award of \$32,000 was granted in June, 1975 to cover research activities over a one-year period (DHEW/OE Grant Number G007500917).

In its application, LaGuardia noted the dearth of research directed to fundamental questions about the impact of CE on students. The proposed research program was designed to isolate and describe such effects, and to examine the study's outcome in terms of major demographic and attitudinal variables. The major objectives of the study were to be accomplished by collecting data on:

- ¶ All contactable graduates of LaGuardia
- ¶ A sample of non-graduates of LaGuardia
- ¶ Samples of CE graduates from other CUNY community colleges
- ¶ Samples of regular (non-CE) graduates of other CUNY community colleges

Graduates of LaGuardia--who, by virtue of the college's mandatory CE program, have all been exposed to its effects--were slated for particularly intensive study. In addition to materials relevant to post-graduate experiences, especially those pertaining to students' performance in the labor market, the research was designed to study:

- ¶ Attitudes of graduates relating to job satisfaction and career focus
- ¶ Assessment by employers of graduates' performance
- ¶ Employment stability
- ¶ Societal adaptation

---

<sup>1</sup>From the application for funds, dated November 27, 1974.

- ¶ Academic performance in community college, and its relation to job performance
- ¶ Basic skills and their relation to job success
- ¶ Students' attitudes toward college, work, and personal growth and development

#### Administrative overview

It was recognized, at the outset of the project, that certain adjustments to the original strategy would have to be effected. LaGuardia's proposal to DHEW/OE specified two years of research, and a first-year funding level of \$74,417, as necessary for implementation of all phases of the investigation specified in the application. The award, as noted above, was for less than half this amount, and the revised strategy bore the assumption that research activities would be limited to a one-year period. A reassessment resulted in the following prospectus for the ensuing year of research:

1. The basic source of information on the post-graduate experiences of participating students would be a paper-and-pencil questionnaire of limited length sent through the mails. This instrument would concentrate on the most basic aspects of demography (e.g., age, sex, parents' occupations), community-college experiences (e.g., major, date of graduation), senior-college experiences, if any (e.g., degree status, major); CE internship statistics; and job-related experiences (e.g., salaries, job titles, duration of employment).

2. That aspect of the original prospectus dealing with students' attitudes and perceptions, which was to have been executed by means of selected in-depth interviews with students, would be largely or entirely deferred.
3. Only two sister community colleges in CUNY would be used as sources of comparative or control data.
4. Although the original intent was to place comparatively greater emphasis on job-market performance of employed graduates than on the academic performance of transfer students in four-year institutions, it was decided to rely even more heavily on these employment-related data, and to restrict information on subsequent school experiences to a few facts supplied by respondents to mailed questionnaires. Thus, the original plan of obtaining transcript information directly from senior colleges was abandoned.
5. The collection of data pertaining to graduates' job performance from their employers would proceed as planned. Employers would be selected from among those most active in LaGuardia's CE internship program. Although this phase of the project would also deal with the performance of graduates, comparatively greater emphasis would be placed on CE employers' experiences with interns (i.e., with active LaGuardia students prior to graduation). More attention would be devoted to general attitudes of CE employers toward CE than had originally been planned.
6. The reduction in anticipated personnel would necessitate

devotion of all or most of the fiscal period of the project to data collection, with possible deferral of completion of the analysis of findings until some time during the 1976-1977 fiscal year. In particular, it was recognized that the employment of certain potentially powerful statistical tools, such as factor analysis and multiple regression, might have to be materially curtailed.

At the start of the fiscal year, a full-time Project Coordinator was hired. During the year she assisted in the development of questionnaires; supervised production, mailing, and collection of questionnaires; maintained liaison with cooperating institutions; supervised coding, keypunching, and transcription of questionnaire data; and supervised administrative activities and interviewer personnel associated with employer interviews. LaGuardia's Director of Institutional Research (a Co-Principal Investigator) increased his (non-federal) contributory allocation from one-quarter-time to half-time, while the commitment of the Project Computer Programmer, originally slated for a 20-percent (non-federal) contribution, was increased to 40 percent. For most of the year there were also available the half-time services of a Research Assistant.

During the course of the 1975-1976 fiscal year two unanticipated events transpired which had a significant impact on the progress of the project. In the spring of 1976, following the development of fiscal problems of unparalleled proportions, the City University of New York closed all of its

facilities for a two-week period. Apart from the actual stoppage of work on the project during this interval, the loss of momentum during a critical phase of data collection created serious obstacles for several weeks. In addition, at about the same time, the Computer Programmer resigned on short notice to take a position at another institution. Although under normal circumstances the college replaces such individuals who are hired on full-time lines, the University's fiscal problems necessitated retrenching the position. Ultimately, it was possible to hire the individual who resigned to complete, on a consultant basis, the most vital of the programming and computer runs which were already in progress. Nevertheless, the resultant slowdown in progress was severe and, in the final analysis, the data-processing aspect of the project was curtailed somewhat short of even the revised projections.

During the month of June, 1976, the college obtained DHEWEOE permission to extend, without the occurrence of further expenditures, the fiscal period of Grant No. G007500917 through July 31, 1976. The resulting one-month prolongation of research activities materially assisted in the college's ability to complete data-collection activities deferred by the June closing of the University.

#### Method

#### The cooperative education program at LaGuardia

Cooperative education is the cornerstone of the educational philosophy at LaGuardia Community College. All full-time students

in all programs must successfully complete, for academic credit, three 3-month full-time internships, with the purpose of developing increased knowledge and skills in a major field of study, exploring career possibilities, developing an understanding of the world of work, and obtaining experiences that promote educational as well as personal growth. There are three components to this approach:

(1) a preparatory course that must be taken prior to the student's first field assignment; (2) the internship or work experience itself; and (3) a seminar taken concurrently with the field experience. The seminar is the bridge between college and the work site, and is the vehicle used to attain the objectives of the CE program. Well over 90 percent of LaGuardia's interns take a paying position, with the balance selecting experiences that are either non-paid or which carry a modest stipend.

### Participants

Students. Students selected for inclusion in the mail survey are described in Table 1. For LaGuardia, survey questionnaires were mailed to each of the 770 persons who graduated during or before the summer of 1974.<sup>1</sup> In addition, questionnaires were

---

<sup>1</sup>A substantial number of LaGuardia students who graduated after the summer of 1974 and before the end of 1975, when the survey was undertaken, were not included in the study. This exclusion was effected because, since a primary objective of the research was to examine the labor-market performance of graduates, it was felt that students who were canvassed should have been in the work

mailed to 449 individuals who had not graduated by, and were not enrolled for courses in, the fall of 1975. All targeted students, whether graduates or non-completers, had to have completed at least one CE internship. The 491 graduates, and 354 non-completers, who failed to respond by mail within six weeks were then sent a second copy of the questionnaire (only LaGuardia students were thus twice contacted).

Questionnaires were also mailed to more than 6600 graduates of two sister community colleges within the CUNY system.<sup>1</sup> College "A" and College "B" were selected for participation in the study because, of seven potential co-participants,<sup>2</sup> these two appeared to offer an optimal combination of those qualities which were felt to be essential or at least preferable: (1) having comprehensive curricula roughly comparable to LaGuardia's; (2) having student bodies with fairly similar ethno-socio-economic derivation; (3) offering CE as an option to their students;<sup>3</sup> and, not least, (4) being willing to

---

force for at least a year--long enough for information about their mobility to be reliable.

<sup>1</sup>By agreement with cooperating administrators in these institutions, they are not identified by name, and are referred to throughout this report as College "A" and College "B."

<sup>2</sup>At the time the project was initiated there were eight community colleges in the CUNY system.

<sup>3</sup>As originally conceived, it was felt that the clearest isolation of the effects of CE would arise from a comparison of CE and non-CE graduates within a given institution.

participate.' Both of these colleges are considerably larger than LaGuardia and have been part of the CUNY system for a longer period of time. College "A" offers a broad range of career and transfer programs, with considerable emphasis on Liberal Arts (30.8 percent of the available population) and Nursing (37.5 percent).<sup>1</sup> College "B" is a very large school--much more so than even College "A"--and offers a wide variety of technical and applied health programs in addition to the traditional liberal arts and business majors.

The CE programs at College "A" and College "B" were quite different from LaGuardia's. These were optional programs administered by--in comparison with LaGuardia--small staffs, and were only available to students in selected curricula. Students participating in their CE programs took one or two internships of a semester's duration in addition to their regular studies. Most of the special features of LaGuardia's CE program were absent or present to only a minor extent. Unfortunately, the available populations of CE

---

<sup>1</sup>At both College "A" and College "B," samples were drawn from either computer-derived or hand-typed lists of names and addresses of graduates, accompanied by information pertaining to curriculum, date of admission and date of graduation. These lists were supplied by responsible authorities at each college and are assumed to represent accurately the distribution of graduates' curricula for the time period sampled. No assumption is made regarding the representativeness of these samples of population distributions at time of admission or for time frames other than those encompassed in this study.



graduates from "A" and "B" proved to be disappointingly small--67 and 104, respectively. Because the questionnaire returns from these individuals were too scanty to constitute a reliable sample, they are not referred to among the findings in later sections of this report.

Somewhat different procedures were adopted in sampling names from the lists of graduates supplied by Colleges "A" and "B." At "A" questionnaires were mailed to all of the students for whom addresses were supplied except the Nursing graduates, of whom 790 (about half) were canvassed. At "B" the various curricula were sampled at different rates, with the objective of producing a reasonable return rate for each of the "curriculum clusters" (comparable groupings of curricula). Table 2 provides a summary of the curricula and sampling rates for each of the colleges.

Employers. In addition to students contacted by mail, a number of employers who participate in LaGuardia's CE program were personally interviewed by a specially-trained staff, using a standardized interview questionnaire. The pool of approximately 300 employers who hire LaGuardia interns<sup>1</sup> was winnowed to a list of 51 whose experience as CE employers appeared to be broad enough to enable them to make representative, balanced, and comparative judgments about CE interns as a class of employees. This list was further narrowed down by imposing the following criteria: (1) the

---

<sup>1</sup>For this phase of the study, particular stress was laid upon employers' experience with interns (i.e., active students prior to graduation) rather than with degree recipients.

employer had to have participated in the program for at least 4 quarters; (2) at least 4 interns must have been placed with the agency or company; and (3) there needed to be continuity of supervision or administration so that the participant's representative in the study had an adequate perspective of his company's role in CE over a period of time.

Twenty-nine separate companies and agencies met these criteria and agreed to be interviewed. Four of these organizations were represented by two or more departments or divisions whose operations were so independent that, for purposes of the study, they were considered as separate employers. Thus, a total of thirty-four employers participated.

### Instruments

Questionnaire mailed to students. A basic mail questionnaire, with slightly different versions for each college and sample, was developed (see Appendix A). The entire instrument was printed on two sides of a single sheet of paper. The questionnaire began with a series of demographic items (age, sex, parents' occupations, curriculum at matriculation and graduation, reason for attending college, living arrangements, career certainty, and reliance on financial assistance after graduation). Versions of the questionnaire sent to CE graduates also requested itemization of internships. The form for LaGuardia non-completers asked why the student discontinued studies. On the reverse side of the questionnaire were two series of items, one concerned with subsequent educational experiences, the other with job-related experiences. The latter

dealt with issues of salary, hours, employers, and job titles. With the exception of those differences pertaining to CE experiences, and to non-completers' reasons for dropping out, the versions were virtually identical except for minor variations relating to the names of the schools and to the completeness of information supplied by Colleges "A" and "B" along with students' names.<sup>1</sup> There were thus six versions:

1. LaGuardia graduates
2. LaGuardia non-completers
3. College "A" CE graduates
4. College "A" non-CE graduates
5. College "B" CE graduates
6. College "B" non-CE graduates

Each student received, along with the questionnaire, a letter from the president of his or her college noting the need for the study, and a postage-paid, self-addressed envelope directed to the college's Office of Institutional Research. LaGuardia students who had not responded to the questionnaire within six weeks were sent a second copy, along with a more solicitous covering letter.

A summary of questionnaire mailing and return rates is provided in Table 3. A return rate of 43 percent was achieved, following the

---

<sup>1</sup>In the case of LaGuardia students, dates of admission and graduation, and students' curricula at matriculation and at graduation, were taken from official transcripts, and not from the questionnaires, even though this information was supplied by respondents.

second mailing (nearly 30 percent responded to the first mailing). In contrast, LaGuardia non-completers provided a combined, double-mailing response rate of 19 percent. In single mailings, 16 percent of College "A," and 18 percent of College "B," graduates returned questionnaires mailed to them.

Interview questionnaire for employers. Personal appointments were made with a representative of each participating employer (usually, either a personnel director or section head), who was visited by a trained interviewer who brought to the interview a 12-page questionnaire. This instrument (Appendix B) was carefully reviewed by the interviewer, who sought confirmation of the respondent's grasp of each question, and provided clarification when there were questions.

The cover sheet of the employer's questionnaire required the interviewer to obtain, informally, basic information about the company and its history of participation in LaGuardia's CE program. This was followed by a foreword stressing the value of the project and assuring the respondent that answers supplied would not affect the employer's relationship with the college. Candidness was besought and confidentiality was assured.

The questionnaire itself began with a series of 19 questions put in statement form pertaining to the employer's attitudes about CE and the agency's participation in the program. The respondent was then asked to identify groups of individuals with whom (in addition to LaGuardia interns) he or she was sufficiently acquainted as employees to provide judgments about their performance as a group.

The groups were:

1. Young employees in entry-level, full-time, permanent, post-training positions, no CE background.
2. Young employees in career training positions, no CE background.
3. LaGuardia graduates, formerly interns in the agency, in entry-level, full-time, post-training positions.
4. LaGuardia graduates, not formerly interns in the agency, also in entry-level, full-time, post-training positions.
5. Young employees, not LaGuardia interns, who (like these interns) were in temporary training positions.

The respondent was then asked to complete a rating form which listed a number of attributes, first for LaGuardia interns, and then also for each comparison group identified on the list just referred to.

Finally, the respondent was asked to identify, within the category of non-LaGuardia, temporary employees in training positions, possible subgroups which might be compared with LaGuardia interns, and then ranked accordingly.<sup>1</sup>

---

<sup>1</sup>This item, which is related to the fifth group listed above, was responded to by only three employers. Similarly, the fourth item was represented by only two agencies. Due to the resulting lack of reliability, data related to these criterion groups have been deleted from the analysis presented later in this report.

## Data processing and statistical analysis

Questionnaires returned by students. Each of the questionnaires returned by students was carefully examined for completeness of responses, legibility, and adherence to format. Each usable form was then processed by a "coder" who, using a special set of instructions, translated responses into numerical codes which were entered in the right or left margin of the questionnaire next to the individual items. Batches of coded questionnaire forms, separated by responding group, were then processed by a commercial key-punching firm according to a format devised by the project's Computer Programmer, using the codes entered in the margins. A set of IBM punched cards, two per student, was then returned to LaGuardia, and these were individually checked for accuracy. The cards were then read into CUNY's computer system, and permanent magnetic disc files were thus established for all responding students.

For LaGuardia graduates and non-completers, two extensive sources of additional information were added to the computer file log for the project. One of these originated from RSFILE (Research File), a computerized system that stores and processes, for all LaGuardia students, transcript-based data and derived indices of performances. Transferred from RSFILE were data pertaining to (1) high school average; (2) grade-point average; (3) number of credits attempted; (4) number of credits earned; (5) efficiency ratio (percentage of courses passed); (6) reading, mathematics, and language placement scores on the California Achievement Test (taken prior to matriculation); and a few other items which overlapped sources of information contained in the questionnaire itself.

The second source of background data derived from a demographic questionnaire (see Appendix C) taken at the time of matriculation by LaGuardia's 1972 freshman cohort. These data were available for 119 of the 164 students who--among the college's graduates included in the study--were admitted in the fall of 1972.<sup>1</sup> Selected from this questionnaire, and entered into the project's files from IBM cards punched shortly after the instrument was administered, were 23 items dealing with such matters as marital status, ethnic and socioeconomic identifications, parents' education, language background, and future career and educational plans.

Using the Statistical Package for the Social Sciences (SPSS), all of these data were tabulated, thus providing frequencies and within-category proportions for all questionnaire, RSFILE, and demographic items. A hard-copy library of selected crosstabulations was also created from these data sets with the use of SPSS.<sup>2</sup> For continuous variables (e.g., salary, age, duration of employment), means and standard deviations were also computed. For several items, special indices were derived (e.g., rank indices of occupations) from

---

<sup>1</sup>Because the administration of a standardized questionnaire to incoming freshmen did not become LaGuardia policy until 1974, demographic data were available only for the 1972 cohort.

<sup>2</sup>The entire set of 1-way SPSS tabulations is reproduced (with appropriate format alterations) among the tables which are included in the ensuing results section. However, only a few crosstabulations, or portions derived therefrom, are presented in this report.

assumptions made about the ordering of data classifications. Finally, a number of special computer-based analyses were performed on restricted portions of the data (e.g., correlation matrices; variable-averaging within crosstabulation matrices; 3- and 4-way crosstabulations, etc.). Although they had been planned before data collection had begun, no factor-analysis or multiple-regression studies were undertaken.

The data derived from the questionnaires, along with RSFILE and demographic material, were organized into five category-types of variables differentiated by source and complexity. These are:

Unsynthesized variables, or primary variables derived directly from questionnaire items.

Synthesized variables, or secondary variables created or computed from primary variables. Thus, the variable "Change in major," in which "Change," "No change," and "Insufficient information" are allowable values, is created from two primary variables, "Curriculum as freshman" and "Curriculum at graduation." (A single table, "Stability of Community College Curriculum...", summarizes these data.)

Performance variables, or computed variables derived from LaGuardia's RSFILE. Performance data were, as noted above, obtained only for LaGuardia graduates and non-completers.

Demographic variables, or primary variables based on the 1972 demographic questionnaire. Each specified demographic variable corresponds to an item or items on the demographic questionnaire.

Unlisted variables (e.g., "Identification number"), serving only



for identification purposes and played no part in the analysis of outcomes.

Employer interview questionnaires. These forms were processed with methods which paralleled those applied to student-questionnaire returns, described above. After an initial scanning and proofing, forms were coded and then key-punched according to appropriate schemes. Data analysis, also achieved with SPSS, was restricted to straight tabulations, highly-selected crosstabulations, and intercorrelation matrices. Analysis was much more restricted in scope than was the case with student-based data.

## Results

The findings of the study are presented in Tables 4 through 84. For ease of cross-referencing, these tables are generally organized in the order in which the source items appear in the questionnaires (see Appendices A and B). To serve those who may seek information beyond the ambition of the present account, all of the available materials are gathered in this section. Needless to say, the analysis which follows does not make reference to the entirety of the findings.

The tables are organized by source as follows:

Tables 4 through 54: Findings based on questionnaires mailed to students

Tables 55 through 61 and Table 84: Summary of RSFILE-based performance data for LaGuardia graduates and non-completers

Tables 62 through 73: Summary of demographic data for those LaGuardia respondents who were admitted in 1972

Tables 74 through 83: Findings based on the interview questionnaire given to employers

It may be noted that the order of appearance of table references in the text does not strictly adhere to the order in which the tables are numbered and placed at the end of the section.

### Questionnaire-based and related findings

Demographic data and sample characteristics. Findings of a primarily demographic nature will be found generally restricted to Tables 4 through 35 and--for the LaGuardia sample--62 through 73. Certain characteristics common to each sample are worthy of remark: (1) Females predominate among these students (Table 5), and they are generally in their mid-twenties at the time of graduating or leaving school (Table 4). (2) Respondents reported total family incomes between, on the average, about \$16,000 and \$17,000 per annum (Table 14). (3) There is a fairly wide dispersion of respondents' fathers' occupations among the categories of service worker, operatives, salesmen, clerical workers, technical workers, craftsmen, and lower-level professional personnel (Table 15), while mothers were most frequently cited as housewives (Table 16). (4) The majority of graduates indicated that when they first entered their community college, they were certain about the kind of work they wanted to do after graduation (Table 21). (5) Most graduates have had some additional educational

experience after graduation, and most have been employed, either on a full- or part-time basis (Table 24).

Apart from these common threads, the difference between samples are more noteworthy than the similarities:

1. The age of LaGuardia degree recipients at the time of their graduation was about 2 years younger than the age of College "A" and College "B" graduates (Table 4).
2. The proportion of men is significantly higher at "A" and "B" than at LaGuardia (Table 5).
3. The average time-in-residence is much higher at LaGuardia's sister colleges--nearly a year longer at "B," and a year-and-a-half at "A" (Table 8). The magnitude of these discrepancies makes unavoidable the inference that attendance on a part-time basis is (or was) common, if not the rule, at "A" and "B," while virtually all of the LaGuardia population attended on a full-time basis. The implications of this situation are discussed in a later section.
4. A majority of LaGuardia respondents indicated that, at the time they answered the questionnaire, they were still living with their parents and siblings, while graduates of "A" and "B" more typically were living with their own families, or alone (Table 11).
5. At College "B" a substantially larger proportion of the sample than at either "A" or LaGuardia indicated that they were certain of the nature of their careers when they matriculated (Table 21).

6. In reporting on the nature of their activities following graduation, respondents at College "B" indicated work as an exclusive occupation almost twice as frequently as graduates of "A," with LaGuardia alumni falling midway between them (Table 25). On the other hand, continuation of studies as an exclusive occupation was much more common among graduates of "A" (Table 25).
7. While only 8 percent of LaGuardia alumni who had transferred to senior colleges had received a baccalaureate degree at the time they answered the questionnaire, 41 and 26 percent of the transferring graduates of Colleges "A" and "B," respectively, had obtained 4-year degrees (Table 27). This finding is an obvious concomitant of the fact, indicated in Table 7, that substantial numbers of students had graduated from "A" and "B" well before the first students received degrees from LaGuardia in the fall of 1973.

It will be recalled that a major rationale for the selection of Colleges "A" and "B" as bases of comparison was the assumption that the students attending these institutions constitute populations that, demographically speaking, are roughly equivalent to LaGuardia's. Although some degree of demographic differentiation in the samples was to be expected, the extent to which this occurred was unanticipated. In the composite, the facts noted above, added to the discrepancies between the colleges in the programs which they offer to their students (see p. 10 and Tables 2 and 19, as

well as data pertaining to fields of employment and study: Tables 29, 32, 38, and 46), yield the following demographic portraits:

The most typical LaGuardia graduate was a young female who majored in Liberal Arts or Secretarial Science, completed her studies in two years, and continued to live with her parents after graduation.

The graduate of College "A," who was somewhat more likely to be female than male, was very likely to have majored in Liberal Arts or Nursing, to have taken 3½ years to complete college studies, and to have continued with additional study following graduation from community college.

The graduate of College "B" was equally likely to be male or female. He or she probably majored in Applied Health, Applied Studies, or Technical Studies, to have been quite certain of his or her career track all along, and to have graduated in about 3 years. Quite likely this student proceeded directly upon graduation into full-time employment, which in many cases was a continuation of a job he or she held while attending school. This student probably did not continue in school for further studies.

Comparison of the colleges on school-related issues. Findings which pertain to experiences of respondents in further study beyond the associate degree are located in Tables 24 through 32. While most of the graduates (and very few of the LaGuardia non-completers) had some additional schooling, full-time attendance at a 4-year institution was considerably more common among graduates of College "A"

than with either LaGuardia or College "B" alumni (Table 24). It is interesting to note that nearly 20 percent of College "B" transferring graduates indicated attendance at a private institution, nearly four times the rate reported by LaGuardia respondents (Table 26). As noted earlier, transferring students from "A" and "B" were considerably advanced in their studies compared with LaGuardia, only a few of whose students had obtained baccalaureate degrees at the time of the survey (Table 27). There were, of course, certain marked differences in the subjects in which graduates majored in senior institutions, which are related to emphases in the curricula offered by their respective junior colleges (Table 29, cf. Table 19). Finally, while only a small percentage of the graduate transfers had actually attended a graduate school (Table 30), more than half said they plan to attend in the future (Table 30) in order to get a master's degree (Table 31).

Comparison of the colleges on work-related issues. As documented in Tables 35 through 54, the employment experiences of the different groups of students have been rather varied and, in a number of important respects, quite different. The great majority of respondents have worked since leaving community college (Table 35), although about a third of these individuals in each sample have not been continuously employed during the entire period of time (Table 36). Those who reported having been unemployed were without work from 6 months (average for LaGuardia) to 13 months (average for College "A") (Table 37). In general, the distributions of areas in which former students were employed immediately following graduation (Table 38) and at the time they responded to the questionnaire

(Table 46) are nearly identical, and conform to patterns which would be expected given the curriculum emphases of the three schools (Table 19). Thus LaGuardia graduates were most frequently employed by schools and by financial, real estate, and insurance agencies; College "A" alumni were mostly in health services, schools, and trade sectors; and College "B" graduates were especially found in the entertainment industry, health services, and public administration.

Respondents have worked for their present or past employers for, on the average, two or three years (Tables 42 and 53). (It should be noted that for many--perhaps most--respondents, "first post-graduation" and "current" employers are identical.) Examination of the questionnaire returns revealed the fact that designations of duration of service often exceeded the period of time elapsed since graduation, thus indicating that the "first post-graduation" employer had in fact employed the student prior to graduation. The number of such instances was considerably higher at Colleges "A" and "B" than at LaGuardia, as shown in Table 41. It thus appears that students at these schools frequently attended school--probably on a part-time basis--while working for an organization which maintained employer status after the student received an associate degree. At the same time, many LaGuardia respondents based their recording of starting date of employment on former internship assignments, so it would appear that the figures for these individuals shown in Table 41 must be taken as an overestimate, and the discrepancy between LaGuardia and the other colleges is even larger than that suggested.

As evidenced by the upward shift in rank index from initial to current employment (Tables 43 and 50), students have generally made gains in level of employment since graduating. An analysis based on reported job titles (Table 47) shows that only a small proportion--12 to 14 percent--of graduates have changed their type of employment during this period, and the majority--particularly at LaGuardia--have worked for only one company (Table 54). A third to a half of the students have had promotions (Table 48), with the incidence somewhat higher at Colleges "A" and "B," where graduates have been on the job market, and in their jobs, for longer periods of time.

Salaries reported by graduates evidence a complex pattern clearly influenced by a number of demographic factors. In an analysis restricted to the colleges' common curriculum clusters (Table 45), starting salary is higher in the LaGuardia sample in all areas in comparison with College "A," but is lower in three of four areas (the exception being Technical Studies) in comparison with College "B." The overall mean salaries reflect these findings, with LaGuardia students placed midway between the other two colleges. The analysis presented in Table 45 clearly demonstrates that--as would be expected--curriculum (i.e., field of employment) is a crucial element in the determination of salary, a fact which is not readily apparent in the salary distributions provided in Table 44. These data, which are collapsed across all curricula, show that College "A" graduates were earning substantially higher starting salaries than LaGuardia alumni. Since Table 45 provides evidence that the reverse is true in overlapping curriculum clusters, it is obvious that the discrepancy in Table 44 can only be created by



students who are not included in the common-curriculum-cluster analysis. It is interesting to note that there are 144 students in the LaGuardia sample in Table 45, or 73 percent of the total responding segment of 197 shown in the previous table; in contrast, 63 and 43 percent of College "A" and College "B" respondents, respectively, are included in the common-cluster list. Thus there were large numbers of students at "A" and "B" whose curricula and fields of employment are not comparable with LaGuardia students', and whose salaries for the most part exceed those of the clusters reported in Table 45.

Two points about the data in Table 45 deserve special emphasis. First, the Technical Studies cluster is the highest-paying group at LaGuardia and College "A," and is above the average at College "B," while Liberal Arts students have fared the worst at all three schools. In this responding sample, Liberal Arts students represent a plurality at LaGuardia and "A," while fully half the students at "B" are Technical Studies graduates. Thus the effect of curriculum emphasis at each school exerts a powerful influence on averaged salaries. Second, the salary figures given in Tables 44 and 45 (and also 51 and 52) include students who were working part-time, so that average wages are accordingly smaller than would be the case if the analysis were restricted to full-time employees. Differential rates of part-time employment at the three colleges may further complicate this picture.

Data on salaries earned at the time of answering the questionnaire are provided in Tables 51 and 52. Students in each of the three colleges reported substantial gains in wages. Since graduates of College "A" and College "B" have been employed longer than LaGuardia alumni, the total amount of gain, and the average level of current salary, is obviously greater at these schools. In Table 52 it may be seen that the relative standing of Liberal Arts and

Technical Studies students, noted earlier with respect to starting salary (Table 45), is maintained.

Freshman demographics, performance factors, and a comparison of LaGuardia graduates and non-completers. A systematic survey of questionnaire, RSFILE, and demographic materials reveals clearly that the group of LaGuardia students who did not complete their studies were, in several respects, different from the college's graduates. These characteristic differences are quite noteworthy in the non-completing students' backgrounds, their attitudes at matriculation, their performance while in college, and their rate of progress in the employment sectors once they have terminated their studies.

Typically, the non-completing (NC) student matriculated with a slightly lower high-school average than the graduate (Table 55). There were more men among NC's (43 percent compared with 36 percent; see Table 5). NC's were also quite a bit younger at matriculation (20.5 versus 22.2 years on the average; these values have been extrapolated from mean age at graduation and mean time-in-residence, given in Tables 4 and 8, respectively). Consistent with the fact that their high school averages were slightly lower, NC's did slightly poorer on all subtests of the California Achievement Test (Table 56), taken just before matriculation.

Responses to the demographic questionnaire administered to the 1972 freshman cohort reveals that the NC was more likely to be black (Table 65) and also more likely to have citizenship status (Table 63). A higher household income was reported (Table 14), for reasons which are not apparent. NC's reported that--on the average--

it was much less important for their parents that they attend college than it was for graduates (Table 70), and, to a much greater extent, they were in college "just to get an education" (16 percent versus 3 percent; see Table 67). They appear to have been rather more interested in LaGuardia because of its location than were graduates (Table 17). Their future plans were, apparently, less well focused: they were not as certain whether they would make their career in their curriculum area (55 versus 72 percent: Table 72) and, although they professed to an equal degree plans to continue their education beyond community college (Table 72), that they did not do so to a comparable extent is clear from findings reported below. Consistent with this picture is the fact that, when asked about their future occupational preference, they were considerably less assured about what they wanted to do than were graduates (Table 73). This fact was clearly corroborated in a similar, retrospective judgment about career certainty made on the survey mail questionnaire (Table 21).

While in college, NC's compiled a poor performance record. Apart from the fact that their education was terminated after earning, on the average, about half of the credits necessary for a degree (Table 58), grade-point averages were extremely low (Table 60) --hardly adequate to maintain good academic standing--and they succeeded in passing only about 64 percent of their courses, compared with 96 percent for graduates (Table 59). Of particular interest is the fact that NC's, who attended LaGuardia for a much shorter period of time than do graduates, changed their curricula while they were in school more often (Table 20).

After terminating their studies, NC's evidenced a pattern that is initially similar to that of the graduate, but indicates a diverging trend with the passage of time. While most post-termination NC students were (not unexpectedly) working and not attending school, most graduates were in school either on a part- or full-time basis, and most were working (Tables 24 and 25). However, a comparison of working graduates and NC's who were employed shows that, at least initially, starting salaries were almost identical--\$6554 per annum compared with \$6514 (Table 44). In addition, roughly an equal proportion of NC's and graduates reported that, since leaving LaGuardia, they have been continuously employed (Table 36).

In reporting facts about their current positions (i.e., their employment at the time of answering the questionnaire), while both NC's and graduates indicated earning higher salaries than when they left LaGuardia, the graduates fared better. Thus, a mean difference in annual salary of more than \$300 will be found in Table 51. Perhaps related to these data is the finding that a substantially higher proportion of NC's (14 versus 8 percent) reported being unemployed at the time of the survey (Table 47). Finally, it may be noted that there is some evidence that the level of positions of employed graduates was somewhat higher than that of NC's (Table 50).

#### Findings based on employer interview questionnaires

Tables 74 through 83 provide data from the questionnaires administered by interviewers to thirty-four employers of LaGuardia interns and graduates. A profile of these agencies appears in the

first three of these tables. About one-fourth of the sample are classified as manufacturing organizations, although LaGuardia interns are placed primarily therein in white-collar positions (Table 74). Another quarter of the participants were educational in nature: one pre-elementary school, several elementary schools, two universities, and a foundation. Financial agencies, comprising another fifth of the group, consisted of several major banks, a finance company, a nationally-based accounting firm, and one actuary. These employers had an average of about 800 total employees, somewhat more than half of which were listed as acting in non-supervisory capacities (Table 75). The employers had, as a group, participated in the cooperative education program for a mean of about ten quarters, having hired an average total of some 29 interns (Table 76). Thus it has been the practice in these organizations to place about three interns per quarter.

The attitudes of the employers' managements toward CE is summarized in Tables 77, 78, and 79. Of nineteen statements concerning CE, agreement with positions supportive of the program occurred in sixteen cases (Table 77). The strongest approval came in statements dealing with support for CE by top management, desire to continue as a participating employer, the value of CE for public-relations purposes, and the value of CE interns to the company's work force; in these instances, no disagreements were encountered. The great majority of the organizations' representatives did not concur with criticisms often leveled at CE, namely, that continual turnover of internships creates problems in personnel continuity, and that CE programs are too costly in terms of financial outlay and personnel

time. However, respondents were about evenly divided on the question of whether training interns is less costly than training regular employees. An analysis of the 34 returns showed that 79 percent of all opinions on these items were positive (Table 78). Financial organizations appear to have held somewhat less positive attitudes than other types of employers, and there was a tendency for larger agencies to be more supportive than smaller ones (Table 79).

Employers were asked to rate several personnel groups on a series of work-related attributes. These included characteristics commonly included on employee rating scales and often cited as the most valid indices of performance standards. In addition to twelve "pure" attributes (cooperativeness, initiative, appearance, maturity, etc.), there were three integrative scales dealing with overall assessments of employees in the areas of (1) attitudes and motivation; (2) skills and abilities; and (3) performance in general. Since all of the rating scales were anchored in a 4-point rating system (excellent, good, fair, poor), it was possible to construct a rating index (similar to a grade-point average) for the responses on each attribute, based on the equivalence formula excellent=1, good=2, fair=3, and poor=4. A mean rating index for the twelve attributes was also computed.

As indicated in Table 80, LaGuardia graduates who had formerly served as interns with their current employers achieved the highest ratings (i.e., the lowest scores) on each of the twelve pure attributes, the three integrative scales, and the mean rating scale. (The mean rating for this group, 1.56, was significantly lower than each

of the other mean ratings at a level of significance exceeding  $p=.02$ , as judged by  $t$ -tests.) Next in overall order were LaGuardia interns (mean rating index of 1.83), followed closely by non-CE personnel in career training positions (1.89) and, lastly, entry-level, post-training personnel not affiliated with a CE program (2.12). (The mean rating index for interns differed from the non-CE entry-level group at a significance level of  $p=.05$ .) A fifth group, LaGuardia graduates who had not formerly served as interns, was insufficiently represented.<sup>1</sup> The tendency for the twelve pure attributes to receive similarly-ranked ratings in each of the four groups is quite marked; cooperativeness, compliance, and willingness to learn are highest-ranked in each case, while knowledge of job is the lowest-ranked attribute in all instances. LaGuardia interns were awarded the best ratings by manufacturing and education-related organizations, while legal and finance agencies were somewhat less positive (Table 81). This finding is in accord with attitudes of different agency types toward CE, reported in Table 79.

A matrix of correlation coefficients for the major variables of the employer study is presented in Table 82. There are two noteworthy findings here: (1) size of agency is significantly related to ratings of non-CE, career employees (but not to ratings of

---

<sup>1</sup>A sixth group, comprised of various peer populations (i.e., employees in temporary training positions) for interns was also inadequately represented for analysis. These peer groups were to have been separately rated and ranked (see Items 26 and 27, Appendix B).

LaGuardia interns)--i.e., the larger the organization, the better they rate these individuals; and (2) while ratings of LaGuardia graduates are highly correlated with ratings of LaGuardia interns, attitudes of employers toward LaGuardia interns are negatively correlated with ratings of non-CE workers in training (i.e., high ratings of the one are associated with low ratings of the other). Table 83 indicates that the various scales associated with ratings of LaGuardia interns generally intercorrelate positively and significantly. Nevertheless, many of the scale-pairs (those for which correlation coefficients are reported in roman type face) appear to be independent of one another (e.g., appearance and cooperativeness).

#### Discussion

In order to assess the significance of these complex and occasionally equivocal findings, it is useful to reexamine briefly the objectives of the study and the strategy conceived for their fulfillment. In simplified terms, the research was conducted for the purpose of determining the impact of CE on the experiences of community-college students subsequent to their graduation. The achievement of this aim was designed to be brought about by several complementary efforts: (1) the amassment of comprehensive, normative data on graduates and non-completers of LaGuardia Community College, which has a unique, universal CE program; (2) the collection of important performance-related information about CE and non-CE graduates of related institutions; and (3) the determination of participating



employers' independent judgments of the CE program, its products, and their performance in relation to employees not associated with CE.

Because LaGuardia has no students who do not go through its CE program, it was recognized at the outset that data pertaining to these individuals would have to stand largely on their own merits. Since it seemed probable that other community-college populations would be demographically unique, it did not appear reasonable that their experiences should or would be like those of LaGuardia students. It was therefore assumed that the most acceptable means of isolating the efforts of CE would be through the comparison of CE and non-CE graduates of colleges which offer CE as an option to their students.

As we have seen, it was not possible to obtain sufficient data on CE graduates of College "A" and College "B" to realize this methodologically critical aspect of the study. But it is important to note that even if the original strategy had succeeded, the findings would have had to be viewed with reservation, since the method itself contained a problematical element. At LaGuardia, CE is a sine qua non of both the college's educational philosophy and its academic program. LaGuardia students are exposed to CE internships, CE seminars, CE counseling, CE faculty, and CE-related evaluation to an extent that far transcends the scope of CE programs of sister schools. It is therefore reasonable that any comparison of CE graduates with non-CE alumni at College "A" and College "B" would have been difficult to extrapolate to LaGuardia's CE program, which is so fundamentally different.

Apart from any empirically-demonstrated inequities in sample composition, there is the chance that former students who chose to respond to the survey may constitute an unrepresentative portion of the target samples. Respondents' reports about such sensitive matters as salary, job title, etc. are not readily verifiable. It is well-known that individuals who respond most readily to an optional survey may have quite different characteristics from those who do not respond, or who delay their response. This is particularly likely to be a problem when individuals who are unemployed or otherwise performing below their own or others' expectations are asked voluntarily to respond to questions patently designed to survey salaries of a peer group.

The possibility of bias arising from the self-selection process deserves special consideration in view of the sharp difference in return rates from the three colleges (Table 3). The fact that nearly twice as many LaGuardia graduates (on the first mailing alone) as alumni of Colleges "A" and "B" chose to return the questionnaire naturally invites some speculation. Although the areas and extent of possible bias are largely a matter of inference, evidence obtained from LaGuardia students strongly implies that this was a real factor contributing to the study's outcomes. It will be recalled that two mailings were carried out for LaGuardia students, the second to those who had failed to reply within six weeks to the first. A separate tabulation of responses was made for first-mailing and second-mailing respondents. These data, which are not presented among the tables, show that second-mailing respondents (1) had an average annual income which was considerably

greater in their current jobs but less in their first post-graduation positions; (2) had worked longer at their current and original positions; and (3) were more likely to have worked full-time after graduation. At the same time, first-mailing respondents were almost twice as likely to have gone on to college full-time after graduation and to have received some form of financial aid. Similar effects took place among LaGuardia non-completers. Clearly, these two sets of returns either tapped vastly different segments of the LaGuardia population, or tended to elicit responses from selective segments of their respective sub-samples. Although a similar biasing effect between colleges is impossible to substantiate, it would appear to be a likely possibility.

In summary, then, the study as conceived permitted the collection of a substantial array of data on each of three related populations of CUNY community-college students. However, the planned methodological controls which would have made available the most rigorous comparison of CE and non-CE students did not materialize. The data which have been collected pose two problems for the task of isolating CE effects through a between-sample comparison: (1) the voluntary nature of the questionnaire leaves open the possibility of auto-selection bias; and (2) no attempt was made to equate the target samples, since their demographic characteristics were mostly unknown at the start of the study, and it was not known which of these characteristics might most properly serve as equation factors. To whatever extent these samples may be shown to be demographically unique, they may not legitimately be considered directly comparable. It then becomes necessary to assess the impact of those

characteristics that emerge as strongly differentiating influences before conclusions may properly be drawn.

The actual demographic data obtained from the mailed questionnaire reveal clearly the nature and extent of the differences between LaGuardia, College "A," and College "B" samples. The most significant of the characteristics which differentiate the colleges are curriculum, field of employment, date of and age at graduation, date of first matriculation, age at time of canvassing, ratio of men to women, time in residence, living arrangements, certainty of career orientation, and tendency to seek and/or complete additional studies following completion of the 2-year program. These represent a substantial proportion of the available pool of demographic indices and comprise the most sensitive of those factors which might be expected to exert an influence on critical outcome variables. One may take as a point of departure that career focus and degree of specialization, sex, and personal maturity are all significantly related to "success" in one's career. Given the validity of this assumption and the distribution of demographic traits in each sample, it is a foregone conclusion that the graduates of College "B" would, on the average, be earning the highest salaries, and the graduates of LaGuardia the lowest.

At this juncture the obvious question is: how do the students compare when these factors are controlled for? That is, given a sample from each community college, equated for age, sex, curriculum, and so forth, what picture of starting salaries, job mobility, promotions, and so forth, would emerge? As we have noted, the number of factors to control for is too large to permit the accumu-

lation of a reliable number of cases, equated for all factors, through the use of crosstabulation. However, it is worthwhile noting that 2-way crosstabulations of the critical demographic variables by starting and current salaries (e.g., age x salary, sex x salary, etc.) overwhelmingly conform to their characteristic relationship with "success."

Because of the complexity of the task and the scarceness of resources presently available, we have chosen not to pursue the technique of crosstabulation much beyond the level described above. However, attention must be drawn to the fact, revealed through crosstabulation, that equation for curriculum has been shown to be essential in the understanding of starting salaries (Table 45). This is also true of time-in-residence. At LaGuardia, 90 to 100 percent of all students surveyed completed their studies within 30 months. At Colleges "A" and "B" the proportion of students taking longer than 30 months is 57 and 44 percent, respectively (Table 8). A third of the students in the highest-paying areas at these schools (Technical Studies at "A," Business at "B," based on starting salaries) take at least four years to complete the nominal 2-year course of studies. This finding lends additional credence to the observation that higher salaries at "A" and "B" must be accounted for, to a significant extent, by a relative preponderance of mature students at those schools who were pursuing a degree part-time while working for agencies that continued to employ them before and after their graduation.

The observed sensitivity of salary to contemporary demographic factors quite naturally prompts a search for less apparent background

influences. To obtain an estimate of the socioeconomic status of respondents' families, the occupations of their fathers (Table 15) was examined. The rank index was highest for College "B," and lowest for "A," with a considerable spread between them. Fathers of LaGuardia respondents fell roughly in the middle. Elsewhere, a check of CUNY reports for high school averages of freshmen allocated to the various community colleges<sup>1</sup> shows that, for the sampled schools, they have tended to be highest at "B" and lowest at "A." This trend was particularly marked in 1971. In conjunction with this finding, it is curious to note that, salaries of working alumni notwithstanding, the rate of receipt of unemployment insurance (Table 22), incidence of current unemployment (Table 47), and duration of unemployment (Table 37) is highest at "A" and, with the exception of duration of unemployment, lowest at "B." These findings suggest the often-noted close correspondence between system input and output. A rather interesting corroboration of this observation springs from a crosstabulation of current salaries earned by LaGuardia respondents, examined as a function of high-school average, grade point average, and California Achievement Test performance (Table 84). All of these indicators bear a relation to earnings, and high-school average appears to be remarkably sensitive in this regard. It seems safe to conclude, then, that the salary data reported here reflect students' backgrounds and abilities, in addition to other demographic factors noted above.

---

<sup>1</sup>From Enrollment reports for the fall semesters of 1971, 1972, and 1973 (New York: Office of Data Collection and Evaluation, CUNY).

Unlikely as it might appear that a single index of performance--salary--could reflect to a significant degree such a host of influential factors, it is clearly the case. In more statistical terms, it means that a significant proportion of salary variance is controlled by each of these factors. It will be recalled that the proposed methodology of the study included the use of multiple-regression analysis, which permits the computation of actual variance-control weights contributed by entered covariates. However, this tool presents its own difficulties, and it is not possible to isolate outcomes that are uninfluenced by the investigator's own priorities in running the analysis. It is probably a fair statement that the assessment of these student-based data has identified the factors which most affect job-market performance, but has not controlled for them. The evidence supports the thesis that the distribution of critical demographic characteristics within the populations tends to produce a lower starting salary among LaGuardia alumni than among graduates of College "A" and College "B." There is no evidence to suggest that the differential in average reported salaries is related to or caused by any factors other than those which have been identified. While it was not feasible to conduct a controlled econometric analysis in which the effects of the critical factors were removed, simple crosstabulations for individual variables tended to demonstrate a counterbalancing effect. Curriculum alone accounted for much of students' reported salaries, and within individual curriculum clusters LaGuardia graduates consistently earned more than students who graduated from one of the other colleges.

Regardless of salaries earned by students included in the study, employers recorded an unequivocally high rating of LaGuardia graduates. In all attributes related to motivation, job skills, and abilities, LaGuardia alumni were perceived as superior to other employees at training and post-training levels. Among the characteristics that most differentiated LaGuardia graduates from the other criterion groups were their cooperativeness, knowledge of job, personal maturity, and attendance records. Management representatives who supplied these ratings are themselves experienced employees of large corporations who act in a supervisory capacity that enables them to make reliable, longitudinally-based judgments about the performance of workers who stem from a variety of backgrounds. Indeed, since the interviewees were all personnel supervisors whose professional responsibility is to make critical evaluations of lower-level employees, their testimony may be viewed as strong support for the value of CE in directing young men and women into the work force.

Bearing directly on this last statement is the overall portrait of LaGuardia students derived from a number of different sources. It is clear that LaGuardia graduates do not represent a highly-selective component of community-college output in the City of New York. On the contrary, comparison with graduates of College "A" and College "B" leaves little doubt that LaGuardia degree recipients have, or had, no special advantages from an academic or socioeconomic point of view that might account for their employers' complimentary opinions. Of course, little is known about their fellow employees who comprised the non-CE criterion groups designated



as entry-level post-training and career training. Possibly these individuals, if comparative demographic data were available, might appear as less likely to achieve high performance ratings than LaGuardia graduates. However, on a priori grounds this putative circumstance seems unlikely. For one thing, community-college students in general stem from the city's lower socioeconomic strata and have had prior educational experiences that are not considered successful and promising. LaGuardia students are no exception. Secondly, since employers normally subject all applicants for employment to standardized screening procedures, it must be assumed that their selection criteria impose a significant leveling effect at the point of initial employment. Consequently, the element of CE looms large as the factor which ultimately differentiates these groups of employees.

While it is hardly surprising that LaGuardia interns--i.e., employees in training-level positions whose jobs are part of the college's CE program--are rated below graduates, it is interesting to note that they are rated higher than non-CE post-training personnel. Possibly the preparatory experiences these students have received prior to their first internship, and the seminar which they take contemporaneously with their work experience, are instrumental in this regard. One of the most unexpected findings of the study is that these employers award lower ratings to entry-level, post-training personnel than to workers in training-level positions, among those who are not associated with a CE program. It may be that there is a factor of compliance or malleability among trainees that is related to the way they are perceived by their employers.

In any event, the ratings of non-CE trainees and LaGuardia interns are nearly identical, which suggests that at the point of initiation of training, the latter group are not seen as greatly superior to their most directly comparable group of peers.

Some commentary seems in place regarding the relative strengths--in terms of reliability, validity, and freedom from various sources of bias and contamination--of these employer-based data vis-à-vis survey-based and related findings. The decision to counteract the inherent shortcomings of the survey technique by obtaining data not dependent on graduates' unverified say-so, or on their willingness to return the questionnaire, undoubtedly constitutes the methodologically strongest feature of the study. The opinions and ratings of employers are therefore considered a comparatively "hard" source of information. Nevertheless, it must be borne in mind that independent wage and job-level estimates of criterion groups were not obtained from employers. Since all of the employers were among the more active participants in LaGuardia's CE program, they may not have been entirely impartial in their assessments, despite a carefully-stressed exhortation to be so.

Finally, it is appropriate to place some emphasis on the issue of community colleges' success in their general mission to develop marketable skills in their students, and the relation of this objective to student attrition. Overall attrition rates in the CUNY community colleges are distressing high--in the vicinity of 70 percent for women and 82 percent for men, according to a recent

report.<sup>1</sup> Despite the severity of these figures, they are lower than the nationally-based norms for public two-year colleges by about 4 percentage points.<sup>2</sup> LaGuardia Community College holds strongly that those students who, for whatever the reason, are unable to see their studies through to the associate degree should also reap the benefits of its CE program. Although these non-completers have not performed very well in their classroom studies, at the entry level, at least, they earn about what graduates do, even though they are, on the average, about two years younger. All of these non-completing students (i.e., those included in the present study) had had at least one internship, and the ancillary preparation and counseling that are associated with it. Thus, some of the benefits of LaGuardia's CE program probably accrue to non-completers--at least those who are resident for a sufficient period of time to gain exposure to CE.<sup>3</sup>

---

<sup>1</sup>B. Kaufman and S. Loveland, Academic progress at the City University of New York: September 1970 to June 1975 (New York: Office of Program and Policy Research, CUNY, November 1976). These data are based on four-year norms for approximately 16,000 students who matriculated at eight CUNY community colleges in the fall of 1971. The attrition rate after five years is expected to be about 1.5 percent less than these figures.

<sup>2</sup>Alexander Astin, cited in Kaufman & Loveland, ibid., p. 34.

<sup>3</sup>Although precise figures are unavailable, an estimated 70 percent of all full-time, matriculated day-session students at LaGuardia do take at least one internship.

LaGuardia Community College in particular has had, by comparison with other CUNY community colleges, a notably low attrition rate. Forty-six percent of its 1971 freshmen had graduated from LaGuardia by the fall of 1975, in comparison with about 13 percent at College "A" and 23 percent at College "B" (Table 85). Among 1972 freshmen, the 4-year graduation rate at LaGuardia has declined to about 36 percent, which is still well in excess of the overall figure for CUNY community colleges. Undoubtedly the fall-off at LaGuardia is related to the fact that the 1971 freshmen, who were the college's first class, were the beneficiaries of a degree of individual attention that is no longer possible to maintain. Nevertheless, LaGuardia has succeeded well, on a comparative basis, in encouraging students to remain in their program of work and study. There is every reason to believe that cooperative education, with its advantages of on-the-job experience, skills development, and contributions to personal finances, is an essential element in bringing this situation about.

Table 1  
Sample Specifications<sup>a</sup>

*LaGuardia Community College*

1. Graduates: ALL 770 who
  - a. Were admitted between Fall 1971 and Summer 1973
  - b. Graduated between Fall 1972 and Summer 1974
  - c. Took at least one CE internship
2. Non-completers: A random SAMPLE of 449 who
  - a. Were admitted between Fall 1971 and Summer 1973
  - b. Were inactive in both the Spring and Summer of 1975
  - c. Took at least one CE internship

*College "A" graduates*

1. Cooperative education: ALL 67 who graduated between June 1972 and June 1975
2. Non-cooperative education: ALL 2632 in non-Nursing programs, and 50 percent (790) of the Nursing students, who graduated between June 1972 and June 1975

*College "B" graduates*

1. Cooperative education: ALL 104 who graduated between June 1970 and September 1975
2. Non-cooperative education: A stratified random SAMPLE of 3809 students who graduated between June 1970 and September 1975<sup>b</sup>

<sup>a</sup>For further details on dates of admission and graduation in the various samples, see Tables 6 and 7

<sup>b</sup>See Table 2 for a complete listing of sampling rates in the various curricula

Table 2  
Curricula at Participating Colleges

<u>Cluster and Subsumed Curricula</u>	<u>Proportion in Population (Pct.)</u>	<u>Approximate Sample Rate (Pct.)</u>
<i>LaGuardia Community College</i>		
Accounting	12.3	100
Allied Health	0.4	
Occupational Therapy		100
Business	17.1	
Business Administration		100
Business Management		100
Human Services	16.2	
Education Associate		100
Family Assistant		100
Human Services		100
Liberal Arts	30.3	100
Secretarial Science	13.2	100
Technical Studies	10.1	
Data Processing		100
Non-Classifiable/Undecided/Misc.	0.5	100
<i>College "A"</i>		
Accounting	2.5	100
Allied Health	38.5	
Medical Laboratory Technology		100
Nursing		50
Pre-Pharmacy		100
Business	9.1	
Business Administration		100
Retailing		100
Human Services	5.0	
Education Associate		100
Business Education (Accounting, Retailing, Secretarial)		100
Liberal Arts	30.8	100
Music	0.8	100

Table 2 (continued)

<u>Cluster and Subsumed Curricula</u>	<u>Proportion in Population (Pct.)</u>	<u>Approximate Sample Rate (Pct.)</u>
Secretarial Science	4.1	
General		100
Legal		100
Medical		100
School		100
Technical Studies	9.2	
Chemical Technology		100
Data Processing		100
Electrical Technology		100
Engineering Science		100
Plastics Technology		100
Mechanical Technology		100
Non-Classifiable/Undecided/Misc.	0.1	100
<i>College "B"</i>		
Accounting	9.0	60
Allied Health	18.6	
Dental Hygiene		50
Dental Laboratory Technology		50
Medical Laboratory Technology		50
Nursing		38
Applied Studies	15.4	
Art, Advertising and Design		50
Automotive Technology		100
Graphic Arts & Design Technology		50
Hotel & Restaurant Management		50
Lithographic Offset Technology		100
Machine Tool Technology		100
Mechanical Technology		50
Ophthalmic Dispensing		100
Business	6.8	
Marketing		50
Marketing Management and Sales		50
Marketing - Retailing		50
Retailing		50

Table 2 (continued)

<u>Cluster and Subsumed Curricula</u>	<u>Proportion in Population (Pct.)</u>	<u>Approximate Sample Rate (Pct.)</u>
Human Services	12.0	
Child Care		100
Education Associate		75
Community Service Assistant		100
Liberal Arts	15.2	
Liberal Arts		25
Chemistry		100
Secretarial Science	4.2	
General/Executive		100
Legal		100
Medical		100
School		100
Technical Studies	18.9	
Architectural Technology		100
Civil Technology		100
Construction Technology		50
Data Processing		75
Design Drafting Technology		50
Electrical Engineering Technology		100
Electrical Technology		50
Electromechanical Technology		50
Environmental Control Technology		100
Fire Protection Technology		50
Industrial Arts Technology		100



Table 3

## Questionnaire Mailout and Response Statistics

	Totals		First	Second
	N	Pct.	Mail'g N	Mail'g N
<u>LaGuardia Community College</u>				
<i>Graduates</i>				
Students canvassed by mail	770	--	770	491 <sup>a</sup>
Items returned by postmaster, undelivered	56	7.3	53	3
Items not returned	382	49.6	489	384
Items returned by student, completed	332	43.1	228	104
Unusable returns	2	0.3	2	0
Total usable sample	330	42.9	226	104
<i>Non-Graduates</i>				
Students canvassed by mail	449	--	449	354 <sup>a</sup>
Items returned by postmaster, undelivered	55	12.3	51	4
Items not returned	308	68.6	354	308
Items returned by student, completed	86	19.2	44	42
Unusable returns	0	0.0	0	0
Total usable returns	86	19.2	44	42
<u>College "A" Graduates<sup>b</sup></u>				
<i>Non-Cooperative Education</i>				
Students canvassed by mail	3421	--		
Items returned by students, completed	545	15.9		
Unusable returns	7	0.2		
Total usable returns	538	15.7		
<i>Cooperative Education</i>				
Students canvassed by mail	67	--		
Items returned by students, completed	7	10.5		
Unusable returns	0	0.0		
Total usable returns	7	10.5		
<u>College "B" Graduates<sup>b</sup></u>				
<i>Non-Cooperative Education</i>				
Students canvassed by mail	3809	--		
Items returned by students, completed	695	18.3		
Unusable returns	8	0.2		
Total usable returns	687	18.0		
<i>Cooperative Education</i>				
Students canvassed by mail	104	--		
Items returned by students, completed	19	18.3		
Unusable returns	0	0.0		
Total usable returns	19	18.3		

<sup>a</sup>Questionnaires mailed to students who did not return them or who returned them in unusable form after the initial mailing

<sup>b</sup>Questionnaires returned by postmaster, undelivered, were not saved for tabulation by the receiving offices of Colleges "A" and "B". For these schools, there was a single mailing

Table 4

Age at Graduation or at  
Last Attendance

Age, Years	S a m p l e   G r o u p s							
	LaGuardia				College "A"		College "B"	
	Graduates		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Under 22.0	224	68.3	70	81.4	216	40.7	282	48.0
22.0-24.0	18	5.5	3	3.5	82	15.4	59	10.1
Above 24.0	86	26.2	13	15.1	233	43.9	246	41.9
Total	328		86		531		587	
Missing Cases	2	0.6	0	0.0	7	1.3	100	14.6
Mean	24.3		22.1		26.4		26.1	

Table 5

Sex

Sex	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Male	119	36.1	37	43.0	228	42.4	340	49.6
Female	211	63.9	49	57.0	310	57.6	346	50.4
Total	330		86		538		686	
Missing Cases	0	0.0	0	0.0	0	0.0	1	0.2

Table 6

## Date of Admission

Date of First Attendance	Sample Group							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Before 1969	0	0.0	0	0.0	109	21.0	120	17.6
Spring 1969	0	0.0	0	0.0	17	3.3	22	3.2
Fall 1969	0	0.0	0	0.0	57	11.0	47	6.9
Spring 1970	0	0.0	0	0.0	31	6.0	33	4.9
Fall 1970	0	0.0	0	0.0	106	20.4	85	12.5
Spring 1971	0	0.0	0	0.0	26	5.0	45	6.6
Fall 1971 <sup>a</sup>	132	40.0	30	34.9	97	18.7	96	14.1
Spring 1972	20	6.1	3	3.5	32	6.2	33	4.9
Fall 1972	164	49.7	49	57.0	31	6.0	86	12.6
Spring 1973	14	4.2	3	3.5	6	1.2	29	4.3
Fall 1973	0	0.0	0	0.0	5	1.0	80	11.8
Spring 1974	0	0.0	1	1.2	0	0.0	3	0.4
Fall 1974	0	0.0	0	0.0	2	0.4	1	0.1
Total	330		86		519		680	
Missing Cases	0	0.0	0	0.0	19	3.5	7	1.0
Minimum	Fall '71		Fall '71		Bef. '69		Bef. '69	
Maximum	Spr. '73		Spr. '74		Fall '74		Fall '74	
Mean (dec. yr.)	72.38		72.46		70.60		71.21	
S.D. (dec. yr.)	0.50		0.52		1.43		1.75	

<sup>a</sup>First quarter when students were admitted to LaGuardia

Table 7

## Date of Graduation or of Last Attendance

Date of Graduation	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Spring 1970	0	0.0	0	0.0	0	0.0	8	1.2
Fall 1970	0	0.0	0	0.0	0	0.0	1	0.1
Spring 1971	0	0.0	0	0.0	0	0.0	51	7.4
Fall 1971	0	0.0	1	1.2	0	0.0	1	0.1
Spring 1972	0	0.0	3	3.5	119	22.1	89	13.0
Fall 1972	0	0.0	8	9.3	17	3.2	16	2.3
Spring 1973	0	0.0	17	19.8	130	24.2	147	21.5
Fall 1973	109	33.1	23	26.7	25	4.6	4	0.6
Spring 1974	34	10.3	14	16.3	154	28.6	125	18.2
Fall 1974	163	49.5	9	10.5	33	6.1	24	3.5
Spring 1975	22	6.7	10	11.6	60	11.2	218	31.8
Fall 1975	1	0.3	1	1.2	0	0.0	1	0.1
Total	329		86		538		685	
Missing Cases	1	0.3	0	0.0	0	0.0	2	0.3
Minimum	Fall '73		Fall '71		Spr. '72		Spr. '70	
Maximum	Fall '75		Fall '75		Spr. '75		Fall '75	
Mean (dec. yr.)	74.49		74.02		73.86		74.03	
S.D. (dec. yr.)	0.53		0.86		0.97		1.34	

Table 8

Time-in-Residence: Elapsed Time From  
Admission to Graduation/Termination

Duration	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1 - 6 Months	0	0.0	8	9.3	2	0.4	2	0.3
7 - 12 Months	1	0.3	16	18.6	2	0.4	4	0.6
13 - 18 Months	9	2.7	24	27.9	13	2.5	20	2.9
19 - 24 Months	245	74.2	20	23.3	99	19.3	238	35.0
25 - 30 Months	46	14.0	12	14.0	105	20.4	115	16.9
31 - 36 Months	25	7.6	5	5.8	87	16.9	89	13.1
37 - 42 Months	3	0.9	1	1.2	45	8.8	40	5.9
43 - 48 Months	1	0.3	0	0.0	43	8.4	50	7.4
49 - 54 Months	0	0.0	0	0.0	16	3.1	38	5.6
55 - 60 Months	0	0.0	0	0.0	18	3.5	20	2.9
61 and over	0	0.0	0	0.0	84	16.3	64	9.4
Total	330		86		514		680	
Missing Cases	0	0.0	0	0.0	24	4.5	7	1.0
Minimum		12.0		3.0		4.0		4.0
Maximum		45.0		42.0		264.0		172.0
Mean		25.1		18.7		42.8		35.5
Std. deviation		4.0		8.6		28.7		21.3

Table 9

Graduates: Distribution of College Residence Duration  
as a Function of Curriculum<sup>a</sup>

Residence, Months	S a m p l e G r o u p s					
	LaGuardia		College "A"		College "B"	
	N	Pct.	N	Pct.	N	Pct.
<b>Business<sup>b</sup></b>						
30 months or less	43	91.5	31	50.8	13	44.8
31-48 months	4	8.5	11	18.0	6	20.7
Over 48 months	0	0.0	19	31.2	10	34.5
<b>Technical Studies</b>						
30 months or less	23	100.0	11	33.3	86	60.6
31-48 months	0	0.0	12	36.4	26	18.3
Over 48 months	0	0.0	10	30.3	30	21.1
<b>Liberal Arts</b>						
30 months or less	99	92.5	95	43.8	23	34.8
31-48 months	8	7.5	82	37.8	26	39.4
Over 48 months	0	0.0	40	18.4	17	25.8
<b>Secretarial Science</b>						
30 months or less	47	100.0	11	36.7	51	81.0
31-48 months	0	0.0	13	43.3	6	9.5
Over 48 months	0	0.0	6	20.0	6	9.5
<b>Total</b>	224		341		300	
<b>Missing Cases</b>	0		19		6	

<sup>a</sup>This analysis has been restricted to the four curriculum cluster areas of Business, Technical Studies, Liberal Arts, and Secretarial Science. Other areas were excluded due to sample inadequacies in one or more of the participating colleges

<sup>b</sup>LaGuardia sample includes only Business Administration graduates

Table 10

Annual Income From All Sources,  
Respondents Living Alone

Income Range, Dollars	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
0 - 4,999	4	13.3	2	40.0	12	16.2	14	14.9
5,000 - 9,999	15	50.0	2	40.0	15	20.3	21	22.3
10,000 - 14,999	6	20.0	1	20.0	29	39.2	36	38.3
15,000 - 19,999	3	10.0	0	0.0	17	23.0	20	21.3
20,000 - 24,999	2	6.7	0	0.0	1	1.4	3	3.2
25,000 and over	0	0.0	0	0.0	0	0.0	0	0.0
Total	30		5		74		94	
Missing Cases	3	9.1	0	0.0	11	12.9	16	14.6
Minimum		\$2,800		\$3,200		\$1,976		0
Maximum		\$22,000		\$10,005 <sup>a</sup>		\$20,000		\$23,000
Mean		\$9,465		\$6,269		\$10,953		\$11,081
Std. deviation		\$4,832		\$2,625		\$4,753		\$4,894

<sup>a</sup>This sample is too small to be considered a reliable estimate of income



Table 11  
Living Arrangements

Living Arrangement	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Alone	33	10.0	5	5.8	85	15.8	110	16.1
With parents and/or siblings	180	54.6	50	58.1	185	34.4	272	39.6
With spouse and/or children	39	11.8	10	11.6	77	14.3	93	13.5
With spouse only	57	17.3	15	17.4	121	22.5	131	19.1
With friends, roommates, etc.	6	1.8	2	2.3	23	4.3	12	1.8
Other	15	4.6	4	4.7	47	8.7	69	10.0
Total	330		86		538		687	
Missing Cases	0	0.0	0	0.0	0	0.0	0	0.0

Table 12

## Number of People in Household

Number	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
One (Respondent Alone)	33	10.4	5	6.3	85	16.5	110	16.4
Two	52	16.5	17	21.3	139	26.9	145	21.6
Three	70	22.1	29	36.3	135	26.2	159	23.7
Four	81	25.6	14	17.5	79	15.3	117	17.4
Five	51	16.1	8	10.0	51	9.9	73	10.9
Six	14	4.4	4	5.0	15	2.9	39	5.8
Seven	10	3.2	1	1.3	9	1.7	13	1.9
Eight or more	5	1.6	2	2.5	3	0.6	15	2.2
Total	316		80		516		671	
Missing Cases	14	4.2	6	7.0	22	4.1	16	2.3
Minimum		1		1		1		1
Maximum		8		8		8		8
Mean		3.5		3.4		2.9		3.2
Std. deviation		1.65		1.48		1.47		1.68

Table 13

## Number of Family Members Who Are Employed

Number	Sample Groups							
	LaGuardia				College "A"		College "E"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
None	3	1.1	0	0.0	2	0.5	14	2.6
One	78	28.4	18	26.5	149	37.2	197	36.3
Two	123	44.7	31	45.6	185	46.2	238	43.8
Three	50	18.2	16	23.5	52	13.0	60	11.0
Four	19	6.9	3	4.4	12	3.0	25	4.6
Five or more	2	0.7	0	0.0	0	0.0	9	1.7
Total <sup>a</sup>	275		68		400		543	
Missing Cases	55	16.7	13	15.1	53	9.9	35	5.1
Minimum		0.0		1.0		0.0		0.0
Maximum		6.0		4.0		4.0		7.0
Mean		2.0		2.1		1.8		1.8
Std. deviation		0.9		0.8		0.8		1.0

<sup>a</sup>Total respondents who are living with other individuals

Table 14

Total Annual Household Income,  
 Respondents Living With Other Individuals

Income Range, Dollars	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
0 - 4,999	8	4.7	2	4.2	13	3.8	10	2.4
5,000 - 9,999	29	17.0	6	12.5	58	17.0	66	15.6
10,000 - 14,999	39	22.8	8	16.7	73	21.3	97	23.0
15,000 - 19,999	39	22.8	9	18.8	78	22.8	87	20.6
20,000 - 24,999	34	19.9	15	31.3	42	12.3	85	20.1
25,000 - 29,999	11	6.4	2	4.2	42	12.3	36	8.5
30,000 - 34,999	7	4.1	6	12.5	29	8.5	25	5.9
35,000 and over	4	2.3	0	0.0	7	2.0	16	3.8
Total	171		48		342		422	
Missing Cases	126	43.4	33	40.7	111	24.5	155	26.9
Minimum		\$2,400		\$1,800		\$1,500		\$2,000
Maximum		\$40,000		\$33,000		\$50,000		\$50,000
Mean		\$16,021		\$17,445		\$16,992		\$17,094
Std. deviation		\$7,557		\$7,562		\$8,439		\$8,177

Table 15

## Father's Occupation

Category	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Service Workers, Laborers, Farm Laborers	54	19.1	12	15.4	108	22.6	87	14.2
Operatives, Farmers	51	18.1	16	20.5	75	15.7	118	19.2
Sales II, Clerical II, Craftsmen II	41	14.5	15	19.2	110	23.0	91	14.8
Sales I, Clerical I, Craftsmen I, Technical II	43	15.2	15	19.2	54	11.3	176	28.7
Professional II, Technical I, Managers	59	20.9	13	16.7	80	16.7	57	9.3
Professional I, Administrators	12	4.3	2	2.6	8	1.7	70	11.4
Non-classifiable	22	7.8	5	6.4	43	9.0	14	2.3
Total	282		78		478		613	
Missing Cases	48	14.6	8	9.3	60	11.2	74	10.8
<i>Rank Index</i> <sup>a</sup>		3.15		3.10		2.88		3.35

<sup>a</sup>Weighted mean based on Service workers=1, Operatives=2,...., Professional I=6 (Non-classifiable not included)

Table 16

## Mother's Occupation

Category	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Service Workers, Laborers, Farm Laborers	31	10.8	4	5.3	39	7.9	52	8.4
Operatives, Farmers	18	6.3	5	6.6	38	7.7	53	8.6
Sales II, Clerical II, Craftsmen II	44	15.4	15	19.7	69	14.0	72	11.7
Sales I, Clerical I, Craftsmen I, Technical II	33	11.5	11	14.5	42	8.5	64	10.4
Professional II, Technical I, Managers	24	8.4	7	9.2	37	7.5	29	4.7
Professional I, Administrators	1	0.3	0	0.0	1	0.2	1	0.2
Non-classifiable <sup>a</sup>	135	47.2	34	44.7	268	54.3	347	56.1
Total	286		76		494		618	
Missing Cases	44	13.3	10	11.6	44	6.4	69	10.0
<i>Rank Index</i> <sup>b</sup>		3.02		3.29		3.01		2.88

<sup>a</sup>Non-classifiable includes Housewife

<sup>b</sup>Weighted mean based on Service workers=1, Operatives=2, ..., Professional I=6 (Non-classifiable not included)

Table 17

Student's Primary Reason for Selecting  
His/Her Community College

Reason	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Location	47	14.2	19	22.6	152	28.6	120	17.5
Curriculum	41	12.4	9	10.7	134	25.2	389	57.0
Coop. Ed. Program	177	53.6	42	50.0	11	2.1	23	3.4
Advice by H.S. Counselor	1	0.3	1	1.2	36	6.8	13	1.9
Reputation of College	1	0.3	0	0.0	28	5.3	19	2.8
Not Accepted Elsewhere	12	3.6	5	6.0	53	10.0	11	1.6
Multiple/Coop. Ed. <sup>a</sup>	23	7.0	4	4.8	3	0.6	11	1.6
Multiple/No Coop. Ed. <sup>b</sup>	13	3.9	3	3.6	62	11.7	71	10.4
Other	15	4.5	1	1.2	53	10.0	26	3.8
Total	330		84		532		683	
Missing Cases	0	0.0	2	0.2	6	1.1	4	0.6

<sup>a</sup>More than one reason checked, including Cooperative Education

<sup>b</sup>More than one reason checked, not including Cooperative Education

Table 18

## Curriculum at Matriculation

Curriculum Cluster <sup>a</sup>	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Accounting	61	19.2	16	19.5	18	3.4	38	5.6
Allied Health	0	0.0	0	0.0	121	22.7	132	19.5
Applied Studies	0	0.0	0	0.0	0	0.0	108	15.9
Business	42	13.3	16	19.5	55	10.3	30	4.4
Human Services	29	9.2	4	4.9	43	8.1	88	12.4
Liberal Arts	93	29.3	23	28.0	229	43.0	80	11.8
Secretarial Sciences	55	17.4	12	14.6	30	5.6	60	8.9
Technical Studies	37	11.7	11	13.4	37	6.9	142	20.9
Other	0	0.0	0	0.0	0	0.0	4	0.6
Total	317		82		533		678	
Missing Cases	13	3.9	4	4.7	5	0.9	9	1.3

<sup>a</sup>See Table 2



Table 19

## Curriculum at Graduation/Termination

Curriculum Cluster <sup>a</sup>	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Accounting	54	16.5	10	11.8	8	1.5	41	5.8
Allied Health	1	0.3	0	0.0	126	23.4	147	21.4
Applied Studies	0	0.0	0	0.0	0	0.0	109	15.9
Business	57	17.4	14	16.5	64	11.9	30	4.4
Human Services	38	11.6	6	7.1	44	8.2	93	13.5
Liberal Arts	107	32.7	34	40.0	231	42.9	67	9.8
Secretarial Sciences	47	14.4	12	14.1	30	5.6	63	9.2
Technical Studies	23	7.0	9	10.6	35	6.5	137	19.9
Other	0	0.0	0	0.0	0	0.0	0	0.0
Total	327		85		538		687	
Missing Cases	3	0.9	1	1.2	0	0.0	0	0.0

<sup>a</sup>See Table 2

Table 20

Stability of Community-College Curriculum From  
First Enrollment to Graduation/Termination

Status	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
No Change	259	78.5	60	69.8	483	89.8	579	84.3
Change	57	17.3	22	25.6	50	9.3	99	14.4
Insufficient Information	14	4.2	4	4.7	5	0.9	9	1.3
Total	330		86		538		687	

Table 21

At Time of Community College Matriculation Was Respondent  
 Certain About His/Her Preferred Career Field  
 After Graduation?

Response	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Yes	185	56.6	34	40.0	309	57.8	514	75.0
No	142	43.4	51	60.0	226	42.2	171	25.0
Total	327		85		535		685	
Missing Cases	3	0.9	1	1.2	3	0.6	2	0.3

Table 22

Financial Assistance Received  
Since Graduation or Termination

Type of Assistance	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
None	243	75.0	68	84.0	356	66.9	503	74.2
School Scholarship	19	5.8	1	1.2	51	23.1	35	5.1
Social Security	9	2.7	2	2.3	7	3.2	13	1.9
Welfare	3	0.9	3	3.5	9	4.1	14	2.0
Unemployment Insurance	42	12.7	8	9.3	57	25.8	67	9.8
Veteran's Benefits	10	3.0	1	1.2	40	18.1	43	6.3
Food Stamps	5	1.5	2	2.3	18	8.1	19	2.8
Other	15	4.6	2	2.3	39	17.6	25	3.6
Total Receiving Any Benefit <sup>a</sup>	103		19		221		216	
Total Respondents	324		81		532		678	
Missing Cases	6	1.8	5	5.8	6	1.1	9	1.3

<sup>a</sup>Total number of respondents not including respondents who received no benefits. Since this question included non-exclusive response categories, students could check more than one choice.

Table 23

LaGuardia Cohort: Number of  
Internships and Internship Exemptions

<u>Number</u>	<u>Internships</u>		<u>Exemptions<sup>a</sup></u>
	<u>N</u>	<u>Pct.</u>	<u>N</u>
Four	8	2.4	0
Three	247	74.9	16
Two	61	18.4	42
One	7	2.1	4
None	7	2.1	5
Total	330		67
Missing Cases	0	0.0	--
Maximum		4	
Minimum		0	
Mean		2.73	
Std. deviation		0.64	

<sup>a</sup>Total number of exemptions granted per category; e.g., there were 42 exemptions granted to the 61 students who took two internships each.

Table 24

Activity After Graduation/Termination  
(Original Data)

Activity	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Part-Time Work	53	16.4	12	14.1	96	18.1	97	14.4
Full-Time Work	184	56.8	55	64.5	249	47.1	414	61.6
Senior College, P/T	65	20.1	4	4.7	132	25.0	145	21.6
Senior College, F/T	131	40.4	12	14.1	267	50.5	222	33.0
Military	2	0.6	2	2.4	1	0.2	3	0.5
Other	11	3.4	11	12.9	11	2.1	25	3.7
Total Responses <sup>a</sup>	446		96		756		906	
Total Respondents	324		85		529		672	
Missing Cases	6	1.8	1	1.2	9	1.7	15	2.2

<sup>a</sup>Since this question included non-exclusive response categories, students could check more than one choice

Table 25

Activity After Graduation/Termination  
(Synthesized Version)

Activity	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Work Only (F/T or P/T) <sup>a</sup>	124	38.3	59	69.4	128	24.2	291	43.3
School Only (F/T or P/T) <sup>a</sup>	87	26.9	11	12.9	199	37.6	162	24.1
Work and School (F/T or P/T) <sup>a</sup>	107	33.0	5	5.9	193	36.5	198	29.5
Miscellaneous <sup>b</sup>	6	1.9	10	11.8	9	1.7	21	3.1
Total	324		85		529		672	
Missing Cases	6	1.8	1	1.2	9	1.6	15	2.2

<sup>a</sup>Includes some individuals who checked "Military" and "Other" categories in addition to the primary category or categories

<sup>b</sup>Includes individuals who checked "Other," "Military," or both

Table 26

Senior College Entered  
(Transfer Students Only)

College	Sample Group (Graduates)					
	LaGuardia		College "A"		College "B"	
	N	Pct.	N	Pct.	N	Pct.
CUNY Institutions:						
Baruch	44	21.3	51	12.4	69	17.3
Brooklyn	5	2.4	5	1.2	37	9.3
CCNY	8	3.9	70	17.1	43	10.8
Hunter	31	15.0	57	13.9	49	12.3
John Jay	11	5.3	9	2.2	25	6.3
Lehman	2	1.0	136	33.2	7	1.8
Medgar Evers	2	1.0	0	0.0	9	2.3
Queens	55	26.6	10	2.4	22	5.5
Richmond	3	1.5	6	1.5	28	7.0
York	27	13.0	4	1.0	13	3.3
Unspecified	0	0.0	1	0.2	5	1.3
Private Colleges	12	5.8	51	12.4	78	19.6
SUNY Institutions	6	2.9	10	2.4	9	2.3
Other Institutions	1	0.5	0	0.0	4	1.0
Total	207		410		398	
Missing Cases <sup>a</sup>						

<sup>a</sup>Could not be calculated due to inadequate data base



Table 27

Current College Status  
(Transfer Students Only)

Status	Sample Group (Graduates)					
	LaGuardia		College "A"		College "B"	
	N	Pct.	N	Pct.	N	Pct.
Sophomores						
Full-Time	6	2.9	2	0.5	12	3.0
Part-Time	1	0.5	9	2.2	13	3.2
Junior						
Full-Time	39	19.1	25	6.0	61	15.1
Part-Time	42	20.6	35	8.4	82	20.3
Senior						
Full-Time	69	33.8	94	22.4	57	14.1
Part-Time	13	6.4	43	10.3	41	10.2
Graduated with Degree	17	8.3	173	41.3	104	25.7
Terminated, No Degree	16	7.8	23	5.5	27	6.7
Other	1	0.5	15	3.6	7	1.7
Total	204		419		404	
Missing Cases <sup>a</sup>						

<sup>a</sup>Could not be calculated due to inadequate data base

Table 28

Number of Senior College Credits Earned  
(Terminated Transfer Students Only)<sup>a</sup>

Number of Credits	S a m p l e G r o u p (G r a d u a t e s)					
	LaGuardia		College "A"		College "B"	
	N	Pct.	N	Pct.	N	Pct.
1 - 10	6	37.5	6	25.0	4	26.7
11 - 20	6	37.5	5	20.8	5	33.3
21 - 30	2	12.5	4	16.7	1	6.7
31 - 40	0	0.0	4	16.7	2	13.3
41 - 50	2	12.5	4	16.7	1	6.7
51 - 60	0	0.0	0	0.0	1	6.7
61 - 70	0	0.0	1	4.2	1	6.7
Total	16		24		15	
Missing Cases <sup>b</sup>						
Minimum	6		7		6	
Maximum	48		78		67	
Mean	16.25		21.9		22.0	
Std. deviation	12.69		14.94		20.52	

<sup>a</sup>Due to the very small rate of return on these items, these data are not considered reliable

<sup>b</sup>Could not be calculated due to inadequate data base

Table 29

Major at Transfer Institutions  
(Transfer Students Only)

<u>Major (Cluster Group)</u>	<u>S a m p l e G r o u p (G r a d u a t e s)</u>					
	<u>LaGuardia</u>		<u>College "A"</u>		<u>College "B"</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Accounting	37	19.9	26	6.8	30	8.0
Allied Health	3	1.6	45	11.7	38	10.2
Business	17	9.1	36	9.4	56	15.0
Human Services	37	19.9	64	16.6	80	21.5
Humanities	21	11.3	61	15.8	20	5.4
Pre-professional	1	0.5	7	1.8	2	0.5
Natural Sciences	4	2.2	22	5.7	26	7.0
Social Sciences	53	28.5	92	23.9	38	10.2
Technical Studies	7	3.8	22	5.7	62	16.6
Other	6	3.2	10	2.6	21	5.6
<b>Total</b>	<b>186</b>		<b>385</b>		<b>373</b>	
Missing Cases <sup>a</sup>						

<sup>a</sup>Could not be calculated due to inadequate data base

Table 30

Plans to Attend Graduate School  
(Transfer Students Only)

Response	Sample Group (Graduates)					
	LaGuardia		College "A"		College "B"	
	N	Pct.	N	Pct.	N	Pct.
Have attended (am attending) grad school <sup>a</sup>	N.A.	N.A.	3	17.4	39	9.3
Have not attended but plan to attend	107	56.0	115	51.2	208	49.8
Have not attended, and do not plan to	84	44.0	76	18.1	98	23.4
Have not attended (future plans not indicated)	N.A.	N.A.	56	13.3	73	17.5
Total	191		420		418	
Missing Cases <sup>b</sup>	5	2.6	-- <sup>b</sup>		-- <sup>b</sup>	

<sup>a</sup>Because LaGuardia respondents all graduated too recently to have attended graduate school, they were asked only if whether or not they planned to attend. College "A" and College "B" graduates, many of whom have graduated from 4-year colleges, were asked if they were attending or had attended graduate school

<sup>b</sup>Could not be calculated due to inadequate data base

Table 31

Graduate Degree Planned  
(Transfer Students with Advanced Study Plans Only)

Degree	Sample Group (Graduates)					
	LaGuardia		College "A"		College "B"	
	N	Pct.	N	Pct.	N	Pct.
Master's	44	67.7	176	76.2	113	58.6
Professional Master's	15	23.1	46	19.9	70	36.3
Academic Doctorate	3	4.6	7	3.0	6	3.1
Professional Doctorate	1	1.5	2	0.9	3	1.6
Professional Certificate	2	3.1	0	0.0	1	0.5
Total	65		231		193	
Missing Cases	42	39.3	57	19.8	54	21.9

Table 32

Area of Planned Graduate Study  
(Transfer Students with Advanced Study Plans Only)

Study Area	Sample Group (Graduates)					
	LaGuardia		College "A"		College "B"	
	N	Pct.	N	Pct.	N	Pct.
Accounting	6	7.0	12	4.9	8	3.5
Allied Health	3	3.5	28	11.4	27	11.8
Business	9	10.5	36	14.6	50	21.9
Human Services	32	37.2	91	37.0	76	33.3
Humanities	8	9.3	20	8.1	5	2.2
Pre-Professional	4	4.7	9	3.7	8	3.5
Natural Sciences	0	0.0	10	4.1	13	5.7
Social Sciences	21	24.4	29	11.8	14	6.1
Technical Studies	3	3.5	7	2.8	17	7.5
Non-classifiable	0	0.0	4	1.6	10	4.4
Total	86		246		228	
Missing Cases	21	19.6	42	14.6	19	7.7

Table 33

Full-Time Jobs of More Than Three Months' Duration  
Held During Period of Attendance<sup>a</sup>

Response	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Yes	78	26.2	18	23.4	189	37.1	286	44.5
No	220	73.8	59	76.6	320	62.9	356	55.5
Total	298		77		509		642	
Missing Cases	32	9.7	9	10.5	29	5.4	45	6.6

<sup>a</sup>For LaGuardia students, job(s) specified as other than cooperative education internship(s)

Table 34

Reason for Terminating Studies  
(LaGuardia Non-Graduates Only)

<u>Reason</u>	<u>LaGuardia Non-Graduates</u>	
	<u>N</u>	<u>Pct.</u>
Family, Personal	16	22.2
Work, Job	13	18.1
Financial	7	9.7
Continued Schooling Elsewhere	7	9.7
Disliked Curriculum	6	8.3
Disinterested in School	5	6.9
Other <sup>a</sup>	18	25.0
Total	72	
Missing Cases	14	16.3



Table 35

## Work Since Graduation or Termination

Status	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Some work	267	86.4	76	90.5	442	89.8	587	90.9
Never worked	42	13.6	8	9.5	50	10.2	59	9.1
Total	309		84		492		646	
Missing Cases	21	6.4	2	2.3	46	8.6	41	6.0

Table 36

Working Alumni:  
Continuity of Employment

Employment History Since Graduation/Termination	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Continuous	182	65.9	49	63.6	320	67.2	442	70.8
Non-continuous	94	34.1	28	36.4	156	32.8	182	29.2
Total	276		77		476		624	
Missing Cases <sup>a</sup>								

<sup>a</sup>Could not be calculated due to inadequate data base

Table 37

Non-Continuously-Employed Working Alumni:  
Duration of Unemployment

Duration	S a m p l e   G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1 - 4 Months	21	44.7	6	24.0	7	15.2	38	39.6
5 - 9 Months	19	40.4	9	36.0	15	32.6	24	25.0
10 - 14 Months	3	6.4	4	16.0	8	17.4	10	10.4
15 - 19 Months	3	6.4	1	4.0	8	17.4	6	6.3
20 - 24 Months	1	2.1	3	12.0	3	6.5	7	7.3
25 - 29 Months	0	0.0	2	8.0	1	2.2	4	4.2
30 - 34 Months	0	0.0	0	0.0	2	4.3	1	1.0
35 Months or more	0	0.0	0	0.0	2	4.3	6	6.3
Total	47		25		46		96	
Missing Cases	47	50.0	3	10.7	110	70.5	86	47.3
Minimum		1.0		1.0		1.0		1.0
Maximum		24.0		27.0		44.0		60.0
Mean		6.0		10.4		12.9		10.9
Std. deviation		4.8		8.2		9.9		11.5

Table 38

Working Alumni: Classification of  
First Employment Following Graduation/Termination<sup>a</sup>

Employer Type	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Agriculture, Forestry, Fisheries	0	0.0	0	0.0	1	0.2	1	0.2
Business & Repair Services	0	0.0	1	1.7	9	2.1	27	
Child Care Centers	5	2.0	0	0.0	3	0.7	11	
Communications	8	3.3	3	5.0	15	3.5	16	
Construction	0	0.0	0	0.0	3	0.7	10	1.9
Entertainment, Recreation	19	7.9	6	10.0	45	10.5	122	22.6
Finance, Insurance & Real Estate	47	19.6	9	15.0	37	8.7	34	8.0
Health Services	7	2.9	3	5.0	109	25.5	94	17.4
Manufacturing-Durable Goods	4	1.7	1	1.7	17	4.0	15	2.8
Manufacturing-Non- Durable Goods	22	9.2	5	8.3	19	4.4	33	6.1
Personal Services	3	1.2	1	1.7	6	1.4	4	0.7
Public Administration	12	5.0	4	6.7	29	6.8	67	12.4
Schools	53	22.1 <sup>b</sup>	4	6.7 <sup>b</sup>	63	14.8	35	6.5
Trade-Wholesale & Retail	20	8.3	8	13.3	62	14.5	52	9.6
Transportation	12	5.0	3	5.0	7	1.6	10	1.9
Utilities & Sanitation	1	0.4	2	3.3	2	0.5	8	1.5
Other	27	11.2	10	16.7	0	0.0	1	0.2
Total	240		60		427		540	
Missing Cases	27	10.1	16	21.0	15	3.4	47	8.0

<sup>a</sup>Based on positive responses to the question, "Have you ever worked since you graduated from-----?" listed as "Some work" in Table 35

<sup>b</sup>The striking difference in the rate of employment by schools among LaGuardia graduates and non-completers may be explained by the fact that the former population includes a substantial number of certified education paraprofessionals

Table 39

Working LaGuardia Alumni: Relation of First  
 Post-Graduation/Termination Employment to Prior  
 Cooperative Education Internships

Internship/Employment Relationship	S a m p l e G r o u p			
	LaGuardia Graduates		LaGuardia Non-Graduates	
	N	Pct.	N	Pct.
Job Developed from Internship	88	33.3	16	21.9
Job Not Developed from Internship	176.	66.7	57	78.1
Total	264		73	
Missing Cases	3	1.1	3	4.0

Table 40

Working Alumni: Duration of Employment in  
First Post-Graduation/Termination Position

Duration, Months	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1 - 4	28	11.9	10	16.1	41	9.7	51	9.4
5 - 9	32	13.6	7	11.3	58	13.7	74	13.7
10 - 14	42	17.9	10	16.1	40	9.5	51	9.4
15 - 19	36	15.3	6	9.7	27	6.4	45	8.3
20 - 24	30	12.8	8	12.9	54	12.8	65	12.0
25 - 29	6	2.6	1	1.6	6	1.4	4	0.7
30 - 34	7	3.0	4	6.5	9	2.1	27	5.0
35 or more	54	23.0	16	25.8	187	44.3	223	41.3
Total	235		62		422		540	
Missing Cases	5	2.1	-- <sup>a</sup>		5	1.2	0	0.0
Minimum		1.0		1.0		1.0		1.0
Maximum		124.0		90.0		108.0		108.0
Mean		26.2		24.4		38.8		37.9
Std. deviation		27.4		21.6		33.8		34.0

<sup>a</sup>Although the size-of-sample base for this item has been assumed to be the number of respondents listed in Table 38 (60 for non-graduates), 2 additional individuals responded here

Table 41

Working Alumni:  
Duration of Service with First Employer Compared  
With Time Since Graduation or Termination<sup>a</sup>

Comparison	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Employed <i>longer</i>	88	26.7 <sup>b</sup>	22	25.6	193	35.9	273	39.8
Employed <i>same duration</i> or <i>less</i>	241	73.3	64	74.4	345	64.1	413	60.2
Total	329		86		538		686	
Missing Cases	1	0.3	0	0.0	0	0.0	1	0.1

<sup>a</sup>Returns from students indicated that, in many cases, the "first employer" (i.e., the employer immediately following graduation from community college) had been the student's employer prior to graduation as well, often for long periods of time. (The percentage of such students is given in the first category above.)

<sup>b</sup>Many of these cases include citation of former internships as the initial date of employment

Table 42

Working Alumni: Weekly Time-on-Job in First  
Post-Graduation/Termination Position<sup>a</sup>

Hours/Week	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
0 - 9	5	2.0	1	1.5	14	3.3	12	2.2
10 - 19	11	4.5	1	1.5	32	7.5	23	4.2
20 - 29	45	18.3	9	13.6	58	13.6	51	9.3
30 - 39	127	51.6	28	42.4	179	42.0	228	41.5
40 - 49	55	22.4	26	39.4	136	31.9	223	40.5
50 and over	3	1.2	1	1.5	7	1.6	13	2.4
Total	246		66		426		550	
Missing Cases	21	7.9	10	13.2	16	3.6	37	6.3
Minimum		5.0		1.0		3.0		2.0
Maximum		80.0		90.0		75.0		90.0
Mean		32.9		35.3		33.3		35.4
Std deviation		8.7		21.6		9.9		8.8

<sup>a</sup>See footnote a, Table 38



Table 43

Working Alumni: Job-Title Classification in First  
Post-Graduation/Termination Position<sup>a</sup>

Title Classification	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Laborers, Farm Laborers, Service Workers	4	1.7	3	4.5	28	6.5	59	10.7
Operatives, Farmers	8	3.4	1	1.5	10	2.3	16	2.9
Sales II, Clerical II, Craftsmen II	79	33.6	36	53.7	163	38.0	233	42.1
Sales I, Clerical I, Craftsmen I, Technical II	136	57.9	26	38.8	106	24.7	160	28.9
Professional II, Technical I, Managers	8	3.4	1	1.5	120	28.0	83	15.0
Professional I, Administrators	0	0.0	0	0.0	0	0.0	0	0.0
Non-classifiable	0	0.0	0	0.0	2	0.5	2	0.4
Total	235		67		429		553	
Missing Cases	32	12.0	9	11.8	63	12.8	44	7.5
Rank Index <sup>b</sup>		3.58		3.31		3.69		3.40

<sup>a</sup>See footnote a, Table 38

<sup>b</sup>Weighted mean based on Laborers=1, Operatives=2, ..., Professional I=6  
(Non-classifiable not included)

Table 44

Working Alumni: Starting Annual Salary in First  
Post-Graduation/Termination Position

Annual Salary	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Less than \$2,500	15	7.6	3	5.9	27	7.6	17	3.6
\$ 2,500 - 4,999	25	12.7	5	9.8	58	16.3	63	13.5
5,000 - 7,499	78	39.6	30	58.8	108	30.4	140	29.9
7,500 - 9,999	66	33.5	10	19.6	74	20.8	162	34.6
10,000 - 12,499	12	6.1	2	3.9	71	20.0	77	16.5
12,500 - 14,999	0	0.0	1	2.0	15	4.2	6	1.3
\$15,000 or more	1	0.5	0	0.0	2	0.6	3	0.6
Total	197		51		355		468	
Missing Cases	43	17.9	9	15.0	72	16.9	72	13.3
Minimum		\$1,092		\$1,500		\$600		\$390
Maximum		15,000		14,000		18,000		18,000
Mean		6,517		6,554		7,168		7,350
Std. deviation		2,405		2,276		3,207		2,678

Table 45

Graduates: Distribution of Starting Salaries.  
as a Function of Curriculum<sup>a</sup>

Curriculum	Sample Groups		
	LaGuardia	College "A"	College "B"
<b>Business<sup>b</sup></b>			
N	39	47	16
Mean	\$6942	\$6664	\$7819
Std. dev.	\$2123	\$2690	\$3503
<b>Technical Studies</b>			
N	20	26	100
Mean	\$7535	\$7445	\$7377
Std. dev.	\$2369	\$2510	\$2706
<b>Liberal Arts</b>			
N	45	128	36
Mean	\$5812	\$5744	\$6365
Std. dev.	\$2872	\$2996	\$2966
<b>Secretarial Science</b>			
N	40	23	49
Mean	\$7245	\$6724	\$7614
Std. dev.	\$1863	\$1728	\$1137
<b>Total N</b>	<b>144</b>	<b>224</b>	<b>201</b>
<b>Missing Cases</b>	<b>68</b>	<b>117</b>	<b>99</b>
<b>Grand Mean</b>	<b>\$6756</b>	<b>\$6235</b>	<b>\$7289</b>

<sup>a</sup>This analysis has been restricted to the four curriculum cluster areas of Business, Technical Studies, Liberal Arts, and Secretarial Science. Other areas were excluded due to sample deficiencies in one or more of the participating colleges

<sup>b</sup>LaGuardia sample includes only Business Administration graduates

Table 46

Working Alumni: Classification of  
Current Employment<sup>a</sup>

Employer Type	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Agriculture, Forestry, Fisheries	1	0.5	0	0.0	5	1.4	3	0.6
Business & Repair Services	0	0.0	2	3.6	5	1.4	17	3.5
Child Care Centers	5	2.4	1	1.8	1	0.3	12	2.4
Communications	8	3.9	1	1.8	18	4.9	13	2.6
Construction	0	0.0	0	0.0	0	0.0	5	1.0
Entertainment, Recreation, Related Services	17	8.3	9	16.1	38	10.3	105	21.3
Finance, Insurance & Real Estate	39	18.9	8	14.3	34	9.2	41	8.3
Health Services	5	2.4	4	7.1	95	25.7	89	18.1
Manufacturing-Durable Goods	4	1.9	3	5.4	10	2.7	17	3.5
Manufacturing-Non-Durable Goods	20	9.7	0	0.0	16	4.3	27	5.5
Personal Services	4	1.9	2	3.6	3	0.8	4	0.8
Public Administration	11	5.3	3	5.4	27	7.3	60	12.2
Schools	42	20.4	3	5.4	69	18.7	48	9.7
Trade-Wholesale & Retail	14	6.8	3	5.4	40	10.8	33	6.7
Transportation	7	3.4	2	3.6	5	1.4	8	1.6
Utilities & Sanitation	3	1.5	3	5.4	3	0.8	8	1.6
Other	26	12.6	12	21.4	1	0.3	3	0.6
Total	206		56		370		493	
Missing Cases	61	22.0	20	26.3	72	16.3	94	16.0

<sup>a</sup>At time of completion of questionnaire (roughly between December, 1975 and February, 1976). See footnote a, Table 38

Table 47

Working Alumni: Change-of-Type-of-Employer Status  
Since First Post-Graduation/Termination Position

Status	S a m p l e    G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Same Employer Type	141	42.7	32	37.2	280	52.0	385	56.0
Different Employer Type	47	14.2	16	18.6	73	13.6	79	11.5
Currently Unemployed	26	7.9	12	14.0	53	9.9	54	7.9
Insufficient Information	116	35.2	26	30.2	132	24.5	169	24.6
Total	330		86		538		687	

Table 48

Working Alumni: Job-Title Mobility Since  
First Post-Graduation/Termination Position

Title Status	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Promotion	121	36.7	34	39.5	215	40.0	346	50.4
No Change	65	19.7	16	18.6	127	23.6	78	11.4
Lateral Move	4	1.2	2	2.3	3	0.6	7	1.0
Lower Level	1	0.3	0	0.0	8	1.5	12	1.7
Insufficient Information	139	42.1	34	39.5	185	34.4	244	35.5
Total	330		86		538		687	

Table 49

Working Alumni:  
Weekly Time-On-Job in Current Position

Hours/Week	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
0 - 9	3	1.5	2	3.8	15	4.2	15	3.1
10 - 19	12	6.2	1	1.9	21	5.8	14	2.9
20 - 29	37	19.1	2	3.8	45	12.5	43	9.0
30 - 39	90	46.4	23	44.2	175	48.6	211	44.2
40 - 49	49	25.3	23	44.2	95	26.4	187	39.2
50 and over	3	1.5	1	1.9	9	2.5	7	1.5
Total	194		52		360		477	
Missing Cases	12	5.8	4	7.1	10	2.7	16	3.4
Minimum		5.0		6.0		4.0		5.0
Maximum		80.0		50.0		90.0		75.0
Mean		33.0		36.1		33.6		35.3
Std. deviation		9.0		7.5		10.4		8.4

Table 50

Working Alumni: Job-Title  
Classification in Current Position

Title Classification	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Laborers, Farm Laborers, Service Workers	3	1.5	1	1.8	7	1.9	33	6.8
Operatives, Farmers	2	1.0	1	1.8	4	1.1	10	2.0
Sales II, Clerical II, Craftsmen II	26	12.9	14	24.6	82	21.8	150	30.7
Sales I, Clerical I, Craftsmen I, Technical II	148	73.3	35	61.4	115	30.6	183	37.5
Professional II, Technical I, Managers	20	9.9	6	10.5	163	43.4	111	22.7
Professional I, Administrators	2	1.0	0	0.0	2	0.5	1	0.2
Non-classifiable	1	0.5	0	0.0	3	0.8	0	0.0
Total	202		57		376		488	
Missing Cases <sup>a</sup>								
Rank Index <sup>b</sup>	3.91		3.77		4.12		3.68	

<sup>a</sup>Could not be calculated due to inadequate data base

<sup>b</sup>Weighted mean based on Laborers=1, Operatives=2, ..., Professional I=6  
(Non-classifiable not included)



Table 5i

## Working Alumni: Current Annual Salary

Annual Salary	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
Less than \$2,500	5	2.8	3	6.5	11	3.3	5	1.1
\$ 2,500 - 4,999	10	5.5	2	4.3	19	5.6	17	3.9
5,000 - 7,499	45	24.9	13	28.3	45	13.4	54	12.4
7,500 - 9,999	72	39.8	16	34.8	66	19.6	106	24.4
10,000 - 12,499	34	18.8	9	19.6	72	21.4	106	24.4
12,500 - 14,999	6	3.3	1	2.2	75	22.3	79	18.2
\$15,000 or more	9	5.0	2	4.3	49	14.5	68	15.6
Total	181		46		337		435	
Missing Cases	15	7.7	10	17.9	33	8.9	58	11.8
Minimum	\$1,300		\$1,400		\$832		\$800	
Maximum	39,000		18,000		27,000		35,900	
Mean	8,648		8,325		10,713		10,992	
Std. deviation	3,770		3,202		4,280		4,370	

Table 52

Graduates: Distribution of Current Salaries  
as a Function of Curriculum<sup>a</sup>

Curriculum	Sample Groups		
	LaGuardia	College "A"	College "B"
<b>Business<sup>b</sup></b>			
N	35	47	13
Mean	\$10420	\$11113	\$12935
Std. dev.	\$5918	\$4233	\$5821
<b>Technical Studies</b>			
N	19	26	88
Mean	\$10028	\$13829	\$13513
Std. dev.	\$2652	\$5449	\$5760
<b>Liberal Arts</b>			
N	37	118	34
Mean	\$7419	\$9198	\$9356
Std. dev.	\$4030	\$4297	\$3687
<b>Secretarial Science</b>			
N	33	22	49
Mean	\$8620	\$9398	\$9486
Std. dev.	\$1938	\$2940	\$1514
Total N	124	213	184
Missing Cases	88	128	116
Grand Mean	\$8985	\$10206	\$11632

<sup>a</sup>This analysis has been restricted to the four curriculum cluster areas of Business, Technical Studies, Liberal Arts, and Secretarial Science. Other areas were excluded due to sample inadequacies in one or more of the participating colleges

<sup>b</sup>LaGuardia sample includes only Business Administration graduates

Table 53

Working Alumni:  
Duration of Employment in Current Position

Duration	Sample Groups							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
1 - 4 Months	24	13.0	8	14.0	33	9.5	46	9.9
5 - 9 Months	25	13.6	8	14.0	52	14.9	70	15.1
10 - 14 Months	28	15.2	4	7.0	29	8.3	33	7.1
15 - 19 Months	26	14.1	6	10.5	30	8.6	45	9.7
20 - 24 Months	25	13.6	11	19.3	48	13.8	57	12.3
25 - 29 Months	3	1.6	1	1.8	5	1.4	6	1.3
30 - 34 Months	5	2.7	3	5.3	7	2.0	23	4.9
35 Months or more	48	26.1	16	28.1	145	41.5	185	39.8
Total	184		57		349		465	
Missing Cases	22	10.7	-- <sup>a</sup>		21	5.7	28	5.7
Minimum		1.0		1.0		1.0		0.0
Maximum		124.0		90.0		108.0		108.0
Mean		28.5		24.8		38.1		36.4
Std. deviation		29.9		20.8		34.4		33.3

<sup>a</sup>Although the size-of-sample base for this item has been assumed to be the number of respondents listed in Table 46 (56 for non-graduates), 1 additional individual responded here

Table 54

Working Alumni: Number of Different  
Employers Since Graduation/Termination

Number of Employers	S a m p l e G r o u p s							
	LaGuardia				College "A"		College "B"	
	Grads		Non-Grads		Grads		Grads	
	N	Pct.	N	Pct.	N	Pct.	N	Pct.
One	170	69.7	45	60.8	256	58.7	359	64.0
Two	53	21.7	20	27.0	107	24.5	131	23.4
Three	18	7.4	6	8.1	43	9.9	41	7.3
Four	1	0.4	1	1.4	16	3.7	20	3.6
Five or more	2	0.8	2	2.7	14	3.2	10	1.8
Total	244		74		436		561	
Missing Cases <sup>a</sup>								
Minimum	1.0		1.0		1.0		1.0	
Maximum	5.0		5.0		5.0		5.0	
Mean	1.4		1.6		1.7		1.6	
Std. deviation	0.7		0.9		0.9		1.0	

<sup>a</sup>Could not be calculated due to inadequate data base

Table 55

## LaGuardia Students: Admission Status

<u>Admission status</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Admitted through University Applications Processing Center				
H.S. average >80.0	15	4.5	3	3.5
H.S. average 75.0-79.9	23	7.0	4	4.7
H.S. average 70.0-74.9	35	10.6	13	15.1
H.S. average <70.0	25	7.6	9	10.5
H.S. average undetermined	134	40.6	39	45.3
Direct admits	31	9.4	3	3.5
Extended Day Session (evening)	50	15.2	14	16.3
Advanced standing	5	1.5	0	0.0
Adapter Program (veterans)	10	3.0	1	1.2
Senior Citizen	1	0.3	0	0.0
Permit	1	0.3	0	0.0
Total	330		86	
Missing Cases	0	0.0	0	0.0

Table 56

## LaGuardia Students: California Achievement Test

Test Section/ Grade Equivalent Range	Graduates (N=225) <sup>a</sup>		Non-Grads (N=66) <sup>b</sup>	
	N	Pct.	N	Pct.
<b>Reading</b>				
Below 6.0	1	0.4	1	1.5
6.0-7.9	12	5.3	7	10.6
8.0-9.9	58	25.8	11	16.7
10.0-11.9	53	23.6	17	25.8
12.0-12.9	47	20.9	15	22.7
13.0 and above	54	24.0	15	22.7
Mean	11.7		11.2	
<b>Mathematics</b>				
Below 6.0	4	1.8	4	6.1
6.0-7.9	34	15.1	8	12.1
8.0-9.9	68	30.2	20	30.3
10.0-11.9	46	20.4	14	21.2
12.0-12.9	22	9.8	7	10.6
13.0 and above	51	22.7	13	19.7
Mean	10.2		10.1	
<b>Language</b>				
Below 6.0	12	5.3	5	7.6
6.0-7.9	12	5.3	3	4.5
8.0-9.9	58	25.8	22	33.3
10.0-11.9	57	25.3	15	22.7
12.0-12.9	33	14.7	4	6.1
13.0 and above	53	23.6	17	25.8
Mean	10.8		10.4	
<b>Battery Total</b>				
Below 6.0	2	0.9	1	1.5
6.0-7.9	19	8.4	7	10.6
8.0-9.9	64	28.4	18	27.3
10.0-11.9	62	27.6	15	22.7
12.0-12.9	14	6.2	7	10.6
13.0 and above	64	28.4	18	27.3
Mean	10.9		10.6	

<sup>a</sup>105 missing cases (31.8 percent of sample)

<sup>b</sup>20 missing cases (23.3 percent of sample)

Table 57

LaGuardia Students: Credits Attempted at LaGuardia

<u>Credits Attempted<sup>a</sup></u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
0.0-9.9	0	0.0	1	1.2
10.0-19.9	0	0.0	4	4.7
20.0-29.9	2	0.6	11	12.8
30.0-39.9	2	0.6	14	16.3
40.0-49.9	7	2.1	11	12.8
50.0-59.9	38	11.5	19	22.1
60.0-69.9	209	63.3	12	14.0
70.0-79.9	61	18.5	10	11.6
80.0 and above	11	3.3	4	4.7
Total	330		86	
Missing Cases	0	0.0	0	0.0
Minimum	27.0		3.0	
Maximum	96.0		99.0	
Mean	65.0		48.2	
Standard Deviation	8.15		19.22	

<sup>a</sup>Due to the admission of a few students with advanced-standing status, some individuals who have graduated have attempted relatively few credits at LaGuardia

Table 58

## LaGuardia Students: Credits Earned at LaGuardia

<u>Credits Earned<sup>a</sup></u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
0.0-9.9	0	0.0	9	10.5
10.0-19.9	0	0.0	17	19.8
20.0-29.9	2	0.6	14	16.3
30.0-39.9	2	0.6	19	22.1
40.0-49.9	9	2.7	9	10.5
50.0-59.9	51	15.5	12	14.0
60.0-69.9	260	78.8	6	7.0
70.0-79.9	6	1.8	0	0.0
Total	330		86	
Missing Cases	0	0.0	0	0.0
Minimum	27.0		0.0	
Maximum	78.0		67.0	
Mean	62.3		31.8	
Standard Deviation	6.24		17.40	

<sup>a</sup>Due to the admission of a few students with advanced-standing status, some individuals who have graduated have earned relatively few credits at LaGuardia



Table 59

LaGuardia Students: Efficiency Ratio (Percentage of Attempted Credits Passed) at LaGuardia

<u>Efficiency Ratio</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Zero	0	0.0	1	1.2
1-20	0	0.0	3	3.5
21-40	0	0.0	11	12.8
41-60	0	0.0	21	24.4
61-80	15	4.5	30	34.9
81-100	315	95.5	20	23.3
Total	330		86	
Missing Cases	0	0.0	0	0.0
Minimum	68.0		0.0	
Maximum	100.0		100.0	
Mean	96.0		63.9	
Standard Deviation	6.14		23.30	

Table 60

## LaGuardia Students: Grade-Point Average at LaGuardia

<u>Grade-Point Average<sup>a</sup></u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
0.00	0	0.0	1	1.2
0.01-0.50	0	0.0	11	12.8
0.51-1.00	0	0.0	21	24.4
1.01-1.50	41	12.4	31	36.0
1.51-2.00	91	27.6	12	14.0
2.01-2.50	131	39.7	9	10.5
2.51-3.00	67	20.3	1	1.2
Total	330		86	
Missing Cases	0	0.0	0	0.0
Minimum		1.12		0.00
Maximum		2.94		2.88
Mean		2.10		1.22
Standard Deviation		0.44		0.59

<sup>a</sup>Using LaGuardia's then-non-traditional grading system, and based on the values of E(xcellent)=3, G(ood)=2, P(ass)=1, and N(o credit)=0. This grading system has recently been replaced by a more traditional type

Table 61

LaGuardia Students: Number of Quarters Active

<u>Number of Quarters<sup>a</sup></u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Zero	0	0.0	1	1.2
1-2	0	0.0	7	8.1
3-4	3	0.9	24	27.9
5-6	16	4.8	25	29.1
7-8	241	73.0	17	19.8
9-10	54	16.4	12	14.0
11-12	15	4.5	0	0.0
13-14	1	0.3	0	0.0
Total	330		86	
Missing Cases	0	0.0	0	0.0
Minimum	3.0		0.0	
Maximum	14.0		10.0	
Mean	8.1		5.5	
Standard Deviation	1.23		2.44	

<sup>a</sup>Due to the admission of a few students with advanced-standing status, some students have graduated despite having relatively few quarters of active status

Table 62

1972 LaGuardia Cohort: Diploma Type

<u>Diploma</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Academic	54	45.8	18	52.9
General	26	22.0	7	20.6
Vocational	1	0.8	2	5.9
Commercial	31	26.3	7	20.6
Technical	1	0.8	0	0.0
General Equivalency	1	0.8	0	0.0
Don't know	4	3.4	0	0.0
Total	118		34	
Missing Cases	1	0.8	0	0.0

Table 63

1972 LaGuardia Cohort:  
Marital, Citizenship, and Veteran Status

<u>Status Category</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
<b>Marital status</b>				
Single	113	97.4	30	100.0
Married	3	3.6	0	0.0
Total	<u>116</u>		<u>30</u>	
Missing Cases	3	2.5	2	6.3
<b>Citizenship status</b>				
Citizen of U.S.	106	89.1	31	96.9
Non-U.S. citizen	13	10.9	1	3.1
Total	<u>119</u>		<u>32</u>	
Missing Cases	0	0.0	0	0.0
<b>Veteran status</b>				
Veteran	2	1.7	2	6.5
Non-veteran	115	98.3	29	93.5
Total	<u>117</u>		<u>31</u>	
Missing Cases	2	1.7	1	3.1

Table 64

1972 LaGuardia Cohort:  
Occupation Prior to Matriculation

<u>Occupation</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
High school	105	90.5	27	84.4
Work	8	6.9	2	6.3
Seeking work	1	0.9	1	3.1
Armed forces	1	0.9	1	3.1
Other	1	0.9	1	3.1
Total	116		32	
Missing Cases	3	2.5	0	0.0

Table 65

## 1972 LaGuardia Cohort: Ethnic Derivation.

<u>Ethnicity</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
White	79	68.1	21	67.7
Black	16	13.8	7	22.6
Puerto Rican born stateside	5	4.3	1	3.2
Puerto Rican born P.R.	2	1.7	1	3.2
Other Spanish-surnamed	8	6.9	0	0.0
Oriental	5	4.3	1	3.2
West Indian, etc.	1	0.9	0	0.0
Total	116		31	
Missing Cases	3	2.5	1	3.1

Table 66

1972 LaGuardia Cohort:  
Primary Language Spoken at Home

<u>Language</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
English	95	81.2	25	80.6
Spanish	13	11.1	2	6.5
Italian	2	1.7	2	6.5
Greek	3	2.6	0	0.0
Slavic	1	0.9	1	3.2
Oriental	3	2.6	1	3.2
Total	117		31	
Missing Cases	2	1.7	1	3.1



Table 67

1972 LaGuardia Cohort:  
Major Reason for Going to College

<u>Reason</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Career preparation	98	83.1	25	80.6
Just for an education	3	2.5	5	16.1
Nothing else to do	17	14.4	1	3.2
Total	118		31	
Missing Cases	1	0.8	1	3.1

Table 68

1972 LaGuardia Cohort: Family Income

<u>Income</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Less than \$4000	12	12.0	1	3.3
\$4000-\$9999	57	57.0	16	53.3
\$10,000-\$14,999	21	21.0	12	40.0
\$15,000-\$19,999	9	9.0	1	3.3
\$20,000 and above	1	1.0	0	0.0
Total	100		30	
Missing Cases	19	16.0	2	6.3

Table 69

1972 LaGuardia Cohort:  
Income Sources and Responsibilities

	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
<b>Main source of income</b>				
Parents	81	68.1	18	58.1
Spouse	1	0.8	1	3.2
Job	24	20.2	9	29.0
Scholarship; fellowship, etc.	3	2.5	3	9.7
Loan	1	0.8	0	0.0
Savings	8	6.7	0	0.0
G.I. Bill, etc.	1	0.8	0	0.0
Total	<u>119</u>		<u>31</u>	
Missing Cases	0	0.0	1	3.1
<b>Family-support responsibility</b>				
None	90	76.9	21	67.7
Under \$500	19	16.2	7	22.6
\$500-\$999	7	6.0	3	9.7
\$1000 and above	1	0.9	0	0.0
Total	<u>117</u>		<u>31</u>	
Missing Cases	2	1.7	1	3.1

Table 70

1972 LaGuardia Cohort: Importance to Parents  
of Student's Attending College

<u>Importance</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Not very	5	4.2	7	22.6
Fairly	29	24.4	4	12.9
Quite	53	44.5	11	35.5
Extremely	32	26.9	9	29.0
Total	119		31	
Missing Cases	0	0.0	1	3.1

Table 71

## 1972 LaGuardia Cohort: Education of Students' Parents

<u>Highest Level Attended</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
<b>Mother</b>				
Graduate school	4	3.6	1	3.3
College	8	7.1	4	13.3
High school	69	61.6	18	60.0
Grade school	20	17.9	5	16.7
Don't know	11	9.8	2	6.7
Total	<u>112</u>		<u>30</u>	
Missing Cases	5	4.2	2	6.3
<b>Father</b>				
Graduate school	1	0.9	0	0.0
College	14	12.5	3	9.7
High school	66	58.9	21	67.7
Grade school	17	15.2	5	16.1
Don't know	14	12.5	2	6.5
Total	<u>112</u>		<u>31</u>	
Missing Cases	7	5.9	1	3.1

Table 72

1972 LaGuardia Cohort: Plans for the Future

	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
<b>Plans For Education</b>				
<b>Beyond Community College</b>				
Yes	32	29.1	10	31.3
No	24	21.8	8	25.0
Undecided	54	49.1	14	43.8
Total	110		32	
Missing Cases	5	4.2	0	0.0
<b>Certainty About Career</b>				
<b>in Area of Curriculum</b>				
Yes, in area	81	71.7	17	54.8
No, not in area	3	2.7	0	0.0
Undecided	29	25.7	14	45.2
Total	113		31	
Missing Cases	6	5.0	1	3.1

Table 73

1972 LaGuardia Cohort:  
Future Occupational Preference

<u>Indicated Choice</u>	<u>Graduates</u>		<u>Non-Grads</u>	
	<u>N</u>	<u>Pct.</u>	<u>N</u>	<u>Pct.</u>
Academic	13	11.4	4	12.5
Business	55	48.2	10	31.3
A profession	9	7.9	2	6.3
Crafts, technology	3	2.6	2	6.3
Arts	1	0.9	0	0.0
The home	6	5.3	2	6.3
Miscellaneous	0	0.0	2	6.3
Don't know	27	23.7	10	31.3
Total	114		32	
Missing Cases	5	4.2	0	0.0

Table 74

Participating Employers: Types of Agencies

<u>Company/Agency Type</u>	<u>N</u>	<u>Pct.</u>
Manufacturing	9	26.5
Education & related orgs.	8	23.5
Finance	7	20.6
Legal	4	11.8
Research & related orgs.	3	8.8
Retailing	2	5.9
Health	1	2.9
<i>Total</i>	<u>34</u>	



Table 75

Size of Participating Agencies

Number of Personnel	Total Employees		Non-Supervisory Employees	
	Na	Pct.	Na	Pct.
Under 100	5	20.0	5	26.3
100-250	4	16.0	4	21.1
251-500	7	28.0	4	21.1
501-750	1	4.0	3	15.8
751-1000	2	8.0	1	5.3
1001-2000	3	12.0	2	10.5
Over 2000	3	12.0	0	0.0
<i>Total</i>	25		19	
<i>Missing</i>	9	26.5	15	44.1
<i>Mean</i>		793		427
<i>Std. Dev.</i>		1006		493

<sup>a</sup>Number of agencies in category

Table 76

## Employing Agencies: Internship Statistics

	<u>N</u>	<u>Pct.</u>
<u>A. No. quarters<sup>a</sup> as CE employer</u>		
1-5	4	11.8
6-10	16	47.1
11-15	13	38.2
Over 15	<u>1</u>	2.9
<i>Total</i>	34	
<i>Mean</i>		9.6
<i>Std. Dev.</i>		3.4
<u>B. Total no. interns hired</u>		
0-10	5	14.7
11-20	8	23.5
21-30	12	35.3
31-40	3	8.8
41-50	2	5.9
Over 50	<u>4</u>	11.8
<i>Total</i>	34	
<i>Mean</i>		28.5
<i>Std. Dev.</i>		24.0
<u>C. Interns per quarter</u>		
1.0-1.9	12	35.3
2.0-2.9	11	32.4
3.0-3.9	5	14.7
Over 4.0	<u>6</u>	17.6
<i>Total</i>	34	
<i>Mean</i>		2.9
<i>Std. Dev.</i>		0.4

<sup>a</sup>Three-month periods corresponding to academic quarters at LaGuardia

Table 77

## Attitudes of Management Towards Cooperative Education (CE)

<u>Statement (paraphrased)</u>	N	Agree	Disagr.	No Op.
		Pct.	Pct.	Pct.
Top management supports CE	32	90.6	0.0	9.4
Participate in CE to increase size of manpower resources	32	62.5	21.9	15.6
Plan to continue participation in CE for next few years	33	90.9	0.0	9.1
Participation in CE is good public relations	33	81.8	0.0	18.2
Turn-over of interns creates a problem in work continuity	33	27.3	58.8	12.1
CE interns are an asset to company work force	33	90.9	0.0	9.1
CE grads are more skilled in their (career) work area than non-CE grads	31	45.2	12.9	41.9
Through participation in CE, employer plays important role in higher ed.	33	63.6	12.1	24.2
Participation in CE is too costly in financial outlay or personnel time	33	3.0	87.9	9.1
Supervision of interns is valuable experience for employees	33	54.5	21.2	24.2
Participation in CE has helped us expand	33	33.3	45.5	21.2
Interns develop more mature work attitudes than non-CE peers	33	57.6	18.2	24.2
Participation in CE reduces costs of maintaining large personnel force	33	39.4	45.5	15.2
Expect CE grads to move up career ladder more rapidly	33	51.5	21.2	27.3
Training interns is less costly than training regular employees	33	39.4	42.4	18.2
We hire grads as full-time employees when positions become available	33	72.7	6.1	21.2
Interns understand and accept standard work rules	33	87.9	9.1	3.0
Participation in CE provides greater flexibility in regular personnel allocation	32	68.8	12.5	18.8
Participation in CE provides larger range of skills among employees	33	54.5	27.3	18.2

Table 78

Management Attitudes: Summary of Positive Responses to Statements about Cooperative Education<sup>a</sup>

<u>Percent Positive Responses<sup>b</sup></u>	<u>N</u>	<u>Pct.</u>
91-100	8	24.2
81-90	8	24.2
71-80	8	24.2
61-70	5	15.2
51-60	3	9.1
41-50	<u>1</u>	3.0
<i>Total</i>	33	
<i>Missing</i>	1	2.9
<i>Mean</i>		78.9

<sup>a</sup>For this analysis, responses of "No Opinion" were excluded. Thus, 90 percent positive responses means 90 percent of the total of "Agree" and "Disagree" statements

<sup>b</sup>For computational purposes, responses of "Disagree" to statements 5 and 9, which were stated in the negative, have been indexed as positive

Table 79

Attitudes of Management Towards Cooperative Education:  
Effects of Company Type, Size, and Longevity as CE Participant

	Sample N	Percent Positive Responses					
		75-100		50-74		0-49	
		N	Pct.	N	Pct.	N	Pct.
<b>A. Company type</b>							
Manufacturing	9	6	66.7	3	33.3	0	0.0
Education & related orgs.	8	6	75.0	1	12.5	1	12.5
Finance	6	1	16.7	5	83.3	0	0.0
Legal	4	3	75.0	1	25.0	0	0.0
Research & related orgs.	3	2	66.7	1	33.3	0	0.0
Retailing	2	2	100.0	0	0.0	0	0.0
Health	1	0	0.0	1	100.0	0	0.0
<i>Total</i>	33	20		12		1	
<i>Missing</i>	1						
<b>B. Total number of employees</b>							
1-250	9	6	66.7	2	22.2	1	11.1
251-500	7	4	57.1	3	42.9	0	0.0
501-1000	3	2	66.7	1	33.9	0	0.0
Over 1000	6	5	83.3	1	16.7	0	0.0
<i>Total</i>	25	17		7		1	
<i>Missing</i>	9						
<b>C. Number of quarters as CE employer</b>							
1-5	4	2	50.0	2	50.0	0	0.0
6-10	16	12	75.0	3	18.8	1	6.3
Over 10	13	6	46.2	7	53.8	0	0.0
<i>Total</i>	33	20		12		1	
<i>Missing</i>	1						

Table 80

Employers' Ratings of Employees:  
Rating Indexes for Various Groups<sup>a</sup>

Attribute	Criterion Group <sup>b</sup>			
	LaGuardia Interns	Non-Coop Entry Level	Non-Coop Training	LaG.Grads Former Interns
Cooperativeness	1.33	1.77	1.71	1.23
Compliance	1.60	1.96	1.79	1.50
Quality of work	1.87	2.28	2.00	1.62
Quantity of work	1.87	2.32	1.93	1.57
Willingness to learn	1.47	1.86	1.57	1.41
Initiative	2.00	2.09	1.93	1.59
Knowledge of job	2.10	2.36	2.29	1.73
Acceptance of responsibility	2.03	2.28	1.86	1.73
Interpersonal communication	2.03	2.00	1.86	1.59
Personal maturity	2.13	2.27	2.21	1.59
Personal appearance	1.80	2.05	1.93	1.59
Attendance and punctuality	1.67	2.00	2.14	1.59
Overall attitudes and motivation	1.73	2.14	1.71	1.46
Overall skills and abilities	1.93	2.09	2.00	1.59
Overall performance	1.90	2.14	2.00	1.68
<i>Number of respondents</i>	30	22	14	22
<i>Mean<sup>c</sup></i>	1.83	2.12	1.89	1.56
<i>Standard deviation</i>	0.31	0.61	0.42	0.33

<sup>a</sup>Indexes based on Excellent=1, Good=2, Fair=3, and Poor=4.

<sup>b</sup>A fifth group, LaGuardia graduates who had not been interns, could be rated by only two employers, and has been omitted from this table

<sup>c</sup>Average for the twelve pure attributes (Cooperativeness...Attendance and Punctuality)

Table 81

Performance Ratings of LaGuardia Interns:  
Effects of Company Type, Size, and CE History

	Sample N	Mean Rating					
		1.0-1.4		1.5-1.9		2.0-2.4	
		N	Pct.	N	Pct.	N	Pct.
<b>A. Company type</b>							
Manufacturing	9	0	0.0	6	66.7	3	33.3
Education & related orgs.	6	2	33.3	3	16.7	1	16.7
Finance	6	0	0.0	3	50.0	3	50.0
Legal	4	0	0.0	1	25.0	3	75.0
Research & related orgs.	3	1	33.3	2	66.7	0	0.0
Retailing	2	0	0.0	2	100.0	0	0.0
Health	0	0	0.0	0	0.0	0	0.0
<i>Total</i>	30	3		17		10	
<i>Missing</i>	4						
<b>B. Total number of employees</b>							
1-250	8	2	25.0	5	62.5	1	12.5
251-500	7	0	0.0	4	57.1	3	42.9
501-1000	3	0	0.0	2	66.7	1	33.3
Over 1000	6	1	16.7	3	50.0	2	33.3
<i>Total</i>	24	3		14		7	
<i>Missing</i>	10						
<b>C. Number of quarters as CE employer</b>							
1-5	3	1	33.3	0	0.0	2	66.7
6-10	14	2	14.3	10	71.4	2	14.3
Over 10	13	0	0.0	7	53.8	6	46.2
<i>Total</i>	30	3		17		10	
<i>Missing</i>	4						
<b>D. Total number of interns</b>							
1-20	12	1	8.3	8	66.7	3	25.0
21-40	13	2	15.4	7	53.8	4	30.8
Over 40	5	0	0.0	2	40.0	3	60.0
<i>Total</i>	30	3		17		10	
<i>Missing</i>	4						
<b>E. Mean number of interns/quarter</b>							
1.0-1.9	15	1	6.7	9	60.0	5	33.3
2.0-2.9	7	2	28.6	3	42.9	2	28.6
3.0-3.9	3	0	0.0	3	100.0	0	0.0
4.0 and higher	7	0	0.0	4	57.1	3	42.9
<i>Total</i>	32	3		19		10	
<i>Missing</i>	2						

Correlation Coefficients for Major Variables<sup>a</sup>

<u>Variable</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>I</u>	<u>J</u>	<u>K</u>	<u>L</u>
<i>Agency characteristics</i>												
A. Total no. employees	--											
B. No. non-supervisory empl.	.80	--										
C. No. active quarters	.25	.37	--									
D. Total no. interns	.16	.19	.52	--								
E. Interns per quarter	.03	.07	.12	.87	--							
F. Management attitudes	-.16	-.13	.17	.13	.07	--						
<i>LaGuardia Interns ratings</i>												
G. Attitudes/motivation	-.10	-.13	.41	.04	-.15	.19	--					
H. Skills/abilities	.04	.23	.26	.07	-.04	.46	.46	--				
I. Performance	.01	.10	.19	-.15	-.29	.42	.64	.77	--			
J. Mean	.08	.14	.28	.19	.07	.58	.64	.77	.78	--		
<i>Other groups, mean ratings</i>												
K. Non-CE, entry	.08	.21	-.02	.49	.56	-.26	.02	.00	.12	.15	--	
L. Non-CE, career	.60	.60	-.11	.03	.20	-.31	-.11	-.19	-.19	-.12	.55	--
M. LaGuardia graduates	-.12	-.04	.23	-.11	-.31	.52	.62	.57	.63	.68	-.02	.38

<sup>a</sup>Values for p<.05 in italics



Table 83

Ratings of LaGuardia Interns: Correlation Coefficients<sup>a</sup>

<u>Attribute</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>I</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>	<u>N</u>	<u>O</u>
A. Cooperativeness	--														
B. Compliance	.64	--													
C. Work quality	.39	.48	--												
D. Work quantity	.17	.15	.62	--											
E. Willingness to learn	.33	.07	.45	.46	--										
F. Initiative	.10	.18	.46	.52	.39	--									
G. Knowledge ability	.13	.18	.47	.36	.27	.37	--								
H. Acc. of responsibility	-.04	-.06	.40	.31	.39	.56	.40	--							
I. Interpersonal commun.	.19	.14	.40	.21	.39	.24	.40	.36	--						
J. Maturity	.38	.43	.40	.42	.15	.39	.44	.21	.32	--					
K. Appearance	.00	.20	.36	.15	.25	-.10	.46	.14	.49	.11	--				
L. Attendance/punctuality	.31	.34	.10	.07	.08	-.09	.16	-.27	.14	.41	.39	--			
M. Attitudes/motivation	.58	.50	.54	.30	.55	.25	.41	.12	.51	.36	.29	.14	--		
N. Skills/abilities	.43	.30	.66	.37	.44	.33	.61	.63	.51	.49	.41	.33	.46	--	
O. Performance	.45	.36	.76	.45	.48	.41	.59	.48	.60	.48	.36	.13	.64	.77	--
P. MEAN RATING	.50	.55	.79	.64	.61	.59	.66	.50	.60	.67	.48	.35	.64	.77	.78

<sup>a</sup>Values for  $p < .05$  in italics

Table 84

LaGuardia Graduates:

Current Annual Salaries Over \$10,000 as a Function of  
High School Average, Grade-Point Average,  
and Performance on the California Achievement Test

	Percent earning \$10,000 or more	
	<u>N</u>	<u>Pct. in category</u>
High School Average		
Less than 75.0	57	12.3
75.0 or higher	21	66.7
Grade-Point Average <sup>a</sup>		
1.01-2.00	65	23.1
2.01-3.00	116	29.3
CAT Battery Total <sup>b</sup>		
6.0-9.9	44	13.6
10.0 and above	73	28.8

<sup>a</sup>See footnote, Table 60

<sup>b</sup>In grade equivalents

Table 85

## Community College Graduation Rates (Percent)

	<u>After 2 Years<sup>a</sup></u>	<u>After 3 Years<sup>b</sup></u>	<u>After 4 Years<sup>c</sup></u>
1971 Freshman Cohort			
LaGuardia	36.4 <sup>d</sup>	42.6 <sup>d</sup>	45.9 <sup>e</sup>
College "A"	N.A.	N.A.	12.8 <sup>e</sup>
College "B"	N.A.	N.A.	22.5 <sup>e</sup>
All CUNY C.C.'s <sup>f</sup>	7.4	20.3	23.9
1972 Freshman Cohort			
LaGuardia	30.0 <sup>d</sup>	33.8 <sup>g</sup>	35.6 <sup>g</sup>
College "A"	N.A.	N.A.	N.A.
College "B"	N.A.	N.A.	N.A.
All CUNY C.C.'s <sup>f</sup>	6.2	21.0	N.A.

<sup>a</sup>Graduation within 8 quarters (LaGuardia) or 4 semesters (all other units)

<sup>b</sup>Graduation within 12 quarters (LaGuardia) or 6 semesters (all other units)

<sup>c</sup>Graduation within 16 quarters (LaGuardia) or 8 semesters (all other units)

<sup>d</sup>From K. Berger, personal communication (April, 1976)

<sup>e</sup>From B. Kaufman and S. Loveland, Academic progress at the City University of New York: September 1970 to June 1975, Office of Program and Policy Research, CUNY, November 1976

<sup>f</sup>Average for all CUNY community colleges except LaGuardia

<sup>g</sup>Values determined by LaGuardia's Office of Institutional Research from RSFILE (see text)

## APPENDIX A

Questionnaire forms and  
covering letters



What did you do after graduation from LaGuardia? (Check all that apply)

- Part-time work
- Full-time work
- Senior college (part-time)
- Senior college (full-time)
- Military
- Other (specify) \_\_\_\_\_

IF YOU ENTERED A SENIOR COLLEGE, ANSWER ALL QUESTIONS IN THIS BOX.

Which senior college did you enter? \_\_\_\_\_

What is your current status? (Check one only)

- Sophomore (part-time)
- Sophomore (full-time)
- Junior (part-time)
- Junior (full-time)
- Senior (part-time)
- Senior (full-time)
- Graduated with degree
- Terminated, no degree (Give number of credits earned) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

Major: \_\_\_\_\_

Are you planning to attend graduate school?

- Yes
- No

IF YES, for what degree and in what area?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

While you were attending LaGuardia, did you ever have a full-time job, not including your coop internship, that lasted for longer than three months?

- Yes
- No

Have you ever worked since you graduated from LaGuardia?

- Yes
- No

IF YES, ANSWER ALL QUESTIONS IN THIS BOX.

Have you worked continuously since you graduated from LaGuardia?

- Yes
- No

IF NO, for how long have you been (or were you) unemployed?

\_\_\_\_\_ years, \_\_\_\_\_ months

With what company or agency was your first job after graduation?

\_\_\_\_\_

Did this job develop out of a cooperative education internship?

- Yes
- No

How long employed there?

\_\_\_\_\_

How many hours per week?

\_\_\_\_\_ hours per week

What was your first job title?

\_\_\_\_\_

What was your starting annual salary? \$ \_\_\_\_\_ per year

For what company or agency are you currently working?

\_\_\_\_\_

How many hours per week?

\_\_\_\_\_ hours per week

What is your current job title?

\_\_\_\_\_

What is your current annual salary? \$ \_\_\_\_\_ per year

How long employed here?

\_\_\_\_\_

How many different employers have you had since you graduated from LaGuardia?

- One
- Two
- Three
- Four
- More than four



What did you do after you left LaGuardia? (Check all that apply)

- Part-time work
- Full-time work
- Senior college (part-time)
- Senior college (full-time)
- Military
- Other (specify) \_\_\_\_\_

IF YOU ENTERED ANOTHER COLLEGE, ANSWER ALL QUESTIONS IN THIS BOX.

Which college did you enter?  
\_\_\_\_\_

What is your current college status? (Check one only)

- Freshman (full-time)
- Freshman (part-time)
- Sophomore (full-time)
- Sophomore (part-time)
- Senior (full-time)
- Senior (part-time)
- Graduated with degree
- Terminated, no degree (Give number of credits earned) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

Major: \_\_\_\_\_

Are you planning to attend graduate school?

- Yes
- No

IF YES, for what degree and in what area?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

While you were attending LaGuardia, did you ever have a full-time job, not including your coop internship, that lasted for longer than three months?  
 Yes  No

Reason for leaving LaGuardia:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Have you ever worked since you left LaGuardia?

- Yes
- No

IF YES, ANSWER ALL QUESTIONS IN THIS BOX.

Have you worked continuously since you left LaGuardia?

- Yes
- No

IF NO, for how long have you been (or were you) unemployed?

\_\_\_\_\_ years, \_\_\_\_\_ months

With what company or agency was your first job after graduation?  
\_\_\_\_\_

Did this job develop out of a cooperative education internship?

- Yes
- No

How long employed there?  
\_\_\_\_\_

How many hours per week?

\_\_\_\_\_ hours per week

What was your first job title?  
\_\_\_\_\_

What was your starting annual salary? \$ \_\_\_\_\_ per year

For what company or agency are you currently working?  
\_\_\_\_\_

How many hours per week?

\_\_\_\_\_ hours per week

What is your current job title?  
\_\_\_\_\_

What is your current annual salary? \$ \_\_\_\_\_ per year

How long employed here?  
\_\_\_\_\_

How many different employers have you had since you left LaGuardia?

- One
- Two
- Three
- Four
- More than four



**INSTRUCTIONS:**

PLEASE ANSWER BOTH SIDES OF THIS QUESTIONNAIRE AND RETURN IT IN THE ENCLOSED ENVELOPE.

NAME AND ADDRESS IF DIFFERENT FROM THAT SHOWN ON LABEL.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Age: _____ years	Sex: <input type="checkbox"/> M <input type="checkbox"/> F	Date of first attendance at _____ Community College: _____ (month) _____ (year)
---------------------	---	--

Do you live alone?  
 Yes  No

IF YES, what is your annual income from all sources? \$ \_\_\_\_\_

IF NO, ANSWER ALL QUESTIONS IN THIS BOX.

With whom do you reside? (Check all that apply)  
 Father  
 Mother  
 Brother(s), sister(s)  
 Husband or wife  
 Your children  
 Friend(s) or roommate(s)  
 Relative(s)

How many people are there in your household? \_\_\_\_\_

How many members of your family are employed? \_\_\_\_\_

What is the total annual income of your household? \$ \_\_\_\_\_

What is (was) your father's occupation?  
\_\_\_\_\_

What is (was) your mother's occupation?  
\_\_\_\_\_

When you entered \_\_\_\_\_ as a freshman, were you certain about the kind of work you wanted to do after graduation?  
 Yes  No

Which of the following was the most important reason for your selecting \_\_\_\_\_? (Check one only)

Location of College  
 Curriculum offering of College  
 Cooperative Education Program  
 Advised by high school counselor  
 Reputation of College  
 Not accepted elsewhere  
 Other (specify) \_\_\_\_\_

Since you graduated from \_\_\_\_\_ have you received any kind of financial assistance (such as unemployment insurance, welfare, school scholarship, etc.)?  
 Yes  No

IF YES, what kind? (Check all that apply)  
 School scholarship  
 Social security  
 Welfare  
 Unemployment insurance  
 Veteran's benefits  
 Food stamps  
 Other (specify) \_\_\_\_\_

What was your major when you entered \_\_\_\_\_ as a freshman?  
\_\_\_\_\_

What was your major when you graduated from \_\_\_\_\_?  
\_\_\_\_\_

Age: \_\_\_\_\_ Date of graduation from \_\_\_\_\_ (month) \_\_\_\_\_ (year)

Sex:  M  F

Did not graduate  Yes  No

Date of first attendance at \_\_\_\_\_ (month) \_\_\_\_\_ (year)

**IF YOU DID NOT GRADUATE FROM \_\_\_\_\_ please return questionnaire without answering questions below.**

Questionnaire form for regular (non-cooperative education) graduates of College "A" (left, reduced). Forms for regular graduates of College "B" were identical except for the box indicated and shown at right. Recto.

What did you do after graduation from \_\_\_\_\_? (Check all that apply)

- Part-time work
- Full-time work
- Senior college (part-time)
- Senior college (full-time)
- Military
- Other (specify) \_\_\_\_\_

IF YOU ENTERED A SENIOR COLLEGE, ANSWER ALL QUESTIONS IN THIS BOX.

Which senior college did you enter? \_\_\_\_\_

What is your current college status? (Check one only)

- Sophomore (part-time)
- Sophomore (full-time)
- Junior (part-time)
- Junior (full-time)
- Senior (part-time)
- Senior (full-time)
- Graduated with degree
- Terminated, no degree  
(Give number of credits earned) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

Major: \_\_\_\_\_

Have you attended graduate school?

- Yes       No

IF YES, give major: \_\_\_\_\_

Degree: \_\_\_\_\_

When expected: \_\_\_\_\_

IF NO, do you plan to?  Yes  No

In what area? \_\_\_\_\_

For what degree? \_\_\_\_\_

While you were attending \_\_\_\_\_, did you ever have a full-time job that lasted for longer than three months?

- Yes       No

Have you ever worked since you graduated from \_\_\_\_\_?

- Yes       No

IF YES, ANSWER ALL QUESTIONS IN THIS BOX.

Have you worked continuously since you graduated from \_\_\_\_\_?

- Yes       No

IF NO, for how long have you been (or were you) unemployed?

\_\_\_\_\_ years, \_\_\_\_\_ months

With what company or agency was your first job after graduation?

How long employed there? \_\_\_\_\_

How many hours per week? \_\_\_\_\_

\_\_\_\_\_ hours per week

What was your first job title? \_\_\_\_\_

What was your starting annual salary? \$ \_\_\_\_\_ per year

For what company or agency are you currently working? \_\_\_\_\_

How many hours per week? \_\_\_\_\_

\_\_\_\_\_ hours per week

What is your current job title? \_\_\_\_\_

What is your current annual salary? \$ \_\_\_\_\_ per year

How long employed here? \_\_\_\_\_

How many different employers have you had since you graduated from \_\_\_\_\_?

- One       Four  
 Two       More than four  
 Three

**INSTRUCTIONS:**

PLEASE ANSWER BOTH SIDES OF THIS QUESTIONNAIRE AND RETURN IT IN THE ENCLOSED ENVELOPE.

NAME AND ADDRESS IF DIFFERENT FROM THAT SHOWN ON LABEL.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Age: \_\_\_\_\_ years

Sex:  M  F

Date of first attendance at \_\_\_\_\_ Community College: \_\_\_\_\_ (month) \_\_\_\_\_ (year)

Do you live alone?

Yes  
 No

IF YES, what is your annual income from all sources? \$ \_\_\_\_\_

IF NO, ANSWER ALL QUESTIONS IN THIS BOX.

With whom do you reside? (Check all that apply)

- Father
- Mother
- Brother(s), sister(s)
- Husband or wife
- Your children
- Friend(s) or roommate(s)
- Relative(s)

How many people are there in your household? \_\_\_\_\_

How many members of your family are employed? \_\_\_\_\_

What is the total annual income of your household? \$ \_\_\_\_\_

What is (was) your father's occupation?

\_\_\_\_\_

What is (was) your mother's occupation?

\_\_\_\_\_

When you entered \_\_\_\_\_ as a freshman, were you certain about the kind of work you wanted to do after graduation?  
 Yes  No

Which of the following was the most important reason for your selecting \_\_\_\_\_? (Check one only)

- Location of College
- Curriculum offering of College
- Cooperative Education Program
- Advised by high school counselor
- Reputation of College
- Not accepted elsewhere
- Other (specify) \_\_\_\_\_

Since you graduated from \_\_\_\_\_ have you received any kind of financial assistance (such as unemployment insurance, welfare, school scholarship, etc.)?  
 Yes  No

IF YES, what kind? (Check all that apply)

- School scholarship
- Social security
- Welfare
- Unemployment insurance
- Veteran's benefits
- Food stamps
- Other (specify) \_\_\_\_\_

What was your major when you entered \_\_\_\_\_ as a freshman?

\_\_\_\_\_

What was your major when you graduated from \_\_\_\_\_?

\_\_\_\_\_

Please list all your coop internships:

Job title \_\_\_\_\_ Company \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Questionnaire form for cooperative education graduates of College "A" (reduced). College "B" form was identical except for box indicated by arrow; see form for regular graduates for variation. Recto.

What did you do after graduation from [ ]? (Check all that apply)

- Part-time work
- Full-time work
- Senior college (part-time)
- Senior college (full-time)
- Military
- Other (specify) \_\_\_\_\_

IF YOU ENTERED A SENIOR COLLEGE, ANSWER ALL QUESTIONS IN THIS BOX.

Which senior college did you enter? \_\_\_\_\_

What is your current college status? (Check one only)

- Sophomore (part-time)
- Sophomore (full-time)
- Junior (part-time)
- Junior (full-time)
- Senior (part-time)
- Senior (full-time)
- Graduated with degree
- Terminated, no degree (Give number of credits earned) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

Major: \_\_\_\_\_

Have you attended graduate school?

- Yes
- No

IF YES, give major: \_\_\_\_\_

Degree: \_\_\_\_\_

When expected: \_\_\_\_\_

IF NO, do you plan to?  Yes  No

In what area? \_\_\_\_\_

For what degree? \_\_\_\_\_

While you were attending [ ], did you ever have a full-time job, not including your coop internship, that lasted for longer than three months?

- Yes
- No

Have you ever worked since you graduated from [ ]?

- Yes
- No

IF YES, ANSWER ALL QUESTIONS IN THIS BOX.

Have you worked continuously since you graduated from [ ]?

- Yes
- No

IF NO, for how long have you been (or were you) unemployed?

\_\_\_\_\_ years, \_\_\_\_\_ months

With what company or agency was your first job after graduation? \_\_\_\_\_

Did this job develop out of a cooperative education internship?

- Yes
- No

How long employed there? \_\_\_\_\_

How many hours per week? \_\_\_\_\_

\_\_\_\_\_ hours per week

What was your first job title? \_\_\_\_\_

What was your starting annual salary? \$ \_\_\_\_\_ per year

For what company or agency are you currently working? \_\_\_\_\_

How many hours per week? \_\_\_\_\_

\_\_\_\_\_ hours per week

What is your current job title? \_\_\_\_\_

What is your current annual salary? \$ \_\_\_\_\_ per year

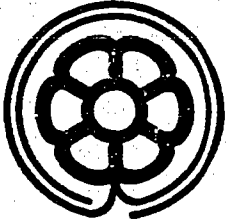
How long employed here? \_\_\_\_\_

How many different employers have you had since you graduated from [ ]?

- One
- Two
- Three
- Four
- More than four

**Florello H. LaGuardia Community College**  
The City University of New York

31-10 Thomson Avenue, Long Island City, N.Y., 11101  
Telephone (212) 937-9200



November 3, 1975

Office of the President

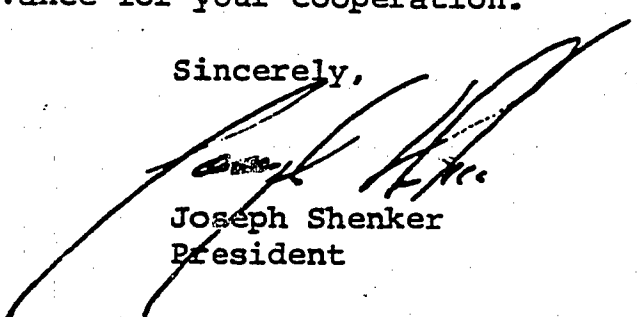
Dear LaGuardia Graduate:

LaGuardia Community College has a very strong interest in your activities since your graduation. By learning about your experiences and your feelings about LaGuardia, we hope to be better able to serve our present and future students.

Please take a few minutes to fill out the attached questionnaire, and return it to the College by November 13 in the enclosed return envelope.

Thank you in advance for your cooperation.

Sincerely,



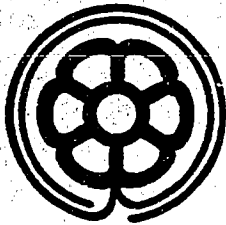
Joseph Shenker  
President

encls.

Cover letter accompanying first mailing of  
questionnaire for LaGuardia graduates

**Fiorello H. LaGuardia Community College**  
The City University of New York

31-10 Thomson Avenue, Long Island City, N.Y., 11101  
Telephone (212) 937-9200



November 3, 1975

Office of the President

Dear Former LaGuardia Student:

Our records indicate that you are not currently attending LaGuardia Community College. However, we are interested in all of our students and hope that by learning about your experiences and reactions to LaGuardia we may be better able to serve our present and future students.

Please take a few minutes to fill out the attached questionnaire and return it to the College by November 13 in the enclosed return envelope.

Thank you in advance for your cooperation.

Sincerely,



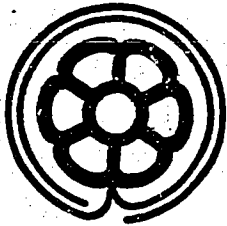
Joseph Shenker  
President

encls.

Cover letter accompanying first mailing of  
questionnaire for LaGuardia non-completers

**Fiorello H. LaGuardia Community College**  
The City University of New York

31-10 Thomson Avenue, Long Island City, N.Y., 11101  
Telephone (212) 937-9200



January 5, 1976

Office of the President

Dear Former LaGuardian:

Several weeks ago we sent you a questionnaire asking you about your activities since leaving LaGuardia. We are contacting you again because we have not received a reply.

LaGuardia is extremely interested in learning about your educational and work experiences. The current city financial crisis -- which, as I am sure you have already discovered, has severely affected the City University -- lends urgency to our need for this information. The knowledge we gain may assist us to better serve our present and future students.

Please -- won't you take a few minutes now to fill out the enclosed questionnaire? Kindly return it to the College in the enclosed envelope (no postage is necessary).

Thank you in advance for your cooperation. Let me extend my best wishes for the new year!

Sincerely yours,



Joseph Shenker  
President

Cover letter accompanying second mailing of  
questionnaire to LaGuardia graduates and  
non-completers

December, 1975

Dear Graduate of ----- Community College:

Although you are no longer enrolled with us, we continue to be interested in your post-graduate educational and vocational experiences. We hope in this way to learn something about how we may better serve our present and future students.

Therefore, would you please take a few minutes to fill out the attached questionnaire and return it to the College as soon as possible in the enclosed self-addressed envelope. No postage is necessary.

Thank you for your cooperation. Our present students and those to come after them will benefit from your help.

Sincerely yours,

-----  
President

Encs.

Cover letter accompanying questionnaire mailed to regular and CE graduates of College "A"



January, 1976

Dear Graduate:

----- Community College has a very strong interest in your activities since your graduation. By learning about you since graduating from the college, we hope to be better able to serve our present and future students.

Although your response is voluntary, please take a few minutes to fill out the attached questionnaire and return it to us within the next day or two in the enclosed return envelope.

Thank you in advance for your cooperation.

Sincerely,

-----  
President

Cover letter accompanying questionnaire mailed to regular and CE graduates of College "B"

## APPENDIX B

### Interview questionnaire for employers

Performance of the Graduates of a Cooperative Education Program

Office of Institutional Research  
LaGuardia Community College of the City University  
of New York

Employer's Questionnaire

COMPANY NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CONTACT'S NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

TELEPHONE NUMBER: \_\_\_\_\_

TYPE OF ORGANIZATION: \_\_\_\_\_

NUMBER OF EMPLOYEES AT PLACE OF BUSINESS: \_\_\_\_\_

NUMBER OF ACTIVE QUARTERS: \_\_\_\_\_

TOTAL NUMBER OF INTERNS: \_\_\_\_\_

## FOREWORD

This is a questionnaire which pertains to your company's or agency's activity as a cooperative education employer. We are interested in your reactions to a number of issues, including the general attitude of your organization toward participation in cooperative education ("coop") and your assessment of the performance of interns and graduates from coop programs. The questionnaire is designed to be completed by you in the presence of an interviewer, who will provide additional explanation about the material and answer any questions you may have.

Before you proceed to the questionnaire itself, we would like to emphasize the great importance of obtaining completely frank and honest opinions. Although this research is being conducted by LaGuardia Community College, whose students have been placed with your organization as interns and/or regular employees, it is vital to the success of our project that your responses truly represent your actual assessment of the issues. Your responses will not be used in any way that might directly affect LaGuardia's relationship with your organization. This questionnaire is designed as part of a broad research program into the outcomes of cooperative education, and is not intended as an evaluation of the program's success in your organization. Your responses will be kept strictly confidential and will not be individually publicized.

Dan J. Ehrlich  
Director of Institutional Research  
LaGuardia Community College

For each statement below, indicate your company's or agency's opinion/policy by circling one of the three letters at the right. Key: A=Agree, D=Disagree, N=No opinion or Not applicable.

- |  |   |   |   |
|--|---|---|---|
| 1. Our top management strongly supports a policy of participation in cooperative education.  | A | D | N |
| 2. One reason that we participate in cooperative education is because it enables us to increase the <u>size</u> of our pool of manpower resources. | A | D | N |
| 3. We plan to continue our participation in cooperative education for the next few years.  | A | D | N |
| 4. Participation in cooperative education is good corporate/agency public relations.   | A | D | N |
| 5. The turn-over of cooperative education interns caused by academic calendars creates a problem in work continuity.                               | A | D | N |
| 6. Cooperative education interns are an asset to the company's work force.   | A | D | N |
| 7. Graduates of cooperative education programs are more skilled in their career (work) area than non-cooperative college graduates.                | A | D | N |
| 8. Participation in cooperative education gives us an opportunity to play an important role in higher education.                                   | A | D | N |
| 9. Our participation in cooperative education is too costly, either in terms of financial outlay or in terms of personnel time.                    | A | D | N |
| 10. Supervision of cooperative education interns is a valuable experience for our employees.   | A | D | N |

- |     |   |   |   |   |
|-----|---|---|---|---|
| 11. | Participation in cooperative education has helped us to expand or develop in ways that might not have occurred without coop interns.          | A | D | N |
| 12. | College cooperative interns tend to develop more mature attitudes about work than do their non-coop peers.                                    | A | D | N |
| 13. | Participation in cooperative education is <u>financially</u> advantageous because it reduces the cost of maintaining a large personnel force. | A | D | N |
| 14. | We would expect cooperative education graduates to move up the career ladder more rapidly than their non-coop peers.                          | A | D | N |
| 15. | Training cooperative education interns is less costly than training regular employees in comparable positions.                                | A | D | N |
| 16. | We have a policy of hiring cooperative education interns as full-time employees when positions become available.                              | A | D | N |
| 17. | Cooperative education interns understand and accept standard work rules.  | A | D | N |
| 18. | Participation in cooperative education provides us with greater <u>flexibility</u> in manpower allocation of <u>regular</u> personnel.        | A | D | N |
| 19. | Participation in cooperative education provides us with a larger <u>range</u> of available <u>skills</u> among our pool of employees.         | A | D | N |

PART 2

Questions 20 through 27 ask you to assess a number of aspects of the work behavior of your LaGuardia interns as well as other types of employees. In each instance, the group is identified, and you are asked to rate them (as a group) on such attributes as cooperativeness, initiative, maturity, etc. Ratings are on a four-point scale: excellent/good/fair/poor.

Regardless of the group you are rating, it is important that your judgments be based on certain standards, and that these standards be applied equally to each group. Specifically, you are asked to make judgments according to your own standards of performance for employees of your organization. It is a good idea to keep this point of comparison in mind while you are answering the questions, and to avoid the use of different standards for different groups.

20. Please indicate which (if any) of the groups of individuals listed below you have sufficient experience with to make judgments about their performance. Such experience should be limited to this organization, and consist of acquaintance with a sufficient number of employees in each category so that you will be fairly clear about their performance as a group.
- (a)  Young employees in entry-level, full-time, permanent, post-training positions who have not been part of a cooperative education program at any school. ("Entry-level" refers to levels characteristic of the first two to three years of employment.)
  - b)  Young employees in career training positions who have not been part of a coop program. ("Career training" refers to positions where full-time, permanent employment is presumed following the period of training.)
  - c)  Graduates of LaGuardia Community College who were formerly interns in your organization, and are now in entry-level, full-time, permanent, post-training positions.
  - d)  Graduates of LaGuardia Community College who were not interns in your organization, but who are now in entry-level, full-time, permanent, post-training positions.
  - e)  Young employees, other than LaGuardia interns, who are also employed in temporary training positions. ("Temporary training" refers to positions where there is no presumption of continuance of employment beyond the period of training.)

21. Please rate your LaGuardia interns -- as a group over the period of your participation as a coop employer -- on the attributes listed below. ("Interns" refers to active students on official internships, and does not refer to graduates of LaGuardia who have been hired by your organization.)

Instructions: Circle one letter on each line: E=Excellent; G=Good; F=Fair; P=Poor.

<u>ATTRIBUTE</u>	<u>RATING</u>			
Cooperativeness	E	G	F	P
Compliance with policy, regulations, etc.	E	G	F	P
Quality of work	E	G	F	P
Quantity of work	E	G	F	P
Willingness to learn	E	G	F	P
Initiative	E	G	F	P
Knowledge of job	E	G	F	P
Acceptance of responsibility	E	G	F	P
Interpersonal communication	E	G	F	P
Personal maturity	E	G	F	P
Personal appearance	E	G	F	P
Attendance and punctuality	E	G	F	P
OVERALL RATING OF ATTITUDES AND MOTIVATION	E	G	F	P
OVERALL RATING OF SKILLS AND ABILITIES	E	G	F	P
OVERALL RATING OF PERFORMANCE	E	G	F	P



**TO BE COMPLETED ONLY IF RESPONDENT HAS CHECKED ITEM 20(a)**

22. Please rate your young employees in entry-level, full-time, permanent, post-training positions who have not been part of a cooperative education program at any school. ("Entry-level" refers to levels characteristic of the first two to three years of employment.)

Instructions: Circle one letter on each line: E=Excellent; G=Good; F=Fair; P=Poor.

<u>ATTRIBUTE</u>	<u>RATING</u>			
Cooperativeness	E	G	F	P
Compliance with policy, regulations, etc.	E	G	F	P
Quality of work	E	G	F	P
Quantity of work	E	G	F	P
Willingness to learn	E	G	F	P
Initiative	E	G	F	P
Knowledge of job	E	G	F	P
Acceptance of responsibility	E	G	F	P
Interpersonal communication	E	G	F	P
Personal maturity	E	G	F	P
Personal appearance	E	G	F	P
Attendance and punctuality	E	G	F	P
OVERALL RATING OF ATTITUDES AND MOTIVATION	E	G	F	P
OVERALL RATING OF SKILLS AND ABILITIES	E	G	F	P
OVERALL RATING OF PERFORMANCE	E	G	F	P

**TO BE COMPLETED ONLY IF RESPONDENT HAS CHECKED ITEM 20 (b)**

23. Please rate your young employees in career-training positions who have not been part of a cooperative education program at any school. ("Career training" refers to positions where full-time, permanent employment is presumed following the period of training.)

Instructions: Circle one letter on each line: E=Excellent; G=Good; F=Fair; P=Poor.

<u>ATTRIBUTE</u>	<u>RATING</u>
Cooperativeness	E G F P
Compliance with policy, regulations, etc.	E G F P
Quality of work	E G F P
Quantity of work	E G F P
Willingness to learn	E G F P
Initiative	E G F P
Knowledge of job	E G F P
Acceptance of responsibility	E G F P
Interpersonal communication	E G F P
Personal maturity	E G F P
Personal appearance	E G F P
Attendance and punctuality	E G F P
OVERALL RATING OF ATTITUDES AND MOTIVATION	E G F P
OVERALL RATING OF SKILLS AND ABILITIES	E G F P
OVERALL RATING OF PERFORMANCE	E G F P

**TO BE COMPLETED ONLY IF RESPONDENT HAS CHECKED ITEM 20 (c)**

24. Please rate your employees who are graduates of LaGuardia Community College and who were formerly interns in your organization. (These employees should be currently holding entry-level, full-time, permanent, post-training positions.)

Instructions: Circle one letter on each line: E=Excellent; G=Good; F=Fair; P=Poor.

<u>ATTRIBUTE</u>	<u>RATING</u>			
Cooperativeness	E	G	F	P
Compliance with policy, regulations, etc.	E	G	F	P
Quality of work	E	G	F	P
Quantity of work	E	G	F	P
Willingness to learn	E	G	F	P
Initiative	E	G	F	P
Knowledge of job	E	G	F	P
Acceptance of responsibility	E	G	F	P
Interpersonal communication	E	G	F	P
Personal maturity	E	G	F	P
Personal appearance	E	G	F	P
Attendance and punctuality	E	G	F	P
OVERALL RATING OF ATTITUDES AND MOTIVATION	E	G	F	P
OVERALL RATING OF SKILLS AND ABILITIES	E	G	F	P
OVERALL RATING OF PERFORMANCE	E	G	F	P

TO BE COMPLETED ONLY IF RESPONDENT HAS CHECKED ITEM 20(d)

25. Please rate your employees who are graduates of LaGuardia Community College who were not formerly cooperative education interns in your organization. (These employees should be currently holding entry-level, full-time, permanent, post-training positions.)

Instructions: Circle one letter on each line: E=Excellent; G=Good; F=Fair; P=Poor.

<u>ATTRIBUTE</u>	<u>RATING</u>
Cooperativeness	E G F P
Compliance with policy, regulations, etc.	E G F P
Quality of work	E G F P
Quantity of work	E G F P
Willingness to learn	E G F P
Initiative	E G F P
Knowledge of job	E G F P
Acceptance of responsibility	E G F P
Interpersonal communication	E G F P
Personal maturity	E G F P
Personal appearance	E G F P
Attendance and punctuality	E G F P
OVERALL RATING OF ATTITUDES AND MOTIVATION	E G F P
OVERALL RATING OF SKILLS AND ABILITIES	E G F P
OVERALL RATING OF PERFORMANCE	E G F P

**TO BE COMPLETED ONLY IF RESPONDENT HAS CHECKED ITEM 20 (e)**

26. Within the group of employees you identified as holding temporary training positions, but not including LaGuardia interns, please check which (if any) subgroups with whom you are sufficiently familiar to permit your judgment of their performance as a group.

- Coop students from other community colleges
- Coop students from other senior colleges
- Non-coop students attending other community colleges
- Non-coop students attending other senior colleges
- Recent community college graduates (not LaGuardia)
- Recent senior college graduates
- Recent high school graduates
- Recent graduates of special high schools, proprietary, trade, or vocational schools
- Coop students from high school

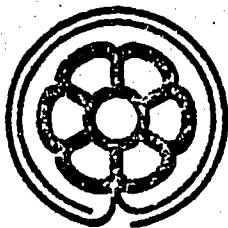


## APPENDIX C

Demographic questionnaire  
administered to 1972 freshmen

**Fiorello H. LaGuardia Community College**  
The City University of New York

31-10 Thomson Avenue, Long Island City, N.Y., 11101  
Telephone (212) 937-9200



Office of Institutional Research

### To the Student

Nowadays all colleges take an active interest in their students --- who they are; where they come from; what their skills are; and so forth. Statistical information relating to these and other matters is often invaluable in the building of better, more relevant programs, and in the continuous evaluation of ongoing programs.

LaGuardia College is no exception. We hope to provide you with the best possible education. This questionnaire is a necessary part of our continuing effort to serve you best through self-evaluation.

*Please note that the questionnaire is strictly confidential and will only be used for research purposes. It will never become a part of your record. This booklet will never become available to teachers, counselors, administrators, or prospective employers. Students' names are recorded only for purposes of carrying out follow-up statistical studies.*



Office of Institutional Research

Your Last Name (Print)				First Name			Initial
Permanent Address:				Number and Street			
Borough or City				State		Zip	Telephone
Social Security Number				Month	Day	Year	
				Date of Birth			
Parent or Guardian: Last Name				First Name			Initial
Address: Number or Street (If same as above, write "same" )							
Borough or City				State		Zip	

Sex:

1 Male

2 Female

Marital Status:

1 Single

2 Married

3 Widowed

4 Divorced

5 Separated

6 Other \_\_\_\_\_  
(specify)

Number of children: \_\_\_\_\_

Are you a veteran? (Check one)

- 1 Yes  
 2 No

Are you a citizen of the United States? (Check one)

- 1 Yes  
 2 No

If not, for how many years have you been living in the United States? \_\_\_\_\_

With which of the following groups do you identify? (Check one)

- 1 White/Caucasian  
 2 Black/Afro--American  
 3 Puerto Rican Born Stateside  
 4 Puerto Rican Born in Puerto Rico  
 5 Spanish Origin other than Puerto Rican  
 6 Oriental  
 7 Other \_\_\_\_\_  
(specify)

Where do you plan to live while attending LaGuardia Community College?  
(Check one)

- 1 At home with parents  
 2 With relatives or family friends  
 3 Private room  
 4 Own home or apartment  
 5 Other \_\_\_\_\_  
(specify)

How much are you helping to support your family while attending college?  
(Check one)

- 1 No  
 2 Yes, under \$500 per year  
 3 Yes, \$500--\$999 per year  
 4 Yes, \$1000 or more per year

What will be your main source of financial support during the coming academic year? (Check one)

- 1 Parent(s)
- 2 Wife or husband
- 3 Job
- 4 Scholarship, fellowship, or school stipend
- 5 Loan
- 6 Previous personal earning and savings
- 7 GI Bill, or other governmental assistance (other than scholarship or loan)
- 8 Family trust fund, insurance plan or other similar arrangement
- 9 Other \_\_\_\_\_  
(specify)

What were (are) you doing just before entering this college? (Check one)

- 1 Attending high school
- 2 Working on a full- or part-time job
- 3 Looking for work
- 4 In the U.S. Armed Services
- 5 Attending another college. (specify)  
\_\_\_\_\_
- 6 Attending a trade school
- 7 Other \_\_\_\_\_  
(specify)

Type of diploma received or expected: (Check one)

- 1 Academic
- 2 General
- 3 Vocational
- 4 Commercial
- 5 Technical
- 6 General Equivalency
- 7 Other \_\_\_\_\_  
(specify)
- 8 Do not know

Is this the first time you have enrolled in college? (Check one)

- 1 Yes
- 2 No

If no, check if you previously attended:

Another community college \_\_\_\_\_  
(enter name of college)

A four-year college \_\_\_\_\_  
(enter name of college)

How important is it to your parents that you go to college? (Check one)

- 1 Not very important to them
- 2 Fairly important
- 3 Quite important
- 4 Extremely important to them

What is your best estimate of your immediate family's total yearly income before taxes? (If you are not certain make the best estimate you can.)

- 1 Less than \$4,000
- 2 \$4,000 - \$5,999
- 3 \$6,000 - \$7,999
- 4 \$8,000 - \$9,999
- 5 \$10,000 - \$14,999
- 6 \$15,000 - \$19,999
- 7 \$20,000 or more

How many brothers and/or sisters do you have?

- 1 None
- 2 One
- 3 Two
- 4 Three
- 5 Four
- 6 Five or more

How many members of your immediate family (not counting yourself) are now attending school? (Enter number for each level).

- |                          |                             |
|--------------------------|-----------------------------|
| <input type="checkbox"/> | In elementary school        |
| <input type="checkbox"/> | In junior high school       |
| <input type="checkbox"/> | In senior high school       |
| <input type="checkbox"/> | In college                  |
| <input type="checkbox"/> | In postgraduate institution |

If your parents work, which of the following best describe their line of work? If retired, deceased, or unemployed, indicate former main occupation. (Check only one for each parent).

- | Mother                   | Father                   |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1 Unskilled worker, laborer   |
| <input type="checkbox"/> | <input type="checkbox"/> | 2 Semi-skilled worker (for example, machine operator)   |
| <input type="checkbox"/> | <input type="checkbox"/> | 3 Service worker (policeman, fireman, barber, military non-commissioned officer, etc.)        |
| <input type="checkbox"/> | <input type="checkbox"/> | 4 Skilled worker or craftsman (carpenter, electrician, plumber, etc.)                         |
| <input type="checkbox"/> | <input type="checkbox"/> | 5 Salesman, bookkeeper, office worker, etc.   |
| <input type="checkbox"/> | <input type="checkbox"/> | 6 Owner, manager, or executive of a small business  |
| <input type="checkbox"/> | <input type="checkbox"/> | 7 Owner manager, or executive of a large business or organization                             |
| <input type="checkbox"/> | <input type="checkbox"/> | 8 Profession requiring a college or advanced degree (teacher, engineer, doctor, lawyer, etc.) |
| <input type="checkbox"/> | <input type="checkbox"/> | 9 Housewife   |
| <input type="checkbox"/> | <input type="checkbox"/> | 10 Does not apply   |

How much formal education did your parents have? Indicate only the highest level. (Check only one for each parent).

- | Mother                   | Father                   |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 1 Grade school  |
| <input type="checkbox"/> | <input type="checkbox"/> | 2 Some high (secondary) school  |
| <input type="checkbox"/> | <input type="checkbox"/> | 3 Finished high school  |
| <input type="checkbox"/> | <input type="checkbox"/> | 4 Business or trade school  |
| <input type="checkbox"/> | <input type="checkbox"/> | 5 Some college  |
| <input type="checkbox"/> | <input type="checkbox"/> | 6 Finished a two-year college   |
| <input type="checkbox"/> | <input type="checkbox"/> | 7 Finished a four-year college  |
| <input type="checkbox"/> | <input type="checkbox"/> | 8 Attended graduate or professional school (for example, law or medical school) but did not attain a graduate or professional degree. |
| <input type="checkbox"/> | <input type="checkbox"/> | 9 Attained a graduate or professional degree (M.A., Ph.D., M.D., etc.)  |
| <input type="checkbox"/> | <input type="checkbox"/> | 10 Do not know  |

List languages spoken in your home in order of greatest usage, including English if spoken.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

Which one of the following was most important in your decision to go to college?

- 1 Did not know what else to do
- 2 To learn a trade or prepare for a professional career
- 3 To avoid or postpone military service
- 4 To satisfy parents or relatives
- 5 Just to get an education

Which of the following reasons were important to you in selecting LaGuardia?  
(Check as many as applicable)

- 1 Location of College
- 2 Grade average too low to gain entrance to four-year institution
- 3 Parents urged you to attend
- 4 Curriculum offering of College
- 5 Cooperative Education or Work-Study Program
- 6 High School guidance counselor advised you to attend this College
- 7 Reputation of College
- 8 Couldn't get into first choice school

Which curriculum did you select? (Check one)

- 1 Accounting
- 2 Business Administration
- 3 Data Processing
- 4 Secretarial Science
- 5 Liberal Arts
- 6 Business Management
- 7 Human Services
- 8 None of the above

Are you planning to make your career in this area? (Check one)

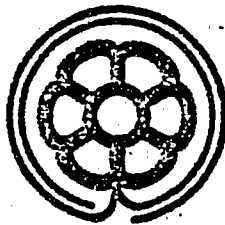
- 1 Yes
- 2 No
- 3 Undecided

In thinking about your occupational future, do you feel that in the long run you will have a preference for: (Check one)

- 1 An academic life (teaching, research, other scholarly work)?
- 2 A business life (Salesman, bookkeeper, etc.)?
- 3 A professional life (doctor, lawyer, engineer, etc.)?
- 4 A life of a trained technician or craftsman?
- 5 A life centering upon some aspect of the creative arts?
- 6 A life centering upon a home and a family?
- 7 Other \_\_\_\_\_  
(specify)
- 8 I have not given sufficient thought to this matter to say.

Do you intend to continue your formal education after graduation from LaGuardia? (Check one)

- 1 Yes
- 2 No
- 3 Undecided



UNIVERSITY OF CALIF.  
LOS ANGELES

CLEARINGHOUSE FOR  
JUNIOR COLLEGES