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To gather information that would aid in planning the development of career curriculums and to stimulate additional research, a study of occupational and vocational experiences of community college graduates was conducted. A completed questionnaire was obtained from 432 (47 percent) of the 925 students identified with this study. Some conclusions were: (1) 53.9 percent took additional education after graduating from a community college, (2) 44.4 percent were attending or had completed a 4-year college program, (3) 69 percent took jobs immediately upon graduation from community colleges, (4) 1.5 percent were unemployed, and (5) The great majority of respondents were employed in job areas directly related to their community college training. Fields of study of graduates were accounting, business, chemical technology, commercial art, construction technology, dental hygiene, dental laboratory technology, electrical technology, graphic arts, hotel technology, marketing, mechanical technology, medical laboratory technology, nursing, and secretarial studies. The appendixes contain a statement of methodology, the questionnaire used, and a copy of the follow-up letter. (DM)

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## CAREER GRADUATES: A PROFILE



of job experience  
and further study  
of students with AAS degrees

CITY UNIVERSITY OF NEW YORK  
Office of Community College Affairs

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occupational trends analyst  
december 1968

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## PREFACE

This study of the occupational and vocational experiences of community college career curricula graduates was undertaken to:

1. Gather information that would aid the City University and the colleges in planning the development of career curricula.
2. Stimulate additional research in this field.

Research on the junior college student has been spurred in very recent years by the marked growth in the number of junior colleges in this country. It appears, however, that this is the first major effort to gather information about the segment of the community college population that is enrolled in career programs. The fact that there are so many unanswered questions concerning this topic is a reflection, in part, of the paucity of such research.

It is the intention of this office to continue to work in this field, and it is hoped that others within and without the City University will also be encouraged to pursue research in this area.

Mildred Davison  
Occupational Trends Analyst

## SUMMARY STATEMENT and CONCLUSIONS

This is a report of the educational and occupational experiences in the three years following commencement of those June 1965 graduates of the community colleges of The City University of New York<sup>(1)</sup> who completed career curricula and were awarded Associate in Applied Science Degrees.

In 1965 there were a total of 925 such graduates from four community colleges who were sent questionnaires. Four hundred and thirty-two replies were received for a return of 47 per cent.

### Demographic Characteristics

The respondents numbered more men than women (57% vs. 42%). Over 75% are in the 21-24 age group; almost 50% are or have been married; and over 50% of the married group have one or more children.

There were no male students in the dental hygiene specialization, and no female students in four technology areas; chemical, construction, electrical, and mechanical.

### Educational Background

High School academic diplomas were earned by 67% of the respondents. The rest of the students had received diplomas of every variety offered in New York City high schools.

<sup>(1)</sup> Under the Program of The State University of New York.

The academic and general diploma student is represented in every college curricula area. Those students with technical, commercial, or vocational diplomas seem to cluster in a few career options that broadly articulate with the vocational training available in New York City high schools.

#### Post Community College Educational Experience

A total of 233 students or 53.9 per cent have taken some kind of education after graduating from community college. Still others indicated that they plan to do so in the future. Only 97 of the respondents or 23 per cent do not aspire to any additional education.

One hundred and ninety-two or 44.4 per cent of the respondents are now attending or have completed a four-year college program. Of this group, 35 per cent selected a four year college within The City University of New York, and 65 per cent selected some other four year institutions.

Eighty-six respondents (20 per cent) have already earned a baccalaureate degree, and ten of these are enrolled in graduate school. Students in every curricula except Construction Technology and Dental Hygiene have received advanced degrees.

#### Post Community College Employment Experience

Of the 298 graduates (69 per cent) who took jobs immediately upon graduation, 267 or 89.6 per cent were employed in fields directly related to their community college training.

The referral resource used by the largest percentage of students (31%) was the College. Nineteen per cent credited a friend or relative, while the remaining students utilized employment agencies and newspaper ads to secure their first jobs.

Three hundred and fifty respondents (81 percent) are presently employed. Others are full-time students, housewives or members of the Armed Forces. Only six reportedly were unemployed, representing a low 1.5 per cent unemployment rate.

Of these 350 respondents, 283 or 80.9% are in jobs directly related to their community college training.

Almost half of the employed respondents (163) have remained in one job since community college graduation; about one-third (115) have had two jobs; and approximately twenty per cent (72) have held three or more jobs.

#### Salary Data

The mean salary for 1965 career graduates based on reported data is \$7,362.

Salaries reported by business and marketing majors averaged \$9,313; technology majors (chemical, construction, electrical and mechanical) reported salaries averaged \$8,279. The lowest weighted average salary was in the area of secretarial studies--\$6000.

Major Conclusions

1. Career students do not view their community college education as terminal, but in fact continue advanced education. Of those taking course work at a four year college, only 35% are enrolled at the City University. The remainder are at other four year institutions. The educational needs of our career graduates are being met largely by institutions outside the City University.
2. The great majority of those respondents in the labor market are employed in job areas directly related to their community college training. This high correlation is an indication that career programs adequately prepare students for their career areas.

Suggested Topics for Further Investigation

1. Was the AAS degree earned in the field that was the student's first choice when applying for college admission?
2. What would the curriculum selection be if the respondent could make the choice today?
3. What factors influenced career choice?
4. Does a career program make employment choice easier or does it narrow job options?
5. Did career training and its subsequent vocational

possibilities contribute to the feasibility of pursuing baccalaureate studies?

6. How do job responsibilities and promotional possibilities for the career graduate compare with other employees in similar jobs but with other kinds of education?

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D R A F T  
A.A.S. GRADUATE STUDY

Introduction

The two-year college is acknowledged to be the fastest growing unit of higher education in the United States today. This is reflected in the planned growth of community colleges within the City University. By 1972, four new community colleges are scheduled to open in order that the University meet its stated Master Plan goal to "offer admission to every high school graduate."<sup>(1)</sup> In addition, each of the six existing community colleges is projecting increased enrollment. By 1975, the enrollment at these six colleges is expected to be more than twice the 1967 figure of 15,233.<sup>(2)</sup>

The rapid increase in the enrollment at the community colleges will undoubtedly be reflected in the number of students who will be studying in two-year career curricula leading to an Associate in Applied Science degree.

Yet according to at least one observer, "the students who enroll in junior college vocational curricula make up a very important subgroup about whom little is known."<sup>(3)</sup> While there is a considerable body of published information on junior

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- (1) Master Plan of the Board of Higher Education for The City University of New York 1968, issued pursuant to Section 6202 of the State Education Law. Pg. ix
  - (2) Ibid. Pg. 24
  - (3) K. Patricia Cross - The Junior College Student: A Research Description; Educational Testing Service, Princeton, New Jersey, 1968.

college transfer students, there has not been a major focus on the career oriented graduate. This survey of educational and occupational patterns of community college career graduates was undertaken to gain new information about this segment of our student body in order to better plan for this burgeoning population in the future.

Specifically, this study was designed to gather educational and occupational data from all the A.A.S. June 1965 graduates within the City University. Thus it involved graduates of Bronx, New York City, Queensborough, and Staten Island Community Colleges. (Borough of Manhattan and Kingsborough each had its first graduating class in 1966.) The 1965 graduates were chosen because a substantial number of students were in this class and because a sufficient period of time had elapsed to permit analysis of their educational and vocational post-community college experience.

Information was gathered for each college but appears in this report cumulatively. The basic data may be examined at this office should the reader wish further information.

The Counseling and Placement staff at each college cooperated in designing the questionnaire and supplying the names and addresses of the June 1965 A.A.S. degree graduates.

The details of the methodology used in this survey are given in Appendix A.

The questionnaire, a copy of which is appended to this study (Appendix B) is a two-page document comprising eleven questions. The cover page was in the form of an explanatory letter from each of the college presidents to the graduates of his institution. A copy of the follow-up letter is included as Appendix C. There were a total of 432 questionnaires completed by graduates, representing a 47 per cent return on the 925 questionnaires involved in this study.

### Demographic Characteristics

The characteristics of the respondents shown in Table 1 were gathered from the answers to questions 1 through 4 on the questionnaire, regarding age, sex, marital status and children.

The June 1965 A.A.S. degree graduates range in age from 21 to 34. More than three quarters (76%) are in the 21-24 age group, and 9 per cent are over 30 years of age.

The respondents numbered more men than women (58% vs. 42%) which corresponds closely to the male-female ratio in the total list of graduates (55% vs. 45%).

Almost half the respondents (46%) indicated that they were or had been married and more than half (53%) of the married respondents have one or more children.

Table 2 reveals that only one major, Dental Hygiene, had no male students, whereas four technologies, Chemical, Construction, Electrical, and Mechanical, had no female students.

With the exception of Dental Laboratory Technology the Health-Related Curricula have a preponderance of females, whereas Marketing and Graphic Arts curricula are largely male-oriented. Occupational traditions as far as sex is concerned are not rapidly changing.

TABLE 1.

Demographic Characteristics of the Respondents

<u>Age</u>	<u>N</u>	<u>%</u>
21-24	328	75.9
25-27	52	12.0
28-30	15	3.5
over 30	<u>37</u> <u>432</u>	<u>8.6</u> <u>100%</u>
<u>Sex</u>		
Male	249	57.6
Female	<u>183</u> <u>432</u>	<u>42.4</u> <u>100%</u>
<u>Marital Status</u>		
Single	232	53.7
Married	188	43.6
Widowed, Divorced	<u>12</u> <u>432</u>	<u>2.7</u> <u>100%</u>
<u>Children</u>		
None	325	75.4
1-3	100	23.3
More than 3	<u>6</u> <u>431*</u>	<u>1.3</u> <u>100%</u>

\* There was no reply to this question on one of the questionnaires.

TABLE 2.

DISTRIBUTION OF A.A.S. DEGREES BY SEX

Field	N. Male	N. Female	Total
Accounting	52	26	78
Business	14	4	18
Chemical Technology	11	--	11
Commercial Art	9	4	13
Construction Technology	21	--	21
Dental Hygiene	--	17	17
Dental Laboratory Technology	9	1	10
Electrical Technology	39	--	39
Graphic Arts	15	3	18
Hotel Technology	9	2	11
Marketing	37	5	42
Mechanical Technology	28	--	28
Medical Laboratory Technology	2	32	34
Nursing	2	30	32
Secretarial Studies	1	59	60
TOTAL	249	183	432

### Educational Background

Item 5 of the questionnaire requested information on the respondent's high-school diploma.

Table 3 reveals that a predictably large group (67%) had received academic diplomas. The remaining 33 per cent entered with high school preparation encompassing every variety of diploma granted by New York City high schools.

TABLE 3.

#### Distribution of the Various Kinds of High School Diplomas Earned

<u>High School Diploma</u>	<u>N.</u>	<u>%</u>
Academic	291	67.4
General	61	14.1
Commercial	37	8.6
Technical	16	3.7
Vocational	16	3.7
High School Equivalency	<u>11</u>	2.5
	432	100.0

Table 4 shows the fifteen college majors of the respondents according to the kind of high school diploma they hold.

In general, those students with academic or general diplomas are represented in each area of study; the students with technical or commercial diplomas are largely in related career programs; and the vocational diploma students are in the curricula which

articulate with the vocational training available in New York City high schools.

The students with Technical, Commercial or Vocational High School Diplomas seem to cluster in a few available career options. This may be viewed as the end result of channeling high school training based on early student vocational interest. It seems more likely that high school education that is vocationally oriented limits the study area choices available to this student should he elect to go to College.

TABLE 4.

## COMMUNITY COLLEGE MAJOR BY HIGH SCHOOL DIPLOMA

	<u>*A</u>	<u>*G</u>	<u>*T</u>	<u>*C</u>	<u>*V</u>	<u>*H.S.E.</u>	<u>Total</u>
Accounting	53	11	1	12	-	1	78
Business	18	-	-	-	-	-	18
Chemical Technology	9	2	-	-	-	-	11
Commercial Art	9	3	-	1	-	-	13
Construction Technology	17	1	2	-	-	1	21
Dental Hygiene	14	2	-	1	-	-	17
Dental Laboratory Technology	7	3	-	-	-	-	10
Electrical Technology	26	6	3	-	4	-	39
Graphic Arts	7	4	1	1	5	-	18
Hotel Technology	6	4	-	-	1	-	11
Marketing	20	12	1	5	1	3	42
Mechanical Technology	15	1	8	-	2	2	28
Medical Labora- tory Technology	30	2	-	-	1	1	34
Nursing	22	5	-	-	2	3	32
Secretarial Studies	38	5	-	17	-	-	60
TOTAL	291	61	16	37	16	11	432

\*A = Academic  
 G = General  
 T = Technical  
 C = Commercial  
 V = Vocational  
 H.S.E. = High School Equivalency

Post Community College Educational Experience

In the three years since Community College graduation, a total of 233 students, or 53.9 per cent, have taken some additional education. Table 5 shows the distribution of those with advanced education by high-school diploma; Table 6 shows the distribution by college major.

With two exceptions, roughly 45 per cent of each of the high school groups went on to further education. The academic group was considerably higher; the vocational group much lower. The college majors, on the other hand, showed a great deal of variation. Of the 11 chemical technology majors, 91 per cent continued their education after Community College graduation. This was true of only 25 per cent of those trained in nursing and secretarial studies.

TABLE 5  
POSTGRADUATE EDUCATION BY HIGH SCHOOL DIPLOMA

	C.C. Only	Post C.C. Edu. N	Total %	
Academic	120	171	58.8	291
General	31	30	49.1	61
Commercial	20	17	45.9	37
Technical	9	7	43.8	16
Vocational	13	3	18.8	16
High School Equivalency	6	5	45.5	11
TOTAL	199	233	53.9	432

TABLE 6.

## POSTGRADUATE EDUCATION BY COLLEGE MAJOR

	No Post C.C. Education	Post C.C. Education	Total
<u>Accounting</u>	21	57	73.1
<u>Business</u>	4	14	77.7
<u>Chemical Technology</u>	1	10	90.9
<u>Commercial Art</u>	4	9	69.2
<u>Construction Technology</u>	10	11	52.3
<u>Dental Hygiene</u>	9	8	47.1
<u>Dental Laboratory Technology</u>	6	4	40.0
<u>Electrical Technology</u>	17	22	56.4
<u>Graphic Arts</u>	11	7	38.9
<u>Hotel Technology</u>	4	7	63.6
<u>Marketing</u>	14	28	66.6
<u>Mechanical Technology</u>	16	12	42.8
<u>Medical Laboratory Technology</u>	13	21	61.7
<u>Nursing</u>	24	8	25.0
<u>Secretarial Studies</u>	45	15	25.0
<b>TOTAL</b>	<b>199</b>	<b>233</b>	<b>53.9</b>
			<b>432</b>

Table 7 presents a breakdown of respondent's education at the time of the questionnaires. One hundred ninety-two or 44.4 per cent of this population are now attending, or have completed, a four-year college program, indicating that contrary to the supposed "terminal nature" of career curricula almost half of the individuals continued their education. Of those students attending four year institutions, 35 percent selected a senior college within The City University and 65 per cent selected some other four-year college.

In addition to the 192 students who elected four year colleges, thirty graduates are attending or have attended other institutions, such as the R.C.A. Institute, Salvation Army Officers' School, and the Academy of Advanced Traffic.

TABLE 7  
NATURE OF POST COMMUNITY COLLEGE EDUCATION

	N	%
None--thus far	199	46.1
Another Community College	11	2.5
4-year CUNY College	64	14.8
4-year College	118	27.3
Graduate Programs	10	2.3
Other Institutions	30	7.0
TOTAL	432	100.0

Question 9 asked for future educational plans over the next five years. It can be seen from Table 7 that 199 respondents had not engaged in post community college education. However, 102 of the above group did indicate that they planned to pursue additional education. In all, then, only 97 of the 432 or 23 per cent of the respondents did not continue their education nor aspire to do so.

Table 8, which details the baccalaureate degree holders by Community College field of study, reveals that 86, or 20 per cent, of the respondents completed work for the baccalaureate. It appears that well over half of those majoring in business and 46 per cent of those in Hotel Technology now hold a Bachelor's Degree. While the numbers are small, it is interesting to note that students in every curricula except Construction Technology and Dental Hygiene have received advanced degrees.

TABLE 8

BACCALAUREATE DEGREE HOLDERS BY  
COMMUNITY COLLEGE FIELD OF STUDY

<u>Field</u>	Total Number of Graduates	Baccalaureate Degree Holders N	Baccalaureate Degree Holders %
<u>Accounting</u>	78	29	37.2
<u>Business</u>	18	10	55.6
<u>Chemical Technology</u>	11	2	18.2
<u>Commercial Art</u>	13	1	7.7
<u>Construction Technology</u>	21	--	--
<u>Dental Hygiene</u>	17	--	--
<u>Dental Laboratory Technology</u>	10	1	10.0
<u>Electrical Technology</u>	39	5	12.8
<u>Graphic Arts</u>	18	2	11.1
<u>Hotel Technology</u>	11	5	45.5
<u>Marketing</u>	42	12	28.6
<u>Mechanical Technology</u>	28	7	25.0
<u>Medical Laboratory Technology</u>	34	9	26.5
<u>Nursing</u>	32	1	3.1
<u>Secretarial Studies</u>	60	3	5.0
TOTAL	432	36	20.0%

Post Community College Employment Experience

The information on employment history subsequent to community college graduation was elicited from the replies to items 7, 8, and 11 of the questionnaire. Several of the tables in this section do not total 432 since some respondents did not answer all these questions fully. One can hypothesize that the less successful graduates preferred not to answer questions concerning their occupational pattern. Thus, the data must be viewed with some caution for they might present a biased profile of the respondents' careers after graduation.

Table 9 reveals that 69 per cent of the respondents took jobs immediately upon graduation. The second largest group, 27 per cent, entered a four-year college on a full-time basis.

Of the 298 graduates who took full-time jobs immediately after graduation, 267 or 89.6 per cent were related to community college training. Only 3.0 per cent of those who entered the labor market took jobs unrelated either to training or interest.

TABLE 9  
ACTIVITY IMMEDIATELY AFTER COMMUNITY COLLEGE GRADUATION

	N	%
Entered Armed Forces	14	3.2
Job--related to training	267	61.8
Job--related to my interest but not to my training	22	5.1
Job--unrelated to either training or interest	9	2.1
Entered a 4-year college	117	27.1
Other	3	0.7
TOTAL	432	100.0

Question 8 asked how the graduates obtained their first job after community college graduation. Almost 31 per cent located their first job through college placement referral, and 19 per cent credited a relative or friend. More than twice as many students used the services of a private employment agency (16%) as did those who used the State employment agency. Newspaper ads were the placement source for 10 per cent of the respondents who answered this question.

Table 10 reveals that 81 per cent of the respondents are presently employed. Those who are included in the Not Employed category are largely out of the labor market; either in the Armed Forces, full-time students, or housewives. Only six reportedly were unemployed and available for employment or a 1.5 per cent unemployment rate.

TABLE 10  
PRESENT EMPLOYMENT FIGURES

	N	%
Total Employed	350	81.0
Not Employed	82	19.0
Total Replies	432	100.0

The next two tables detail the relationship of employment to community college training by college major. Table 11 shows this relationship in terms of the first job after community college graduation, and Table 12 shows the association between college major and the job currently held by the graduate.

In both instances the marketing major shows the lowest correlation between training and placement. This suggests that job opportunities in this field may be limited or that the jobs do exist but are not satisfactory to the community college graduate.

In the fields of dental hygiene, graphic arts, nursing, and secretarial studies, the data shown in Tables 11 and 12 suggest a very high correlation between education and employment.

In the remaining curricula, these tables also reflect a high correlation between community college training and vocational placement for both the first job and the present job, with only minor fluctuations in the percentage figures shown.

Based upon the data in Table 12 which indicates that 80.9 per cent of the graduates hold jobs directly related to their community college curricula, there is reason to conclude that

people remain in the fields for which they are trained. The numbers for each career category are too small to draw significant conclusions regarding stability within particular occupational areas.

TABLE 11  
RELATIONSHIP OF FIRST JOB TO COLLEGE MAJOR

College Major	Total N. of questionnaires in which this inform- ation was available	N. Directly Related	% Directly Related
Accounting	73	61	83.6
Business	18	11	61.1
Chemical Technology	11	8	72.7
Commercial Art	13	10	76.9
Construction Technology	19	17	89.5
Dental Hygiene	17	17	100.0
Dental Laboratory Technology	8	6	75.0
Electrical Technology	39	30	76.9
Graphic Arts	18	18	100.0
Hotel Technology	11	10	90.9
Marketing	36	20	55.5
Mechanical Technology	23	19	82.6
Medical Laboratory Technology	34	32	94.1
Nursing	32	32	100.0
Secretarial Studies	58	58	100.0
<b>TOTAL</b>	<b>410*</b>	<b>349</b>	<b>85.1</b>

\*Includes both full-time and part-time job.

TABLE 12  
RELATIONSHIP OF PRESENT JOB TO COLLEGE MAJOR

College Major	Total N. of Graduates Now Employed	N. Directly Related	% Directly Related
Accounting	63	51	81.0
Business	17	11	64.7
Chemical Technology	5	4	80.0
Commercial Art	13	7	53.8
Construction Technology	16	14	87.5
Dental Hygiene	15	15	100.0
Dental Laboratory Technology	7	4	57.1
Electrical Technology	35	29	82.9
Graphic Arts	17	17	100.0
Hotel Technology	7	5	71.4
Marketing	33	15	45.5
Mechanical Technology	23	19	82.6
Medical Laboratory Technology	28	22	78.6
Nursing	27	27	100.0
Secretarial Studies	44	43	97.7
TOTAL	350	283	80.9

Table 13 shows the number of jobs that the employed population of 350 held since graduation, detailed by college major. The fields of electrical technology, mechanical technology and business have the largest percentages of graduates who remained in one job since graduation. The commercial art and graphic-arts major have the largest percentage of students who have held three or more jobs since graduation.

TABLE 13

NUMBER OF JOBS SINCE GRADUATION OF CURRENTLY  
EMPLOYED RESPONDENTS BY COLLEGE MAJOR

College Major	One Job	Two Jobs	Three or more Jobs	Total N. Employed
Accounting	25	29	9	63
Business	9	4	4	17
Chemical Technology	4	1	0	5
Commercial Art	4	3	6	13
Construction Technology	10	2	4	16
Dental Hygiene	5	6	4	15
Dental Laboratory Technology	2	3	2	7
Electrical Technology	22	8	5	35
Graphic Arts	5	5	7	17
Hotel Technology	2	3	2	7
Marketing	14	13	6	33
Mechanical Technology	15	6	2	23
Medical Laboratory Technology	10	10	8	28
Nursing	13	8	6	27
Secretarial Studies	23	14	7	44
<b>TOTAL</b>	<b>163</b>	<b>115</b>	<b>72</b>	<b>350</b>

### SALARY DATA

Salaries for the 1965 AAS graduates range from \$3,500 to \$30,000, with a mean of \$7,362 and a standard deviation of \$2,082.

Table 14 presents the weighted average salary for the respondents grouped by community college study areas. For purposes of this table, the Technologies include Chemical, Construction, Electrical and Mechanical; the Health area includes Dental Hygiene, Dental Laboratory Technician, Medical Laboratory Technology, and Nursing; the Business Category includes business and marketing areas, and the last column under the heading "other" includes Hotel Technology and other areas of job involvement not classified under the headings used.

In addition to the weighted average salary, Table 14 represents the range of earnings of the middle 50% of the graduates in each of these areas. The highest weighted average salary is found in the business area, with the secretarial studies area showing the lowest weighted average salary. Further research on the jobs held in the business area is indicated to determine whether extraneous factors in specific situations may have affected this figure. The second highest salaries are earned by persons in the technologies. The narrowest range of salaries above and below the weighted average are in secretarial studies and the health related areas, probably resulting from similarity of job assignments.

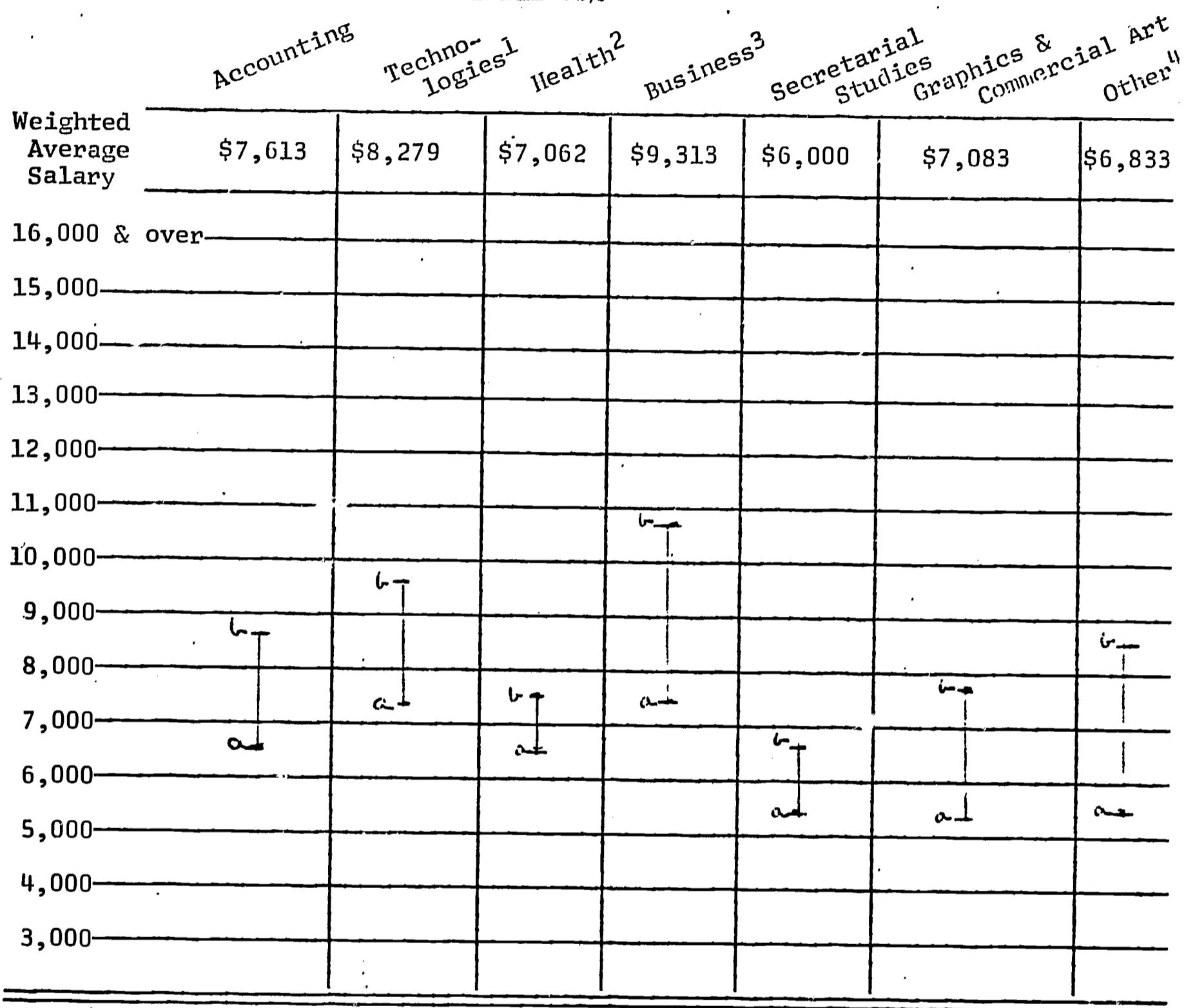
There are no statistics available that would permit meaningful comparisons between salaries earned by community college career graduates and those of similarly employed persons with either less or

more education. However New York City all industry average earnings for 1967 as reported in the July issue of the Employment Review<sup>1</sup> was over \$7,200 per year, somewhat less than the weighted average salary for this group of career graduates.

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1. Employment Review - A monthly publication issued by the New York State Department of Labor - Division of Employment - Research and Statistics Office.

TABLE 14

24

WEIGHTED AVERAGE SALARY - AND SALARY  
RANGE OF MIDDLE 50%

Line a \_\_\_\_\_ b represents the range of salaries earned by the middle 50% of the respondents.

1. Technologies include chemical, construction, electrical and mechanical.
2. Health area includes dental hygiene, dental laboratory technology, medical laboratory, technology and nursing.
3. Business includes both business and marketing areas.
4. Included here are Hotel Technology and other areas of job involvement not elsewhere classified.

### Conclusion

From this study, one can identify two important factors that can be used in future planning for career students at community colleges.

1. Career students do not view their community college education as terminal, but in fact continue advanced education.
2. The great majority of the graduates in the labor market are employed in job areas directly related to their community college training.

In the three years that have elapsed since graduation, 53.9 per cent of the class of 1965 have participated in some post-community college education. Eighty-six or 20 per cent of the respondents have received baccalaureate degrees, and ten of these are in graduate school. An additional 24 per cent are now pursuing baccalaureate studies and another 15 per cent plan to earn a bachelor's degree in the future, for a total of 59 per cent with interest in the Bachelor's degree.

Of the 182 students who have taken course work at a four-year college, only 35 percent attended an institution within the City University. If 65 per cent of this population seek higher education at other four-year institutions, we must conclude that the educational needs of our career graduates are being met largely by institutions outside the City University.

The occupational experiences reported by these students provided striking evidence of the significantly high correlation between community college career training and subsequent employment. Eighty-five per cent of the jobs accepted directly after community college graduation and 81 per cent of the respondents' present jobs are directly related to their school training.

This indicates that at present the career programs are adequately preparing students for their career areas, and further that career programs offered in our community colleges are in areas in need of trained manpower. An additional observation might be that the choice of curriculum by the career student in large part determines job choice. This makes it of utmost importance to provide adequate career counseling at the outset of a student's college career.

There are numerous unanswered questions that might profitably be investigated. Among those suggested are:

- Were any changes in major made while at community college?
- Was the A.A.S. degree earned in the field that was the student's first choice when applying for college admission?
- What would the curriculum choice be if the respondent could make the choice today?

- What factors influenced career choice?
- Does a career program make employment choice easier or does it narrow job options?
- Should career information be provided in high school?
- Was post-community college education pursued on a full-time or part-time basis?
- Did career training and its subsequent vocational possibilities contribute to the feasibility of pursuing baccalaureate studies?
- How do job responsibilities and promotional possibilities for the career graduate compare with other employees in similar jobs but with other kinds of education?

In addition, there should be a concerted effort made to follow up those who do not reply to questionnaires. This may avoid the statistical bias that seems likely if one is correct in believing that graduates with positive experiences both educationally and vocationally are more likely to reply than those with less successful experiences to report.

Additional research and continuous follow up of the graduates is a vital ingredient in the planning for new programs that will best serve the needs of all junior college career-oriented students.

## APPENDIX A

Methodology

The attached questionnaire (Appendix B) was mailed the week of May 27th, 1968 to 994 students, whose names and addresses were supplied by the colleges. Some 42 envelopes were returned by the post office marked "No longer at that address." A telephone directory check enabled us to re-address nine questionnaires, making a final total of 961 delivered questionnaires. Within six weeks, we received 393 completed questionnaires, of which 33 were from graduates with an Associate in Arts or an Associate in Science degree rather than an Associate in Applied Science degree. These 33 were not included in our tabulated results.

A second mailing (Appendix C) was sent out the week of July 15th. Enclosed with the follow-up letter was a postcard reply form. We received 82 requests for questionnaires which elicited 75 replies, three of them from A.A. or A.S. graduates and therefore excluded from this report.

To recapitulate:

- 994 - questionnaires sent out
- 33 - not deliverable
- 961 - questionnaires delivered
- 36 - A.A. or A.S. graduate replies
- 925 - total questionnaires for this study
- 432 - replies received, or 47 per cent return

## APPENDIX B

*Office of the President*

May 27, 1968

Dear Graduate:

We are conducting a research study of the education and employment patterns of each of our June 1965 A.A.S. degree graduates at several of the Community Colleges in New York City.

Please fill out this questionnaire and return it, following instructions on the back, to the City University and not to this college. There it will be analyzed and a report issued. We are seeking this information from all, including those now in the Armed Forces and those who are now housewives.

The material we shall then be able to examine will be extremely helpful in determining future career programs and in modifying existing ones for the benefit of future students.

No individuals will be identifiable in the resultant report, and all answers will be used for research purposes only.

In order to expedite this study, we would greatly appreciate your cooperation in returning the completed questionnaire within one week.

Sincerely,

PLEASE MARK THE APPROPRIATE BOX **1 AGE**

- 21-24     28-30  
 25-27     Over 30

**2 SEX**

- Male  
 Female

**3 MARITAL STATUS**

- Single     Married  
 Widowed, Divorced or Separated

**4 CHILDREN**

- None  
 1-3  
 More than 3

**5 HIGH SCHOOL DIPLOMA**

- Academic     Commercial  
 General     Vocational  
 Technical     High School Equivalency

**6 IN WHICH FIELD DID YOU RECEIVE YOUR AAS DEGREE?**

- |   |   |   |  |
|---|---|---|--|
| <input type="checkbox"/> Accounting     | <input type="checkbox"/> Commercial Art     | <input type="checkbox"/> Electrical Tech. | <input type="checkbox"/> Mechanical Tech.    |
| <input type="checkbox"/> Business       | <input type="checkbox"/> Construction Tech. | <input type="checkbox"/> Graphic Arts     | <input type="checkbox"/> Medical Lab. Tech.  |
| <input type="checkbox"/> Chemical Tech. | <input type="checkbox"/> Dental Hygiene     | <input type="checkbox"/> Hotel Tech.      | <input type="checkbox"/> Nursing             |
| <input type="checkbox"/> Pre-Pharmacy   | <input type="checkbox"/> Dental Lab. Tech.  | <input type="checkbox"/> Marketing        | <input type="checkbox"/> Secretarial Studies |

Other \_\_\_\_\_

Specify \_\_\_\_\_

**7 UPON GRADUATION FROM COMMUNITY COLLEGE I:**

- Entered Armed Forces.     Enrolled in a 4-year college.  
 Accepted a job for which I had been trained at the Community College.  
 Accepted a job in which I was interested but for which I had not received specialized training.  
 Was unable to find a job in the area of my training so I accepted a position unrelated to my community college career program.

Other: \_\_\_\_\_

Specify \_\_\_\_\_

**8 FIRST POSITION AFTER GRADUATION LOCATED THROUGH:**

- College Referral     Private Employment Agency     Relative or Friend  
 State Employment Service     Newspaper Advertisement  
 Other: \_\_\_\_\_

Specify \_\_\_\_\_

**9 EDUCATIONAL PLANS FOR THE NEXT FIVE YEARS INCLUDE:**

- No future school work     Completing the Bachelor's Degree  
 Non-matriculated College Courses     Vocational Training  
 Graduate Degree Courses     Other: \_\_\_\_\_

Specify \_\_\_\_\_

10

**EDUCATION BEYOND HIGH SCHOOL**

(Include courses or programs in community college, senior college, technical institution, or other, as well as any institution you are currently attending.)

31

Name of the Institution	Curriculum Specialty	Year Begun	Year COMPLETED	Degree if Earned	Check One	
					Full-time	Part-time

11

**EMPLOYMENT HISTORY**

(Start with present employment and work backwards to date of graduation from community college. Please indicate periods of unemployment, service in the Armed Forces and housewife status. If at any time you have held more than one job, list them all. If presently unemployed, please state.)

Job Title	Description of Work	Check One		Dates of Employ.	Related to Comm. Coll. Training	Approx. Annual Salary
		Full-time	Part-time			
		From	To			

**USE THIS SPACE FOR ANY ADDITIONAL COMMENTS:**

**Instructions for mailing on Page 4 (No Postage Required)**

## APPENDIX C

**The City University of New York**

535 East Eightieth Street  
New York, New York 10021

Office of the Chancellor

July 15, 1968

Dear Graduate:

As a June 1965 A.A.S. graduate of a community college, you were recently sent a questionnaire by your college requesting information on your education and employment history after graduation.

If you have already filled in and returned this questionnaire to us, please disregard this letter.

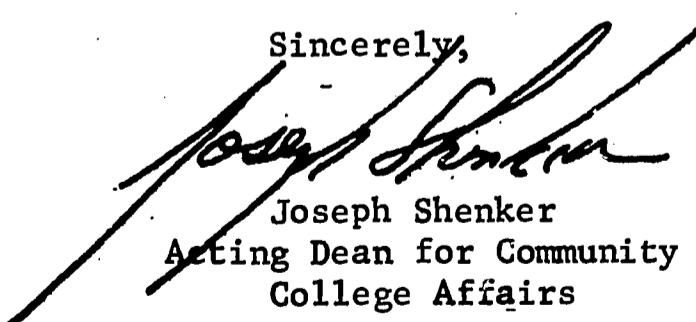
If you have this questionnaire, but have not yet had the opportunity to complete it, please take the time to do so now, since we are working toward an early completion of our study.

If you have never received a copy of the questionnaire or have misplaced it and would like another, please fill out and return the enclosed postcard and we will send you a questionnaire immediately.

The information being gathered will aid future community college students plan their vocational and educational goals more effectively. All answers will be used for research purposes only, and no individual will be identifiable in the resultant report.

We are grateful for your cooperation.

Sincerely,

  
Joseph Shenker  
Acting Dean for Community  
College Affairs

JS:rmh

Enc1.