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REPORT ON NEW YORK STATE DATA FROM A NATIONAL FOLLOW-UP STUDY OF HIGH SCHOOL LEVEL T AND I VOCATIONAL GRADUATES.

BY- ENINGER, MAX U.
EDUCATIONAL SYSTEMS RESEARCH INST., PITTSBURGH,PA.

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A NATIONAL FOLLOWUP STUDY OF TRADE AND INDUSTRIAL VOCATIONAL GRADUATES FROM 100 SELECTED SCHOOLS WAS MADE TO (1) DESCRIBE THE POST-HIGH SCHOOL EDUCATIONAL AND VOCATIONAL EXPERIENCE OF A GROUP OF TRADE AND INDUSTRIAL VOCATIONAL COURSE GRADUATES FROM THE CLASSES OF 1953, 1958, AND 1962, (2) COMPARE VOCATIONAL COURSE GRADUATES FROM COMPREHENSIVE HIGH SCHOOLS WITH THOSE FROM VOCATIONAL HIGH SCHOOLS, AND (3) COMPARE VOCATIONAL WITH ACADEMIC COURSE GRADUATES IN TERMS OF RELEVANT POST-HIGH SCHOOL OCCUPATIONAL AND NONOCCUPATIONAL VARIABLES. THE NEW YORK SAMPLE OF EIGHT PARTICIPATING HIGH SCHOOLS WAS A CLOSE APPROXIMATION OF THE STRUCTURE OF THE NATIONAL SAMPLE. COMPARED WITH THE NATIONAL SAMPLE, THE NEW YORK GRADUATES' VOCATIONAL COURSE SELECTION WAS LESS INFLUENCED BY JOB OPPORTUNITIES, FRIENDS, AND TEACHERS AND MORE INFLUENCED BY COUNSELORS, BOOKS, AND MAGAZINES. VOCATIONAL GRADUATES OBTAINED JOBS MORE QUICKLY THAN NONCOLLEGE-BOUND ACADEMIC GRADUATES. THEY FELT THAT THEY WERE WELL-PREPARED FOR THEIR CHOSEN OCCUPATION, AND THEIR STARTING SALARIES SURPASSED THOSE OF ACADEMIC GRADUATES. THE GRADUATES WHO ENTERED THE SAME OR A HIGHLY RELATED JOB FOR WHICH THEY RECEIVED TRAINING WERE MORE SATISFIED WITH THEIR JOBS THAN GRADUATES IN SLIGHTLY RELATED OR UNRELATED JOBS. THE VOCATIONAL GRADUATES SHOWED A HIGH LEVEL OF EMPLOYMENT SECURITY, WITH 80 PERCENT OF THE 1953 GRADUATES HOLDING FOUR OR FEWER FULL-TIME JOBS SINCE GRADUATION. ALTHOUGH 70.2 PERCENT WENT DIRECTLY TO WORK, THERE WAS A SUGGESTION OF A DECREASE IN THE NUMBER OF VOCATIONAL GRADUATES GOING DIRECTLY TO WORK AND AN INCREASE IN THE NUMBER GOING TO COLLEGE. A SUMMARY OF THE NEW YORK DATA IS GIVEN IN VT 005 266. (HC)

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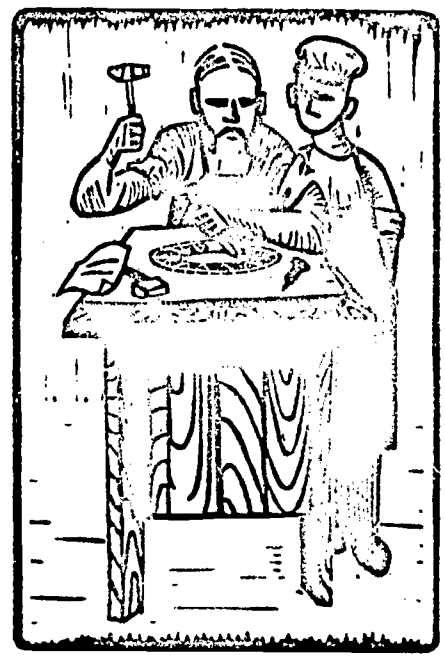

May 1967

EDUCATIONAL SYSTEMS RESEARCH INSTITUTE
Pittsburgh, Pennsylvania

REPORT ON NEW YORK STATE DATA FROM A NATIONAL FOLLOW-UP STUDY OF HIGH SCHOOL LEVEL T&I VOCATIONAL GRADUATES

Prepared by:

MAX U. ENINGER

MAY, 1967

EDUCATIONAL SYSTEMS RESEARCH INSTITUTE
Pittsburgh, Pennsylvania

FOREWORD

In 1963, the American Institutes for Research undertook a nation-wide study, The Process and Product of T&I High School Level Vocational Education in the United States, funded by the Ford Foundation.

The first phase consisted of a post high school follow-up survey of a national sample of vocational and academic program graduates selected from 100 vocational and comprehensive high schools. Eight of the 100 schools were from New York State. First phase findings were reported in 1965, and have been widely circulated since. At the present time, the second phase of the study, an analysis of the process of vocational education as found in the 100 participant schools, is nearing completion.

The present report concerns the post high school follow-up data on the vocational and academic program graduates of the eight New York schools that participated in the national survey. Where appropriate, comparable national survey data have been provided so that the New York educators may compare the New York State data with that from the national survey.

The findings reported have one obvious limitation. They are based on a breakout sample, rather than on a sample of schools and graduates specifically constructed for the State of New York. Even so, there is good reason to believe that the findings are representative of what happens to New York State vocational course graduates after high school. Hence, they should be of interest to vocational educators in New York.

TABLE OF CONTENTS

TABLE OF TABLES

TABLE OF TABLES (contd.)

TABLE OF TABLES (contd.)

TABLE OF TABLES (contd.)

TABLE OF TABLES (contd.)

TABLE OF TABLES (contd.)

TABLE OF TABLES (contd.)

TABLE OF TABLES (contd.)

TABLE OF FIGURES

SECTION 1 NATIONAL FOLLOW-UP STUDY OF VOCATIONAL GRADUATES

Objectives and Issues

The objectives of the national follow-up study that are relevant to this report were as follows:

1. To describe the essential variables of post high school occupational and educational experiences of 10,000 high school T&I vocational course graduates selected from the classes of 1953, 1958 and 1962. The occupational variables of primary concern included:

   - Time required to get first full-time job.
   - Relatedness of first job to high school training.
   - Methods used to get first full-time job.
   - Reasons for not getting job related to training.
   - Geographic mobility relative to first job.
   - Initial earnings and earnings progression.
   - Employment security over the years worked.
   - Relatedness of all jobs held to high school training.
   - Satisfaction with jobs held.
   - Employer stability over the years worked.

   Nonoccupational variables included:

   - Sources of influence in vocational course selection.
   - Attitudes toward selected school factors.
   - Opinions regarding adequacy of occupational training.
   - Post high school educational experiences.
   - Conversational interests of graduates.
   - Leisure time activities of graduates.
   - Organization affiliations of graduates.

2. To compare vocational with academic course graduates in terms of relevant post high school occupational and non-occupational variables. Related to this objective, is the long-standing issue of general as vocational education at the high school level. While it was not the goal of the study to resolve the issue, it did hope to provide some long overdue data to a controversy not noted for concern with facts.

3. To compare vocational course graduates from comprehensive high schools with those from vocational high schools in terms of relevant post high school occupational and non-occupational variables. Here, again, an issue is involved. Some educators argue strongly for vocational education in comprehensive high schools. Others argue with equal conviction that such education is best conducted in the vocational high school. It was felt that a comparison of graduates from both types of schools would have a bearing on the issue.

Selection of Schools

At the time of the original study in 1963, there were 667 high schools in United States that offered three or more trade and industrial high school level courses. The study sampled 100 or 15 percent of these schools. The schools were selected by means of a stratified random sampling procedure that took into account geographic region, school enrollment and type of high school.

Table 1 shows the regional distribution of both the population of 667 schools and the sample of 100 schools. Notice that each region is represented in the sample in approximate proportion to its contribution to the United States total.

TABLE 1. DISTRIBUTION OF THE STUDY'S POPULATION AND SAMPLE OF SCHOOLS BY GEOGRAPHICAL REGION. (U.S. Office of Education Regions)

Geographic Region	Population		Sample	
	N	%	N	%
1. New England	72	10.8	11	11
2. Mideast	162	24.3	24	24
3. Great Lakes	100	15.0	15	15
4. Plains	48	7.2	7	7
5. Southeast	196	29.4	29	29
6. Southwest	54	8.1	8	8
7. Rocky Mountains	8	1.2	1	1
8. Pacific	27	4.0	5	5
UNITED STATES	667	100.0	100	100

Table 2 shows the distribution of population and sample schools in three total pupil enrollment categories. Each enrollment category was represented in the sample in approximate proportion to its representation in the U.S. population of schools. Notice that the New York sample of eight schools does not conform to the U.S. sample in terms of percentage of schools distributed in the three enrollment categories. The New York sample contains a greater percentage of schools with enrollments of 1500 or more.

TABLE 2. DISTRIBUTION OF THE POPULATION AND SAMPLE SCHOOLS BY TOTAL ENROLLMENT

Enrollment	Population		U.S. Sample		N.Y. Sample	
	N	%	N	%	N	%
Less than 1500	177	26.5	30	30	1	12.5
500 - 1500	284	42.6	40	40	3	37.5
More than 1500	206	30.9	30	30	4	50.0
TOTAL	667	100.0	100	100	8	100.0

Table 3 shows the distribution of the U.S. sample and the New York sample in terms of type of school. Both samples involve a 50-50 split among the two types of schools. Thus, the New York sample is, in this respect, the same as the U.S. sample. It is also a reasonable approximation of the population distribution of schools into the two basic categories, i.e., comprehensive and vocational schools.

TABLE 3. DISTRIBUTION OF THE POPULATION AND SAMPLE SCHOOLS BY TYPE OF SCHOOL

Type of School	Population		U.S. Sample		N.Y. Sample	
	N	%	N	%	N	%
Vocational	296	44.4	50	50	4	50
Comprehensive	371	55.6	50	50	4	50
TOTAL	667	100.0	100	100	8	100

It must be understood that there was no choice about the New York State sample. The present study reports as the New York State sample the eight New York schools that were included in the U.S. sample of the original study. Nevertheless, it is a happy circumstance that the New York sample is a close approximation of the structure of the original U.S. sample. It makes possible a comparison of New York State data with data obtained from the United States as a whole.

Selection of Graduates

From each of the 100 schools, a maximum of 50 T&I vocational course graduates was selected from each of three graduating classes, i.e., the classes of 1953, 1958 and 1962. Where the graduating class was less than 50, all graduates were selected for follow-up survey. Where it exceeded 50, a random sample of 50 graduates was selected. In the latter case, an attempt was made to select graduates so that all vocational courses offered by the school were equally represented in the class year sample. This was not always possible.

Table 4 shows the distribution of vocational program graduates selected for follow-up study by graduating class year and by type of school. The relatively small graduating classes in some of the comprehensive schools accounts for the smaller percentages of graduates from such schools. Nevertheless the disparity is not excessive.

TABLE 4. DISTRIBUTION OF T&I GRADUATES SELECTED FOR FOLLOW-UP STUDY BY CLASS YEAR AND TYPE OF SCHOOL

Type of School	YEAR OF GRADUATION							
	1953		1958		1962		Combined	
	N	%	N	%	N	%	N	%
Vocational	1779	60.4	2002	54.7	2379	56.7	6160	57.0
Comprehensive	1166	39.6	1659	45.3	1820	43.3	4645	43.0

Table 5 shows the distribution of the graduates by graduating class year and school total enrollment. The percentages of graduates by enrollment category is a reflection of the 30-40-30 distribution of the 100 schools surveyed in the enrollment categories shown.

TABLE 5. DISTRIBUTION OF T&I GRADUATES SELECTED FOR FOLLOW-UP STUDY BY CLASS YEAR AND SCHOOL ENROLLMENT

School Enrollment	YEAR OF GRADUATION							
	1953		1958		1962		Combined	
	N	%	N	%	N	%	N	%
Less than 500	1021	34.7	1146	31.3	1370	32.6	3537	32.7
500 - 1500	1119	38.0	1432	39.1	1553	37.0	4104	38.0
More than 1500	805	27.3	1083	29.6	1276	30.4	3164	29.3

Survey Procedure

A roster of the names and addresses of graduates selected for follow-up study was obtained from each school. The questionnaire mailed to the graduates is shown in the Appendix. Because of the formidable nature of the questionnaire, a multiple contact strategy was applied to increase the percentage of returns. The procedure involved seven mail contacts, a sequence that was terminated when a questionnaire return was received from the graduate. The seven contacts were as follows:[1]

1. Initial contact (letter). A letter requesting the graduate to complete and return the questionnaire and explaining the purpose of the survey was the first contact. The letter appeared on a specially designed school letterhead, and was signed by the school principal and/or shop instructor. Signatures were simulated with permission of school personnel.

2. Second contact (post card). A post card signed by the school principal was sent as a reminder three days after the initial letter. It also functioned as a thank you note to those who had returned the questionnaire.

3. Third contact (post card). Another reminder post card, signed by the principal, was mailed ten days after the first letter. It was a stepped-up version of a friendly reminder, urging the graduate to send in the completed questionnaire.

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[1] See the original report for a more detailed account of the survey procedure, and exhibits of the mailing pieces. (Eninger, M. U. The Process and Product of T&I High School Level Vocational Education in the United States. Pittsburgh: American Institutes for Research, September, 1965.

4. Fourth contact (letter). This was a strongly-worded appeal, signed by the president of the research institute. It stressed the graduate's opportunity to help the future of vocational education by giving the information requested. It was mailed twenty-four days after the initial letter, together with a second questionnaire, to graduates who had not responded.

5. Fifth contact (post card). A third reminder post card, signed by the principal, was mailed to nonrespondents on the thirty-eighth day after the initial mailing.

6. Sixth contact (letter). A special plea letter, signed by the principal, was mailed together with another questionnaire on the fifty-third day. The letter stressed the importance of getting a completed questionnaire from the graduate.

7. Seventh contact (letter). A final letter, signed by the graduate's former shop instructor, was mailed sixty days after the initial letter to the remaining nonrespondents.

The above approach, which bordered on pestering the nonrespondents to return the questionnaire, proved to be essential. Each mail contact brought a new wave of questionnaire returns, albeit a diminishing wave with each successive contact. Only about 21 percent responded to the initial letter. The complete series of contacts eventually brought the return to 50.5 percent of the initial mailing and 66.6 percent of those who could be located by mail. These results proved the value of a multiple contact strategy.

Survey Returns

Table 6 shows the survey returns from the graduates for both the New York and United States samples. The percentages are questionnaire returns based upon the numbers of graduates contacted. The returns from New York graduates were slightly greater than from the U.S. graduates. Notice also that the returns decrease with the increased years out of school. This is primarily attributable to the greater difficulty in locating graduates of 1953 and 1958.

TABLE 6. NUMBER AND PERCENTAGE OF QUESTIONNAIRE RETURNS BY TYPE OF SCHOOL AND YEAR OF GRADUATION, BASED ON GRADUATE SAMPLE
(Shaded rows contain U.S. data for comparison purposes.)

Type of School		YEAR OF GRADUATION							
		1953		1958		1962		Combined*	
		N	%	N	%	N	%	N	%
Vocational	NY	82	44.3	113	51.4	151	68.0	348	55.5
	US	715	40.2	938	46.8	1453	61.1	3122	50.7
Comprehensive		40	31.7	44	39.3	89	59.7	175	45.2
		448	38.4	720	43.4	1033	56.8	2205	47.5
All Schools		122	39.2	157	47.3	240	64.7	523	51.6
		1163	39.5	1658	45.4	2486	59.2	5327	49.5

* Includes cases from adjacent years of graduation.

Table 7 shows the structure of the New York and U.S. samples. The percentages are based upon the total number of usable returns, and include additional questionnaires obtained by special search, find and interview procedures applied for the purpose of correcting the main sample results for nonrespondence. Notice that the New York sample came to 551 cases for the combined class years. The number of New York cases reported in subsequent analysis will often be less than this total because varying percentages of respondents failed to complete individual questionnaire items.

TABLE 7. THE NUMBER AND PERCENTAGE OF GRADUATES IN THE NEW YORK AND UNITED STATES SAMPLE BY TYPE OF SCHOOL AND YEAR OF GRADUATION BASED ON USABLE QUESTIONNAIRE RETURNS
(Shaded rows contain U.S. survey data for comparison purposes.)

Type of School		YEAR OF GRADUATION							
		1953		1958		1962		Combined*	
		N	%	N	%	N	%	N	%
Vocational	NY	87	66.9	120	71.8	154	61.6	363	65.9
	US	715	61.5	938	56.6	1453	58.4	3122	58.6
Comprehensive		43	33.1	47	28.2	96	38.4	188	34.1
		448	38.5	720	43.4	1033	41.6	2205	41.4
All Schools		130	23.6	167	30.3	250	45.4	551	100.0
		1163	21.8	1658	31.1	2486	46.3	5327	100.0

* Includes cases from adjacent years of graduation.

Throughout the report, the number of New York cases reported in individual tables will usually be less than the total New York usable returns reported in Table 7. The nature of each particular analysis generates a loss of cases. For example, when the analyses concern the first job held after high school, only those who went directly to work after high school are tapped for data. Those who went directly to college or to military service are dropped, because to include them would mean a distortion of the data.

SECTION 2 INTRODUCTION TO NEW YORK STATE REPORT

Report Organization

With few exceptions, all tables include New York and United States data for comparison purposes. The United States data will always appear in shaded columns or rows, whereas New York data will always appear in non-shaded (white) columns or rows. The contrast should facilitate making comparisons.

All tables and figures appear on right-hand pages. A quick identification heading is located in the upper right-hand corner of all table pages. The commentary for each table is located on the opposite left-hand page. Each commentary page consists of (1) orientation questions at the top of the page, (2) a findings section which reports the major findings without commenting on all tabled data, and (3) a comment section which the writer has used to emphasize overall generalizations, data implication or cautions concerning the interpretation of the data. The commentary for each table is limited to one page in the interest of brevity and the method of data reporting described above.

SECTION 3 SOURCES OF INFLUENCE ON COURSE SELECTION

Introduction

This section takes a look at the sources which vocational and academic graduates report influenced them in the type of course selected in high school. Each graduate was asked to indicate all sources which had some measure of influence on the course selected, and then to indicate the single most important source of influence. The analyses which follow merely scratch the surface of an important problem-area, namely, the dynamics of deciding a career during the formative years of the high school period.

Summary

1. Multiple sources of influence. Most graduates acknowledge that they were influenced by more than one source. The most frequently mentioned sources of influence in course selection were job opportunities, parents, books and magazines, school counselors and friends of the same age. ● Relative to other sources of influence, school personnel play a minor role. ● The trend suggests, however, that the role of school personnel in influencing course selection is on the increase. ● Vocational graduates from comprehensive schools differ in degree from vocational school graduates in the sources of influence acknowledged. The school counselor plays a more active role in the comprehensive schools. ● Academic program graduates differ markedly from vocational program graduates in the sources acknowledged to have influenced their course selection.

2. Most important source of influence. No one single source predominates as the most important source of influence on course selection. ●The most frequently mentioned "most important" source is the graduate's perception of job opportunities, i.e., he selects the type of course he does because he thinks the job opportunities will be good. ● The minor role of school personnel in influencing course selection is emphasized by their infrequent mention as a "most important" influence source. ●There are substantial differences between graduates of vocational and comprehensive schools on the "most important" sources of course selection influence acknowledged. ●Academic graduates report a greater influence by school counselors than by parents. The reverse is true for vocational graduates.

WHAT SOURCES DO NEW YORK STATE VOCATIONAL COURSE GRADUATES ACKNOWLEDGE AS AN INFLUENCE ON THE TYPE OF COURSE SELECTED? DOES THE NEW YORK STATE PATTERN OF SOURCES ACKNOWLEDGED DIFFER FROM THE U.S. PATTERN? ARE THERE INDICATIONS OF YEAR TO YEAR TRENDS?

- FINDINGS: Table 8 presents the data. The top six sources of influence acknowledged by the New York State graduates are ranked below, with the U.S. top six at the right.

New York	%	United States	%
job opportunities	36.2	job opportunities	43.4
parents	29.1	parents	28.5
books and magazines	20.5	friend your age	21.6
school counselor	17.5	books and magazines	17.5
friend your age	15.6	school teacher	15.1
relative	13.8	school counselor	12.3

Compared with U.S. graduates, the New York graduates are <u>less</u> influenced by job opportunities and friends of the same age, and <u>more</u> influenced by school counselors and books and magazines. Only 12.4 percent of the New York graduates acknowledged the influence of a teacher.

The data suggest that the influence of job opportunities, parents, books and magazines, school teachers and school counselors is increasing. With the exception of the parental influence trend, these trends agree with comparable U.S. trends.

- COMMENT: While the trends are in the right direction, school personnel are still not a major source of influence on vocational course selection. Students lean more heavily on their perceptions of job opportunities, the advices of parents and friends, and what they read in books and magazines. This is in contrast with the potential for vocational guidance claimed for school personnel. One wonders if the holding power of vocational programs would increase if students received more professional vocational guidance.

TABLE 8. ACKNOWLEDGED SOURCES OF INFLUENCE ON COURSE SELECTION: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL GRADUATES

Sources of Influence on Course Selection		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Job opportunities	NY	38	29.5	61	36.3	98	39.4	199	36.2 ↗
	US	417	36.3	697	42.5	1167	47.2	2290	43.4
Parents		30	23.3	50	29.8	78	31.3	160	29.1 ↗
		328	28.6	440	26.8	732	29.6	1504	28.5
Friend your age		24	18.6	22	13.1	40	16.1	86	15.6
		242	21.1	333	20.3	561	22.7	1139	21.6
Books and magazines		22	17.1	35	20.8	56	22.5	113	20.5 ↗
		159	13.9	256	15.6	508	20.6	923	17.5
School teacher		11	8.5	22	13.1	35	14.1	68	12.4 ↗
		143	12.5	232	14.2	422	17.1	799	15.1
School counselor		12	9.3	29	17.3	54	21.7	96	17.5 ↗
		90	7.8	175	10.7	381	15.4	649	12.3
Relative		19	14.7	17	10.1	40	16.1	76	13.8
		111	9.7	162	9.9	287	11.6	561	10.6
Part-time job		13	10.1	9	5.4	20	8.0	42	7.6
		131	11.4	153	9.3	243	9.8	529	10.0
Brother or sister		13	10.1	11	6.5	16	6.4	41	7.5 ↘
		86	7.5	133	8.1	201	8.1	421	8.0
Course graduate		7	5.4	4	2.4	12	4.8	23	4.2
		47	4.1	93	5.7	182	7.4	323	6.1
Neighbor (adult)		6	4.7	9	5.4	10	4.0	25	4.5
		53	4.6	70	4.3	116	4.7	240	4.5
School principal		1	0.8	0	0.0	6	2.4	7	1.3
		27	2.4	30	1.8	76	3.1	135	2.6
Other than above		17	13.2	27	16.1	41	16.5	85	15.5
		224	19.6	292	17.8	476	19.3	995	18.9

↗ Consistent increase
↘ Consistent decrease

▼ N.Y. > U.S. by ≧ 5%
▲ U.S. > N.Y. by ≧ 5%

WHAT SOURCES OF INFLUENCE ON VOCATIONAL COURSE SELECTION WERE ACKNOWLEDGED AS MOST IMPORTANT BY THE GRADUATES? HOW DOES THE NEW YORK PATTERN COMPARE WITH THE U.S. PATTERN? ARE THERE ANY SIGNIFICANT YEAR TO YEAR TRENDS?

- FINDINGS: Graduates were asked to indicate which source of influence was the most important. Table 9 indicates the percentage response for each potential source of influence. The top six for the New York and United States sample are shown below:

New York	%	United States	%
job opportunities	19.9	job opportunities	26.8
parents	16.6	parents	14.4
school counselor	10.4	friend your age	9.8
friend your age	7.3	school teacher	6.3
books and magazines	7.0	school counselor	5.7
brother or sister	6.7	books and magazines	4.5

School counselors have greater "most important" influence on course selection in New York than in the United States as a whole. Teachers are a relatively minor "most important" source of influence on vocational course selection.

The small number of cases in the New York data argues against trying to interpret trends. However, the decreasing influence of parents as the most important source of influence and the increasing influence of books and magazines agrees with the U.S. trend.

- COMMENT: The findings verify an earlier comment. School personnel are a relatively minor source of influence on the selection of vocational courses. Perception of job opportunity and the influence of parents are dominant. Are these the best sources of influence? Do they take into account capabilities and aptitudes?

TABLE 9. MOST IMPORTANT SOURCE OF INFLUENCE ON COURSE SELECTION: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL GRADUATES

Most Important Influence on Course Selection		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Job opportunities	NY	13	13.5	28	23.1	36	21.6	77	19.9
	US	168	19.9	339	28.9	466	29.1	973	26.8
Parents		17	17.7	21	17.4	24	14.4	64	16.6
		160	19.0	161	13.7	200	12.5	524	14.4
Friend your age		10	10.4	7	5.8	11	6.6	28	7.3
		93	11.0	116	9.9	146	9.1	357	9.8
School teacher		2	2.1	7	5.8	7	4.2	16	4.1
		43	5.1	80	6.8	104	6.5	227	6.3
School counselor		5	5.2	15	12.4	20	12.0	40	10.4
		34	4.0	61	5.2	110	6.9	205	5.7
Books and magazines		4	4.2	9	7.4	14	8.4	27	7.0
		31	3.7	44	3.7	88	5.5	163	4.5
Brother or sister		12	12.5	4	3.3	10	6.0	26	6.7
		40	4.7	46	3.9	75	4.7	161	4.4
Relative		7	7.3	5	4.1	8	4.8	24	5.2
		38	4.5	57	4.9	62	3.9	158	4.4
Part-time job		4	4.2	1	0.8	3	1.8	8	2.1
		52	6.2	54	4.6	48	3.0	154	4.2
Course graduate		2	2.1	1	0.8	3	1.8	6	1.6
		9	1.1	21	1.8	33	2.1	63	1.7
Neighbor (adult)		1	1.0	2	1.7	3	1.8	6	1.6
		15	1.8	14	1.2	22	1.4	51	1.4
School principal		0	0.0	0	0.0	3	1.8	3	0.8
		10	1.2	9	0.8	18	1.1	38	1.0
Other than above		19	19.8	21	17.4	25	15.0	65	16.8
		150	17.8	172	14.7	231	29.1	554	15.3

↗ Consistent increase
↘ Consistent decrease

▼ N.Y. > U.S. by ≥5%
▲ U.S. > N.Y. by ≥5%

DO VOCATIONAL SCHOOL GRADUATES DIFFER FROM COMPREHENSIVE SCHOOL GRADUATES IN TERMS OF SOURCES ACKNOWLEDGED TO HAVE INFLUENCED VOCATIONAL COURSE SELECTION? HOW DOES THE NEW YORK PATTERN COMPARE WITH THE U.S. PATTERN?

- FINDINGS: Table 10 presents the comparison data. The rank order of the top six sources of influence for each type of school is as follows:

Vocational	%	Comprehensive	%
job opportunities	34.2	job opportunities	40.1
parents	31.4	school counselor	25.7
books and magazines	22.3	parents	24.6
friend your age	15.4	books and magazines	17.1
relative	14.3	friend your age	16.0
school counselor	13.2	relative	12.8

While the top six factors are the same for both types of schools, there are differences in rank order and magnitude of percentages. Vocational school graduates are more influenced by parents and reading materials. Comprehensive school graduates are more influenced by job opportunity, school counselors and part-time jobs.

The New York pattern for type of school comparisons agrees generally with the U.S. pattern in that the direction of differences are the same. There are, however, interesting New York - United States differences within each type of school. These are marked with arrows. Notice that the reported influence of counselors is substantially different between the comprehensive school graduates of New York (25.7%) and those of United States (14.0%).

- COMMENT: Why are counselors in comprehensive schools acknowledged so much more frequently as an influence in the course selection process than counselors in vocational schools? It could be that they are more actively involved with students. It could also be a reflection on the type of student apt to see the counselor in the two kinds of schools.

TABLE 10. ACKNOWLEDGED SOURCES OF INFLUENCE ON COURSE SELECTION: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL GRADUATES

Sources of Influence on Course Selection		TYPE OF SCHOOL			
		Vocational		Comprehensive	
		N	%	N	%
Job opportunities	NY	124	34.2 ←	75	40.1
	US	1328	42.8 ▲	962	44.2
Parents		114	31.4 →	46	24.6
		956	30.8	548	25.2
Friend your age		56	15.4	30	16.0 ▲
		626	20.2	513	23.6
Books and magazines		81	22.3 →	32	17.1
		560	18.1	363	16.7
School teacher		47	12.9	21	11.2 ▲
		420	13.5	379	17.4
School counselor		48	13.2 ←	48	25.7 ▼
		344	11.1	305	14.0
Relative		52	14.3	24	12.8
		357	11.5	204	9.4
Part-time job		20	5.5 ←	22	11.8
		244	7.9	285	13.1
Brother or sister		32	8.8	9	4.8
		222	7.2	199	9.1
Course graduate		15	4.1	8	4.3
		142	4.6	181	8.3
Neighbor (adult)		18	5.0	7	3.7
		149	4.8	91	4.2
School principal		4	1.1	3	1.6
		98	3.2	37	1.7
Other than above		60	16.5	25	13.4
		605	19.6	390	18.0

→ Vocational > Comprehensive by ≥ 5%
← Comprehensive > Vocational by ≥ 5%
▼ N.Y. > U.S. by ≥ 5%
▲ U.S. > N.Y. by ≥ 5%

HOW DO THE GRADUATES OF VOCATIONAL AND COMPREHENSIVE SCHOOLS DIFFER IN TERMS OF WHAT THEY ACKNOWLEDGE AS THE MOST IMPORTANT SOURCE OF COURSE SELECTION INFLUENCE?

- FINDINGS: Table 11 presents the comparison data. The six most frequently acknowledged most important sources of influence are ranked for each type school as follows:

Vocational	%	Comprehensive	%
parents	20.5	job opportunities	25.0
job opportunities	17.3	school counselor	18.3
brother or sister	8.3	parents	9.1
books and magazines	7.9	friend your age	7.6
friend your age	7.1	books and magazines	5.3
school counselor	6.3	part-time job	4.5

The data indicate substantial differences between the two types of schools. Parents are the single most important source of influence reported by vocational school graduates, whereas job opportunities are the most important source of influence reported by comprehensive school graduates. Again, notice the relatively strong influence of the school counselor in the comprehensive schools.

The arrows in Table 11 indicate substantial New York - United States differences. Counselors in New York comprehensive schools are much more frequently acknowledged as the most important source of influence than their counterparts throughout the United States.

- COMMENT: The persistent differences between the two types of schools may be as much a reflection of differences among the students who take vocational courses in the two types of schools as the sources of influence. It is noteworthy that twice as many comprehensive school graduates reported the school counselor as the most important source of influence as those who placed their parents in this category.

TABLE 11. MOST IMPORTANT SOURCE OF INFLUENCE ON COURSE SELECTION: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL GRADUATES

Most Important Influence on Course Selection		TYPE OF SCHOOL			
		Vocational		Comprehensive	
		N	%	N	%
Job opportunities	NY	44	17.3 ←	33	25.0
	US	564	26.0 ▲	409	28.0
Parents		52	20.5 →	12	9.1
		365	16.8	159	10.9
Friend your age		18	7.1	10	7.6
		202	9.3	155	10.6
School teacher		14	5.5	2	1.5
		135	6.2	92	6.3
School counselor		16	6.3 ←	24	18.3
		101	4.7	104	7.1 ▼
Books and magazines		20	7.9	7	5.3
		105	4.8	58	4.0
Brother or sister		21	8.3	5	3.8
		89	4.1	72	4.9
Relative		15	5.9	5	3.8
		105	4.8	53	3.6
Part-time job		2	0.8	6	4.5
		71	3.3	83	5.7
Course graduate		4	1.6	2	1.5
		26	1.2	37	2.5
Neighbor (adult)		5	2.8	1	0.8
		38	1.8	13	0.9
School principal		1	0.4	2	1.5
		26	1.2	12	0.8
Other than above		42	16.5	23	17.4
		341	15.7	213	14.6

← Comprehensive > Vocational by ≥ 5%
→ Vocational > Comprehensive by ≥ 5%
▼ N.Y. > U.S. by ≥ 5%
▲ U.S. > N.Y. by ≥ 5%

DO ACADEMIC COURSE GRADUATES REPORT THE SAME PATTERN OF COURSE SELECTION INFLUENCES AS DO VOCATIONAL COURSE GRADUATES? IF NOT, WHAT ARE THE DIFFERENCES? HOW DOES THE NEW YORK PATTERN COMPARE WITH U.S. PATTERN?

- FINDINGS: Table 12 presents the comparison data. The six most frequently acknowledged sources of influence are ranked below for each type of graduate.

Vocational	%	Academic	%
job opportunities	36.2	school counselor	52.4
parents	29.1	parents	38.5
books and magazines	20.5	job opportunities	25.2
school counselor	17.5	friend your age	21.7
friend your age	15.6	school teacher	13.3
relative	13.8	brother or sister	9.8

The data indicate substantial differences between the two types of graduates. Academic graduates in New York are strongly influenced by <u>school counselors</u> compared to vocational graduates. <u>Parents</u> also are a greater influence on academic graduates than vocational graduates in the matter of course selection. Vocational graduates are more influenced by <u>job</u> opportunities, as might be expected.

The arrows in Table 12 indicate where there are substantial New York - United States differences. New York vocational graduates report less influence by perceived <u>job opportunities</u> and <u>friends of the same age</u> than U.S. vocational graduates. Similarly, New York academic graduates report a much greater influence of <u>school counselors</u> than do U.S. academic graduates. The <u>direction</u> of differences is generally the same in the New York and United States data.

- COMMENT: The data clearly suggest that school counselors do <u>not</u> have the same influence on vocational students as they have on academic students. One possible interpretation is that they are primarily concerned with the academic students, and that their programs of contact are more closely geared to the academic student.

TABLE 12. ACKNOWLEDGED SOURCES OF INFLUENCE ON COURSE SELECTION: ANALYSIS BY TYPE OF GRADUATE IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL AND ACADEMIC GRADUATES

Sources of Influence on Course Selection		TYPE OF GRADUATE			
		Vocational		Academic	
		N	%	N	%
Job opportunities	NY	199	36.2 →	36	25.2
	US	2290	43.4 ▲	654	37.6 ▲
Parents		160	29.1 ←	55	38.5
		1504	28.5	751	43.2
Friend your age		86	15.6 ←	31	21.7
		1139	21.6 ▲	379	21.8
Books and magazines		113	20.5 →	10	7.0 ▲
		923	17.5	259	14.9
School teacher		68	12.4	19	13.3 ▲
		799	15.1	413	23.7
School counselor		96	17.5 ▼ ←	75	52.4 ▼
		649	12.3	539	31.0
Relative		76	13.8 →	12	8.4
		561	10.6	146	8.4
Part-time job		42	7.6	10	7.0
		529	10.0	88	5.1
Brother or sister		41	7.5	14	9.8
		421	8.0	221	12.7
Course graduate		23	4.2	5	3.5
		323	6.1	104	6.0
Neighbor (adult)		25	4.5	5	3.5
		240	4.5	62	3.6
School principal		7	1.3	2	1.4
		135	2.6	54	3.1
Other than above		85	15.5	12	8.4
		995	18.9	267	15.4

→ Vocational > Academic by ∓5%
← Academic > Vocational by ∓5%
▼ N.Y. > U.S. by ∓5%
▲ U.S. > N.Y. by ∓5%

HOW DO ACADEMIC AND VOCATIONAL COURSE GRADUATES DIFFER IN TERMS OF THE REPORTED MOST IMPORTANT INFLUENCE ON TYPE OF COURSE SELECTED? HOW DOES THE NEW YORK PATTERN COMPARE WITH THE U.S. PATTERN?

- FINDINGS: Table 13 presents the comparison data. The six most frequently reported most important sources of influence are ranked below for each type of graduate.

Vocational	%	Academic	%
job opportunities	19.9	school counselor	33.0
parents	16.6	parents	20.6
school counselor	10.4	friend your age	9.3
friend your age	7.3	school teacher	5.2
books and magazines	7.0	job opportunities	5.2
brother or sister	6.7	part-time job	5.2

The data corroborate the substantial differences reported earlier between the two type of graduates. Fully one-third of the academic graduates reported the school counselor as the most important source of influence. Only 10 percent of the vocational graduates so reported. Does the difference lie with the type of students involved or the type of counselors found in the two kinds of schools?

The arrows in Table 13 indicate where there are substantial New York - United States differences. New York vocational graduates again report less influence by perceived job opportunities. The same appears to be true for New York academic graduates, only even more strikingly so. Twice as many New York academic graduates reported the counselor as the most important source of influence as did U.S. academic graduates.

- COMMENT: The data further support the need for a more intensive study of school counselor activities in relation to vocational students. It is clear that the two types of students have different relationships with counselors.

TABLE 13. MOST IMPORTANT SOURCE OF INFLUENCE ON COURSE SELECTION: ANALYSIS BY TYPE OF GRADUATE IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL AND ACADEMIC GRADUATES

Most Important Influence on Course Selection		TYPE OF GRADUATE			
		Vocational		Academic	
		N	%	N	%
Job opportunities	NY	77	19.9 →	5	5.2 ▲
	US	973	26.8 ▲	217	17.7
Parents		64	16.6	20	20.6
		524	14.4	303	24.8
Friend your age		28	7.3	9	9.3
		357	9.8	92	7.5
School teacher		16	4.1	5	5.2
		227	6.3	88	7.2
School counselor		40	10.4 ←	32	33.0 ▼
		205	5.7 ▼	197	16.1
Books and magazines		27	7.0	2	2.1
		163	4.5	41	3.3
Brother or sister		26	6.7	3	3.1
		161	4.4	51	4.2
Relative		20	5.2	2	2.1
		158	4.4	26	2.1
Part-time job		8	2.1	5	5.2
		154	4.2	27	2.2
Course graduate		6	1.6	1	1.0
		63	1.7	18	1.5
Neighbor (adult)		6	1.6	1	1.0
		51	1.4	7	0.6
School principal		3	0.8	0	0.0
		38	1.0	3	0.2
Other than above		65	16.8	12	12.4
		554	15.3	154	12.6

→ Vocational > Academic by ≧5%
← Academic > Vocational by ≧5%
▼ N.Y. > U.S. by ≧5%
▲ U.S. > N.Y. by ≧5%

SECTION 4 THE FIRST FULL-TIME JOB AFTER HIGH SCHOOL

Introduction

This section examines the first full-time job after high school held by the vocational graduates of 1953, 1958 and 1962. Specifically, it establishes where they go after high school, how many move to other communities to get a job, how long it takes them to find a job, how related their first job is to high school vocational training, what their starting hourly earnings are, how much job satisfaction they experienced, and what reasons they gave for leaving their first job.

Summary

1. Where they go after high school. The great majority go directly to work, but the percentage that do so is decreasing while the percentage that go to college is increasing. Relatively few continue post high school trade or technical study.

2. First job new community moves. Less than 4 percent move to a new community for their first job. Of these, there is no indication that the move was unrelated to job-seeking.

3. Time required to find job. The time required to get the first job varies with the economy level. ● The mean time was 1.0, 2.3 and 1.6 months for the class years 1953, 1958 and 1962. ● There is no substantial difference between vocational and comprehensive school graduates in time

required to get the first job. ● Vocational graduates find their first job sooner than academic graduates.

4. Methods used to get jobs. Friends and relatives are the most frequently cited source of help in getting jobs. ● Excluding vocational teachers, school personnel play a minor role in helping graduates find jobs. ● Vocational school graduates receive more placement help from school personnel than do comprehensive school graduates.

5. Relatedness of job to training. The percentage of graduates who enter the same or a highly related occupation for which trained varies with the level of the economy. ● Only about 28 percent enter the same occupation for which trained, with another 18 percent entering a highly related occupation. ● The percentage who entered a completely unrelated occupation increased from 29 percent of the 1953 graduates to 40 percent of the 1962 graduates, whereas the percentage who entered the same occupation decreased from 36 to 25 percent. ● Vocational schools do slightly better than comprehensive schools in placing graduates in the field for which trained. ● Lack of job opportunity and preference for other work are the two most frequently cited reasons for not getting a job in the field for which trained.

6. Opinion of vocational training received. Graduates who entered the fields for which trained hold a very favorable opinion of their vocational training. Forty-five percent said they were exceptionally well prepared to enter their chosen fields.

(Continued in Appendix A)

WHERE DO THE NEW YORK VOCATIONAL PROGRAM GRADUATES GO AFTER GRADUATION FROM HIGH SCHOOL? HOW DOES THE NEW YORK STATE PATTERN COMPARE WITH THE UNITED STATES PATTERN OF FINDINGS?

- FINDINGS: Table 14 indicates that the great majority of New York vocational program graduates go directly to work after completion of high school. For the three graduating classes combined, 70.2 percent went directly to work, 17.4 percent went to college, 10.9 percent went into military service, and only 1.5 percent continued in some type of trade or technical school. There is a suggestion of a decrease in the trend of directly to work percentages and an increase in the directly to college percentages.

  A comparison with United States data indicates that fewer New York graduates go directly to work after high school (New York 70.2% vs. United States 75.7%), and a substantially greater percentage of New York graduates go to college, (New York 17.4% vs. United States 9.4%). The latter difference may be a reflection of greater opportunity for college entry in New York State. There is no data in the study to account for the difference. An explanation, therefore, is conjecture.

- COMMENT: A more comprehensive survey of New York vocational program high school graduates would be desirable to determine whether the New York - United States difference in percentage that attend college holds up. A study that seeks to determine the reasons why more New York than United States vocational program graduates go to college would shed more light on these findings.

TABLE 14. WHERE THEY WENT AFTER GRADUATION: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL GRADUATES

Where Vocational Graduates Went After High School		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Directly to work	NY	95	73.6	120	71.4	169	67.6	387	70.2
	US	960	82.5	1217	73.4	1844	74.2	4035	75.7
College or university		20	15.5	26	15.5	50	20.0	96	17.4
		96	8.3	146	8.8	258	10.4	501	9.4
Military service		13	10.1	19	11.3	27	10.8	60	10.9
		99	8.5	271	16.3	339	13.6	712	13.4
Other trade/technical school		1	0.8	3	1.8	4	1.6	8	1.5
		8	0.7	23	1.4	37	1.5	69	1.3

↗ Consistent increase
↘ Consistent decrease

▼ N.Y. > U.S. by ≥5%
▲ U.S. > N.Y. by ≥5%

WHAT PERCENTAGE OF NEW YORK VOCATIONAL GRADUATES MOVE TO OTHER COMMUNITIES FOR THEIR FIRST FULL-TIME JOB? WHAT DISTANCES DO THEY MOVE? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 15 shows that the percentage of graduates who moved to a new community for their first full-time job was about 3, 3 and 5 percent respectively for the class years of 1953, 1958 and 1962. These percentages are consistently less than comparable percentages for the United States sample. Thus, a small, almost negligible percentage of New York graduates move to other cities for their first full-time job.

  The small number of cases that moved makes an analysis of distances moved inconclusive. It is very likely that more cases would have revealed a New York pattern similar to the United States pattern, namely, the majority of movers move within 150 miles from the city in which they went to school.

- COMMENT: The data has considerable implications for curriculum planning. Vocational graduates are not a highly mobile population. Better than 95 percent will find their first full-time job in the city in which they went to school. This would seem to imply that vocational curriculum planning is better based upon job opportunity forecasts that are local in nature rather than national or even regional. The 18 year old high school graduate looking for a full-time job is not likely to extend his efforts to other states or regions of the country. If the graduate can not get a job in his community in the occupation for which he was trained, assuming that he wants such a job, the chances are he will take an unrelated job rather than go outside of his community to find work.

TABLE 15. GEOGRAPHIC MOBILITY FOR THE FIRST JOB: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Distance Moved for Job (Miles)		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
> 1200	NY	1	-	1	-	1	-	3	27.3
	US	3	6.5	4	6.0	4	4.0	11	5.2
601 - 1200		0	-	0	-	0	-	0	0.0
		5	10.9	8	11.9	7	7.1	20	9.4
301 - 600		0	-	0	-	1	-	1	9.1
		9	19.6	12	17.9	17	17.2	38	17.9
151 - 300		0	-	0	-	1	-	1	9.1
		7	15.2	8	11.9	18	18.2	33	15.6
51 - 150		1	-	0	-	2	-	3	27.3
		14	30.4	21	31.3	20	20.2	55	25.9
< 50		0	-	2	-	1	-	3	27.3
		8	17.4	14	20.9	33	33.3	55	25.9
Number of first job moves		3	3.3	4	3.4	8	5.2	16	4.4
		75	8.2	93	8.2	153	9.4	321	8.7

HOW LONG DID IT TAKE NEW YORK VOCATIONAL PROGRAM GRADUATES TO GET THEIR FIRST FULL-TIME JOB AFTER GRADUATION FROM HIGH SCHOOL? HOW DO THE NEW YORK FINDINGS COMPARE WITH THE UNITED STATES FINDINGS? DO THE CLASS YEAR DIFFERENCES SUGGEST ANY TRENDS?

- FINDINGS: Table 16 indicates, for the three class years combined, that the majority (70.1%) of the New York graduates obtained their first full-time job within one month after graduation. The mean time to obtain the first full-time job was 1.0, 2.3 and 1.6 months respectively for the graduates of 1953, 1958 and 1962. The level of the economy appears to be a factor influencing time required to find a job. The class of 1953, a boom year, required the shortest time, whereas, the class of 1958, a recession year, required the greatest time.

  The New York findings are not significantly different from the United States findings. New York vocational graduates are requiring about the same amount of search time to find their first full-time job as are United States graduates.

- COMMENT: While a small percentage of vocational graduates in each graduating class require six months or more to get their first full-time job, it is clear that the greater majority of graduates have relatively little difficulty in finding a full-time job.

  Placement time, i.e., time required by graduates to find their first full-time job, is recommended as a measure of school placement efforts. Some United States schools, with well organized placement services, come close to zero placement time, meaning that almost all graduates have a job at the time of graduation. An annual reading on how long it requires to place the graduating class has merit.

TABLE 16. PLACEMENT TIME* FOR FIRST JOB: ANALYSIS BY CLASS YEAR IN TERMS OF FREQUENCY, PERCENTAGE AND CUMULATIVE PERCENTAGE DISTRIBUTIONS, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Placement Time (Months)	YEAR OF GRADUATION											
	1953			1958			1962			Combined		
	N	%	C%	N	%	C%	N	%	C%	N	%	C%
≧9.0	1	1.1	100.0	7	5.9	100.0	5	3.2	100.0	13	3.5	100.0
8.0	0	0.0	98.9	0	0.0	94.0	2	1.3	96.7	2	0.5	96.4
7.0	0	0.0	98.9	0	0.0	94.0	1	0.6	95.4	2	0.5	95.9
6.0	1	1.1	98.9	5	4.2	94.0	4	2.5	94.8	10	2.7	95.4
5.0	0	0.0	97.8	4	3.4	89.8	1	0.6	92.3	5	1.3	92.7
4.0	2	2.1	97.8	4	3.4	86.4	5	3.2	91.7	11	3.0	91.4
3.0	7	7.4	95.7	10	8.5	83.0	9	5.7	88.5	26	7.0	88.4
2.0	10	10.6	83.3	13	11.0	74.5	19	12.1	82.8	42	11.3	81.4
1.0	19	20.2	77.7	28	23.7	63.5	37	23.6	70.7	85	22.8	70.1
0.5	14	14.9	57.5	13	11.0	39.8	20	12.7	47.1	48	12.9	47.3
0.1	40	42.6	42.6	34	28.8	28.8	54	34.4	34.4	128	34.4	34.4
Number	94			118			157			372		
	946			1193			1807			3960		
Mean	1.0			2.3			1.6			1.7		
	1.3			2.3			1.7			1.8		
Median	0.5			1.0			1.0			1.0		
	0.5			1.0			1.0			0.5		
S.D.	1.6			4.0			2.5			2.9		
	2.6			4.0			2.8			3.2		

* The measure does not mean an active school placement effort. It is simply the time lapse in months between date of graduation and date of starting the first full-time job after graduation.

HOW DO NEW YORK COMPREHENSIVE SCHOOLS AND VOCATIONAL SCHOOLS COMPARE IN TERMS OF TIME GRADUATES REQUIRED TO GET THEIR FIRST FULL-TIME JOB? HOW DO THE NEW YORK FINDINGS COMPARE WITH THE UNITED STATES FINDINGS?

- FINDINGS: Table 17 shows the comparison data. For the combined graduating classes, the mean time required to get the first full-time job was 1.8 months for vocational school graduates and 1.4 for comprehensive school graduates. Although the difference favors the comprehensive schools, it is negligible and of no practical significance.

  The United States findings are at variance with the New York findings. The United States data indicates that vocational school graduates find jobs quicker than vocational graduates of comprehensive schools. However, the difference is small, and no firm conclusion about differences in placement time between the two types of schools is warranted.

- COMMENT: The small number of New York cases, involving only a total of 4 comprehensive and 4 vocational schools, raises some question about the correctness of the comparison. One would have to be reasonably confident that differences in community job opportunity were minimal before drawing conclusions about the relative placement success of the two types of schools.

TABLE 17. PLACEMENT TIME FOR FIRST JOB: ANALYSIS BY TYPE OF SCHOOL, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		PLACEMENT TIME (MONTHS)					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	64	0.9	1.2	30	1.2	2.2
	US	591	1.1	2.4	355	1.5	3.0
1958		89	2.5	4.1 →	29	1.7	3.3
		692	2.3	4.1	501	2.3	4.0
1962		93	1.7	2.6	64	1.4	2.3
		1086	1.5	2.7	721	1.9	2.9
Combined		248	1.8	3.1	124	1.4	2.6
		2381	1.7	3.1	1579	2.0	3.3

→ Vocational > Comprehensive

HOW DO NEW YORK ACADEMIC GRADUATES COMPARE WITH VOCATIONAL GRADUATES IN TERMS OF TIME REQUIRED TO GET THEIR FIRST FULL-TIME JOB? HOW DO THE NEW YORK FINDINGS COMPARE WITH THE UNITED STATES FINDINGS?

- FINDINGS: Table 18 shows that the mean time required to get the first job, for the combined classes of graduates, was 1.7 months for the vocational program graduates and 2.8 months for the academic graduates who did not go on to college. The difference is substantial. Vocational program graduates find jobs quicker than noncollege bound academic graduates.

  The New York findings are in agreement with the United States findings. The U.S. vocationals required a mean of 1.8 months to get their first job, whereas, the job-seeking academics required a mean of 3.1 months to get their first job. Thus, vocational graduates in general seem to find their first job sooner than academic graduates who seek work after high school.

- COMMENT: The relatively poorer performance of noncollege bound academic graduates in time to find their first job suggests that schools may consider a special job placement effort to help such graduates. Such graduates have particular difficulty in finding their first full-time job in a recession economy. For example, the U.S. academics who graduated in 1958, a recession period, required a mean of 4.0 months to find their first job.

TABLE 18. PLACEMENT TIME FOR FIRST JOB: ANALYSIS BY TYPE OF GRADUATE, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		PLACEMENT TIME (MONTHS)					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	94	1.0	1.6	27	3.7	6.8
	US	946	1.3	2.6	175	2.6	4.8
1958		118	2.3	4.0	33	2.3	2.4
		1193	2.3	4.0	207	4.0	5.7
1962		157	1.6	2.5	34	2.5	3.1
		1807	1.7	2.8	256	2.8	4.3
Combined		372	1.7	2.9	94	2.8	4.4
		3960	1.8	3.2	638	3.1	5.0

← Academic > Vocational

HOW DO NEW YORK ACADEMIC GRADUATES COMPARE WITH VOCATIONAL GRADUATES FROM THE SAME COMPREHENSIVE SCHOOLS IN TERMS OF TIME REQUIRED TO FIND THEIR FIRST FULL-TIME JOB? HOW DO THE NEW YORK FINDINGS COMPARE WITH THE UNITED STATES FINDINGS?

- FINDINGS: The comparison data shown in Table 19 is more equitable than the preceding data in Table 18 because the graduates come from the same schools. However, the results bear out the earlier conclusion, namely, vocational program graduates find their first full-time job quicker than job-seeking academic program graduates. The mean time required by vocational graduates for the combined class years, was 1.4 months, exactly half of the time required by the New York academic graduates (2.8 months).

  The direction of the New York findings agrees with the United States findings, although both vocational and academic graduates from New York comprehensive schools tend to find their first full-time job somewhat sooner than the equivalent United States graduates.

- COMMENT: The findings reinforce the previous suggestion, that schools make a special effort to help job-seeking academic graduates find employment.

TABLE 19. PLACEMENT TIME FOR FIRST JOB: ANALYSIS BY TYPE OF COMPREHENSIVE SCHOOL GRADUATE, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		PLACEMENT TIME (MONTHS)					
		Vocational ←			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	30	1.2	2.2	27	3.7	6.8
	US	355	1.5	3.0	175	2.6	4.8
1958		29	1.7	3.3	33	2.3	2.4
		501	2.3	4.0	207	4.0	5.7
1962		64	1.4	2.3	34	2.5	3.1
		721	1.9	2.9	256	2.8	4.3
Combined		124	1.4	2.6	94	2.8	4.4
		1579	2.0	3.3	638	3.1	5.0

←Consistent trend for all years

HOW DO NEW YORK VOCATIONAL GRADUATES COMPARE WITH THOSE FROM OTHER GEOGRAPHIC REGIONS IN TERMS OF TIME REQUIRED TO GET THE FIRST FULL-TIME JOB AFTER GRADUATION?

- FINDINGS: The shaded rows in Table 20 give the New York data for the three graduating classes separately and combined. The combined data indicate that two regions lead New York State, i.e., New England (1.1 months) and the Rocky Mountains (1.2 months). New York graduates required a mean of 1.0, 2.3 and 1.6 months to get their first full-time job respectively for the boom year of 1953, the recession year of 1958 and the recovery year of 1962. Notice how the time required to get the first full-time job reflects the economy level of those years. With few exceptions, the data for the eight geographic regions also reflects the economy levels that characterized the years 1953, 1958 and 1962.

- COMMENT: The comparison of New York graduates in terms of mean time required to get the first full-time job with those from other geographic regions has little value. Regional differences in economy level, type of vocational courses offered, ratio of Negro to white graduates, and other relevant variables make it impossible to draw any conclusions other than that New York State ranks Nth among the regions. The more important question is how does New York State perform in terms of mean placement time over the years and in varying economy levels? Table 16 provides the data that comes nearest to giving the answer.

TABLE 20. PLACEMENT TIME FOR FIRST JOB: ANALYSIS BY GEOGRAPHIC REGION, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation	Geographic Region	PLACEMENT TIME (MONTHS)		
		N	M	S.D.
1953	NEW YORK STATE	94	1.0	1.6
	New England	184	0.8	1.6
	Mideast	309	1.0	2.3
	Great Lakes	106	1.6	3.7
	Plains	88	1.2	2.3
	Southeast	179	1.7	2.7
	Southwest	30	1.5	2.3
	Rocky Mountains	12	1.4	2.4
	Pacific	38	2.5	4.6
1958	NEW YORK STATE	118	2.3	4.0
	New England	209	1.6	2.5
	Mideast	360	2.4	3.8
	Great Lakes	156	2.7	4.5
	Plains	93	2.1	3.0
	Southeast	271	2.5	4.7
	Southwest	58	2.4	4.7
	Rocky Mountains	15	1.0	1.7
	Pacific	31	3.0	6.7
1962	NEW YORK STATE	157	1.6	2.5
	New England	293	0.9	2.0
	Mideast	482	1.7	2.8
	Great Lakes	294	2.0	2.9
	Plains	164	2.0	3.1
	Southeast	396	2.0	2.9
	Southwest	88	1.9	3.0
	Rocky Mountains	19	1.1	1.6
	Pacific	71	1.4	1.5
Combined	NEW YORK STATE	372	1.7	2.9
	New England	687	1.1	2.1
	Mideast	1155	1.7	3.1
	Great Lakes	560	2.1	3.6
	Plains	345	1.8	2.9
	Southeast	851	2.1	3.6
	Southwest	176	2.0	3.6
	Rocky Mountains	46	1.2	1.9
	Pacific	140	2.0	4.2

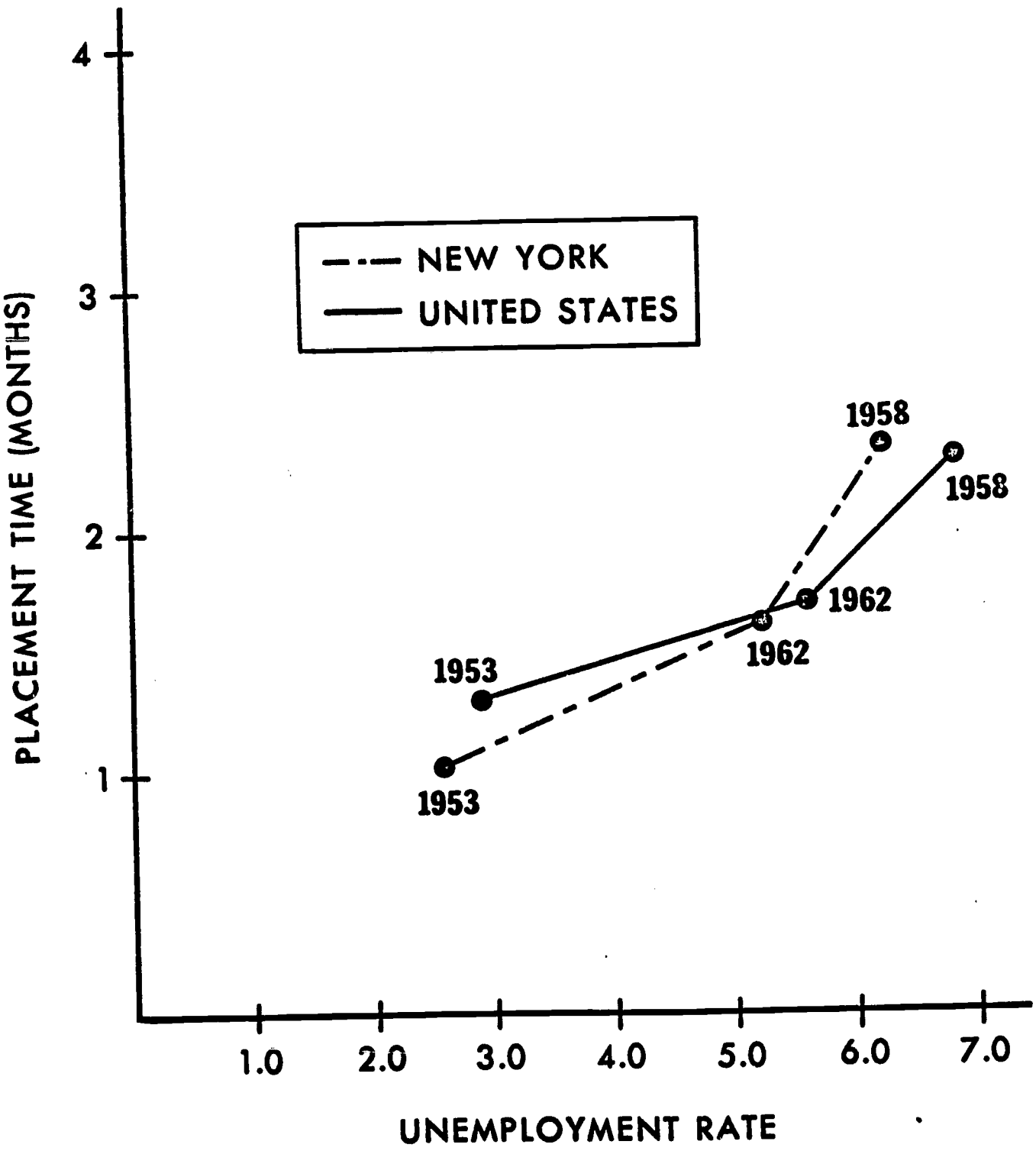
HOW IS TIME REQUIRED TO GET THE FIRST FULL-TIME JOB RELATED TO GENERAL UNEMPLOYMENT RATE? HOW DOES THE NEW YORK DATA COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Figure 1 shows that the time required by vocational graduates to get their first full-time job after graduation is related to the general unemployment rate for the state. (One can assume that the state unemployment rate is an approximation of the local community unemployment rate.) The finding is not unexpected. As the level of the economy decreases, unemployment rates increase and young people just out of school have more difficulty in finding a job.

  The New York relationship is essentially the same as the United States relationship between placement time and unemployment rate.

- COMMENT: Time required by graduates to find their first full-time job has been recommended as a measure of school effectiveness in placing graduates. Figure 1 shows that the measure is not wholly within control of the school. Thus, an increase in placement time would not necessarily reflect on school placement efforts if it coincides with an increase in general unemployment rate. The economy level must be taken into account. That is no argument, however, against using placement time as a measure of school placement effectiveness. Economy influences can be reduced by using, for example, a moving three year average placement time measure.

FIGURE 1. RELATIONSHIP BETWEEN UNEMPLOYMENT RATE AND PLACEMENT TIME FOR THE FIRST FULL-TIME JOB



WHAT METHODS DO NEW YORK GRADUATES USE TO GET THEIR FIRST FULL-TIME JOB AFTER HIGH SCHOOL GRADUATION? ARE THERE ANY CLASS YEAR TRENDS? HOW DOES NEW YORK COMPARE WITH UNITED STATES ON THIS QUESTION?

- FINDINGS: Table 21 shows that New York vocational graduates acknowledge a wide variety of sources of help in finding their first full-time job. The top five acknowledged sources are ranked below:

New York	%	United States	%
Help of relative or friend	36.6	Help of relative or friend	38.2
Help of school teacher	16.1	Help of school teacher	17.9
Answering want ad	9.4	School placement service	9.6
State employment agency	8.9	School coop program	9.0
School placement service	8.1	Answering want ad	7.5

Friends and relatives are the means most frequently used to get jobs. Of the five school sources of help, the teacher is the most acknowledged source. Less than 9 percent of the graduates reported use of employment security services.

There are no consistent class year trends, no doubt because the years reflect three different economy levels. Notice the greater reliance on friends, relatives and employment agencies in the recession year of 1958.

Looking at the combined years column, one sees no striking differences between New York and United States data. United States graduates rely more on the five sources of school help, and less on employment agencies.

- COMMENT: It is clear that school personnel, excluding the teacher, have no substantial role in helping graduates find jobs. One wonders if the percentage of graduates who found their first job in the occupation for which trained or a highly related occupation would <u>increase</u> if school resources were more completely utilized in helping graduates find jobs.

TABLE 21. METHODS USED BY GRADUATES TO GET FIRST JOB: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK AFTER HIGH SCHOOL

Means Used to Get First Full-time Job After Graduation		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Answering want ad	NY	9	9.6	9	7.6	17	10.8	35	9.4
	US	74	7.8	90	7.7	126	7.2	290	7.5
Private employment agency		2	2.1	6	5.1	3	1.9	11	3.0
		6	0.6	26	2.2	37	2.1	69	1.8
State employment agency		5	5.3	3	11.0 ▼	14	8.9	33	8.9
		28	3.0	59	5.0	115	6.5	203	5.2
Help of school teacher		18	19.1	17	14.4	25	15.9	60	16.1
		162	17.2	181	15.5	352	20.0	696	17.9
Help of school counselor		5	5.3	2	1.7	7	4.5	14	3.8
		44	4.7	44	3.8	118	6.7	206	5.3
Help of school principal		2	2.1	0	0.0	4	2.5	6	1.6
		26	2.8	27	2.3	76	4.3	130	3.3
Help of school placement service		12	12.8	4	3.4	14	8.9	30	8.1
		121	12.8	87	7.4	161	9.2	371	9.6
Help of relative or friend		28	29.8	50	42.4	56	35.7	136	36.6
		345	36.6 ▲	471	40.4	661	37.6	1485	38.2
Through school coop program		9	9.6	2	1.7	10	6.4	21	5.6
		105	11.1	94	8.0	150	8.5	350	9.0
Other than above		24	25.5	26	22.0	30	19.2	80	21.6
		206	21.9	302	25.9	347	19.7	857	22.1

▼ N.Y. > U.S. by ≧5% ▲ U.S. > N.Y. by ≧5%

DO NEW YORK VOCATIONAL SCHOOL GRADUATES SHOW A DIFFERENT PATTERN OF METHODS USED TO GET FIRST JOBS THAN THE COMPREHENSIVE SCHOOL GRADUATES? HOW DOES NEW YORK COMPARE WITH THE UNITED STATES ON THIS QUESTION?

- FINDINGS: Table 22 indicates that New York vocational school graduates acknowledge employment agencies, school counselors and school placement services more frequently than comprehensive school graduates. The latter, in turn, more frequently acknowledge the help of relatives or friends and school cooperative programs. Despite these differences, the graduates of both types of schools acknowledge relatives and friends as the number one source of help. It should be emphasized that not all categories make a fair comparison. The difference in reliance on employment agencies, for example, may be the result of vocational schools being in communities where there is closer access to such agencies.

- COMMENT: When one excludes the school cooperative program, 32.2 percent of the vocational school graduates acknowledge placement help from school sources versus 24.1 percent for the comprehensive school vocational graduates. This suggests that vocational school personnel are somewhat more active in finding jobs for their graduates than are comprehensive school personnel. The conclusion is in agreement with the United States data presented in Table 21.

Oddly enough, there is no evidence that the greater involvement of placement help in vocational schools results in graduates getting jobs sooner (Table 17). There is evidence, however, that vocational school graduates are somewhat more likely to enter the occupation for which trained than are comprehensive school graduates (Table 24). This may be the result of school personnel involvement in the vocational schools.

TABLE 22. METHODS USED BY GRADUATES TO GET FIRST JOB: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Means Used to Get First Full-time Job After Graduation		TYPE OF SCHOOL			
		Vocational		Comprehensive	
		N	%	N	%
Answering want ad	NY	23	9.3	12	9.7
	US	185	7.9	105	6.8
Private employment agency	NY	11	4.4	0	0.0
	US	41	1.7	28	1.8
State employment agency	NY	27	10.9 →	6	4.8
	US	123	5.2	80	5.2
Help of school teacher	NY	40	16.1	20	16.1
	US	446	19.0	250	16.2
Help of school counselor	NY	12	4.8	2	1.6
	US	151	6.4	55	3.6
Help of school principal	NY	5	2.0	1	0.8
	US	110	4.7	20	1.3
Help of school placement service	NY	23	9.3	7	5.6
	US	293	12.5	78	5.1
Help of relative or friend	NY	84	33.9 ←	52	41.9
	US	794	33.9	691	44.9
Through school coop program	NY	9	3.6 ←	12	9.7
	US	235	10.0	115	7.5
Other than above	NY	56	27.7	24	19.4
	US	484	20.6	373	24.2

→ Vocational > Comprehensive by ≧5%
← Comprehensive > Vocational by ≧5%

▼ N.Y. > U.S. by ≧5%
▲ U.S. > N.Y. by ≧5%

HOW IS THE NEW YORK GRADUATE'S FIRST FULL-TIME JOB RELATED TO HIS VOCATIONAL TRAINING? IS THE FIRST JOB-TO-TRAINING RELATEDNESS INCREASING OR DECREASING OVER THE YEARS? HOW DOES NEW YORK COMPARE WITH UNITED STATES IN TERMS OF JOB-TO-TRAINING RELATEDNESS?

- FINDINGS: Graduates indicated whether their first full-time job was the same as, highly related to, slightly related to or completely unrelated to vocational training. Table 23 gives the percentage of graduates who responded in each category of job-to-training relatedness. Over all years, about 28 percent entered the same occupation for which trained, 18 percent entered a highly related occupation, 18 percent entered a slightly related occupation, and 36 percent entered a completely unrelated occupation. Moreover, the percentage who entered the same occupation decreased from 35.6 percent in 1953 to 25.3 percent in 1962, while the percentage who entered a completely unrelated occupation increased from 28.9 percent to 40.0 percent over the same period.

  The mean relatedness scores, based on weights of 4, 3, 2 and 1 respectively for same, highly related, slightly related and completely unrelated job-to-training ratings, indicate no increase or decrease in overall first job relatedness over the three graduating classes.

  The New York data is substantially the same as the United States data.

- COMMENT: The high percentage of graduates who do not enter the occupations for which trained, or highly related occupations represents, in a sense, a loss of trained manpower. Shall this be regarded as a problem? If so, it seems to be more acute in New York in the two extreme categories; the percentage going into the same occupation for which trained is less than a third of the graduates and decreasing, whereas, the percentage going into completely unrelated occupations appears to be increasing.

TABLE 23. RELATEDNESS OF FIRST JOB TO TRAINING: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE IN EACH OF FOUR RELATEDNESS CATEGORIES, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Relation of First Job to Trade Studied in High School		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Same Trade	NY	32	35.6	30	26.1	38	25.3	101	28.2 ↘
	US	301	32.6	313	27.6	498	29.6	1118	29.8
Highly related trade		14	15.6	18	15.7	32	21.3	64	17.9
		168	18.2	189	16.6	333	19.8	691	18.4
Slightly related trade		18	20.0	26	22.6	20	13.3	65	18.2
		150	16.3	164	14.4	229	13.6	544	14.5
Completely unrelated trade		26	28.9	41	35.7	60	40.0	128	35.8 ↗
		303	32.9	470	41.4 ▲	625	37.1	1402	37.3
Number		90		115		150		358	
		908		1120		1601		3641	
Mean		2.58		2.32		2.32		2.38	
		2.51		2.31		2.40		2.40	
Median		3		2		2		2	
		3		2		2		2	
S.D.		1.24		1.20		1.24		1.23	
		1.25		1.26		1.25		1.26	

↗ Consistent increase
↘ Consistent decrease

▼ N.Y. > U.S. by ≧5%
▲ U.S. > N.Y. by ≧5%

HOW DO VOCATIONAL GRADUATES FROM COMPREHENSIVE AND VOCATIONAL SCHOOLS COMPARE IN TERMS OF RELATEDNESS OF THE FIRST JOB TO TRAINING? HOW DO THE NEW YORK FINDINGS COMPARE WITH THE UNITED STATES FINDINGS ON THIS POINT?

- FINDINGS: Table 24 shows the percentage of graduates from each type of school whose first full-time job was the same as, highly related to, slightly related to, or completely unrelated to high school training. The percentage values in the table indicate a negligible difference in percentage placed into slightly related or completely unrelated occupations. The impressive difference is in the percentage placed in the same occupation for which trained. Almost 32 percent of the vocational school graduates found their first job in the occupation for which trained, whereas only 21 percent of the comprehensive school graduates so reported.

  The mean relatedness score shown in Table 25 suggests vocational schools in New York do slightly better than comprehensive schools in the placement of graduates into jobs related to training. The United States data also shows that vocational schools did somewhat better than the comprehensive schools in the matter of first job relatedness to training. The United States vocational schools also did slightly better than the New York vocational schools. The reverse was the case for the comprehensive schools.

- COMMENT: Although the difference between the two schools in overall relatedness of first job-to-training, as evidenced by the mean relatedness values, is not great, the impressive difference in percentage placed into the same occupation prompts the question why. Do vocational schools put out more vigorous placement effort on behalf of graduates? Or, is the difference the result of a different kind of vocational student in the two schools. Since the New York data agrees essentially with the United States data, it is not likely that the difference between the two types of schools is the result of an inadequate sample of New York schools.

TABLE 24. RELATEDNESS OF FIRST JOB TO TRAINING: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF NUMBER AND PERCENTAGE IN EACH OF FOUR RELATEDNESS CATEGORIES, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Relation of First Job to Trade Training		TYPE OF SCHOOL			
		Vocational		Comprehensive	
		N	%	N	%
Same trade	NY	76	31.7 →	25	21.2
	US	763	33.6	355	23.9
Highly related trade		37	15.4 ←	27	22.9 ▼
		447	19.7	244	16.5
Slightly related trade		42	17.5	23	19.5
		311	13.7	233	15.7
Completely unrelated trade		85	35.4	43	36.4 ▲
		751	33.1	651	43.9

→ Vocational > Comprehensive by ≧5%
← Comprehensive > Vocational by ≧5%
▼ N.Y. > U.S. by ≧5%
▲ U.S. > N.Y. by ≧5%

TABLE 25. RELATEDNESS OF FIRST JOB TO TRAINING: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF CLASS YEAR MEANS, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		RELATEDNESS OF FIRST JOB					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	62	2.55	1.27	28	2.64	1.17
	US	567	2.66	1.24	335	2.26	1.23
1958		86	2.40	1.24	29	2.10	1.06
		653	2.43	1.27	468	2.16	1.23
1962		90	2.39	1.26	60	2.22	1.18
		964	2.54	1.25	637	2.19	1.23
Combined		240	2.43	1.26	118	2.29	1.16
		2198	2.54	1.26	1443	2.20	1.23

HOW DO NEW YORK STATE VOCATIONAL GRADUATES COMPARE WITH THOSE FROM OTHER GEOGRAPHIC REGIONS IN TERMS OF THE RELATEDNESS OF FIRST JOB-TO-TRAINING?

- FINDINGS: Table 26 presents the mean job-to-training relatedness value for New York and eight geographic regions, including the Mideast Region of which New York is a part. For 1953, 1958 and 1962, New York ranked second, fourth and fourth respectively. The decline is primarily the result of the decreasing percentage of vocational graduates who get their first job in the same occupation for which trained. The absolute value differences are not great if one excludes New England which does impressively better in placing graduates in the same or highly related occupations for which trained.

  Comparisons such as presented in Table 26 are not recommended. Regional differences in employment opportunity and type of occupation for which trained make such comparisons of questionable value.

- COMMENT: The real question is not how New York schools compare with those from other regions, but how New York schools compare with their own past performance on such matters as job-to-training relatedness. Are they doing better, showing no real change or doing worse? We saw in Table 23 that New York schools showed no real change over the three class years studied, although there was some evidence of trends in the wrong direction on the percentage of graduates placed in the same occupation for which trained and the percentage placed in completely different occupations.

TABLE 26. RELATEDNESS OF FIRST JOB TO TRAINING: ANALYSIS BY GEOGRAPHIC REGION, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation	Geographic Region	RELATEDNESS OF FIRST JOB		
		N	M	S.D.
1953	NEW YORK STATE	90	2.58	1.24
	New England	179	2.93	1.18
	Mideast	293	2.50	1.27
	Great Lakes	101	2.43	1.22
	Plains	83	2.54	1.20
	Southeast	168	2.27	1.23
	Southwest	29	2.52	1.30
	Rocky Mountains	12	2.25	1.30
	Pacific	37	2.03	1.10
1958	NEW YORK STATE	115	2.32	1.20
	New England	203	2.63	1.27
	Mideast	339	2.35	1.25
	Great Lakes	148	2.18	1.27
	Plains	88	2.07	1.21
	Southeast	249	2.16	1.22
	Southwest	54	2.50	1.20
	Rocky Mountains	14	2.71	1.38
	Pacific	26	1.96	1.28
1962	NEW YORK STATE	150	2.32	1.24
	New England	262	2.87	1.18
	Mideast	422	2.37	1.26
	Great Lakes	266	2.30	1.24
	Plains	133	2.16	1.16
	Southeast	355	2.29	1.27
	Southwest	79	2.38	1.26
	Rocky Mountains	17	2.41	1.38
	Pacific	65	2.29	1.24
Combined	NEW YORK STATE	358	2.38	1.23
	New England	645	2.81	1.22
	Mideast	1057	2.40	1.26
	Great Lakes	519	2.30	1.25
	Plains	304	2.24	1.20
	Southeast	776	2.24	1.25
	Southwest	162	2.44	1.25
	Rocky Mountains	43	2.46	1.37
	Pacific	128	2.15	1.22

HOW IS THE RELATEDNESS OF THE FIRST JOB TO THE OCCUPATION STUDIED IN HIGH SCHOOL INFLUENCED BY THE GENERAL UNEMPLOYMENT RATE? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

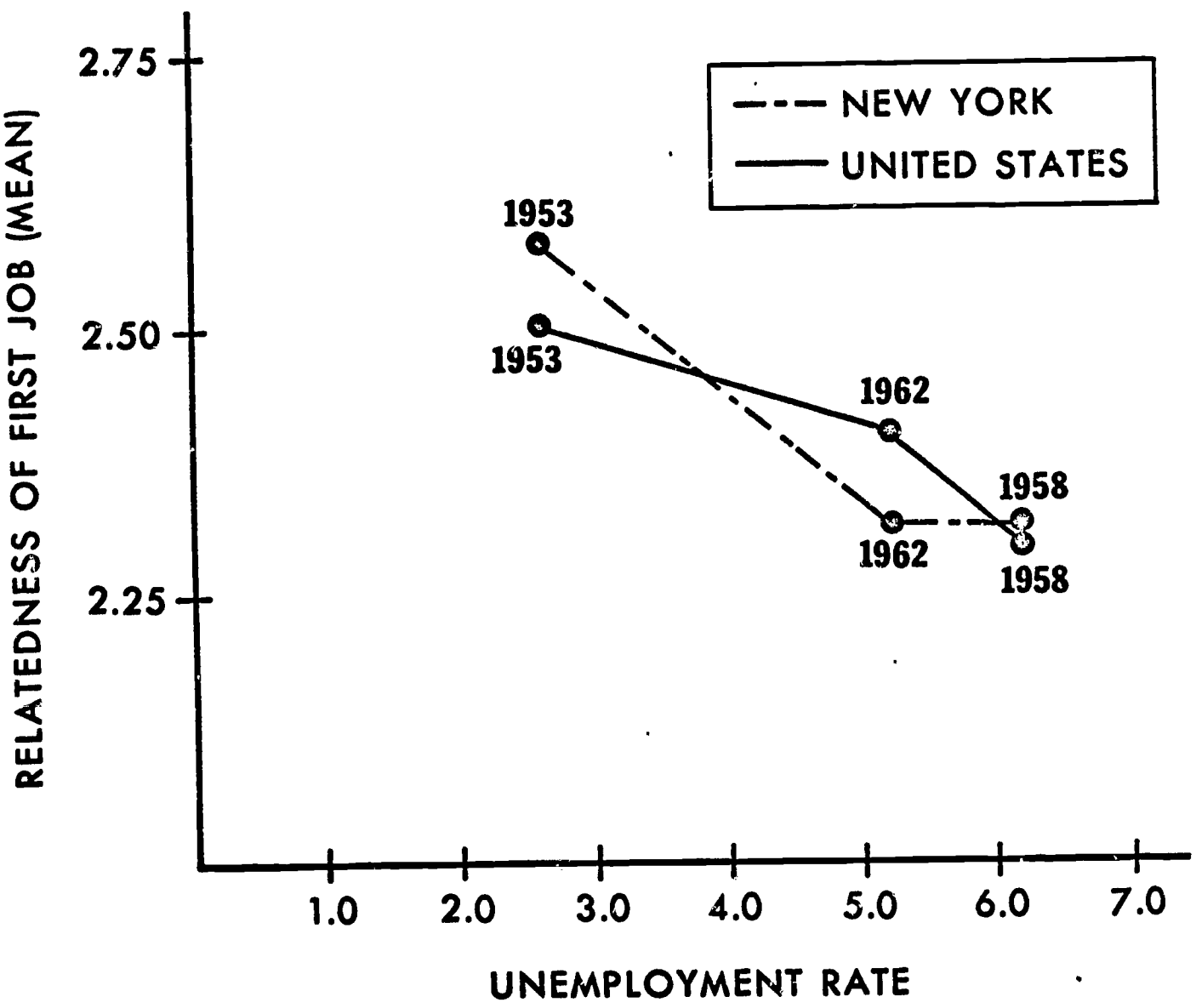
- FINDINGS: Figure 2 shows the mean first job-to-training relatedness values for three economy levels: the boom year of 1953, the recession year of 1958 and the intermediate economy year of 1962. The United States trend clearly shows that as unemployment rates increase, the job-to-training relatedness decreases. The New York trend is not as clear-cut because of a lack of difference between 1958 and 1962 mean relatedness values. The lack of difference could result from the general trend of decreasing job-to-training relatedness in New York. The possibility will be explained in the next analysis.

- COMMENT: First job relatedness to training has been recommended as a measure of school effectiveness in placing graduates. The measure has the same limitations as the placement time measure; it is influenced by factors beyond the control of the school. This does not mean it can not be usefully employed as a measure of placement effectiveness. It can be used, for example, in the form of a three year moving average to minimize the economy influence.

The data also suggest that the time for more vigorous school placement effort is when there is a down turn in the economy. Unless special efforts are made, many graduates are permanently lost to the fields for which trained because once they enter unrelated fields only a small percentage return to related occupations.

RELATEDNESS OF FIRST JOB TO
THE OCCUPATION STUDIED IN H
ANALYSIS BY UNEMPLOYMENT RA

FIGURE 2. RELATIONSHIP BETWEEN UNEMPLOYMENT RATE AND RELATEDNESS OF FIRST JOB TO TRAINING



HOW DOES THE ECONOMY LEVEL INFLUENCE THE PERCENTAGE OF GRADUATES WHO ENTER THE FIELD FOR WHICH TRAINED AS OPPOSED TO THE PERCENTAGE WHO ENTER UNRELATED FIELDS? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

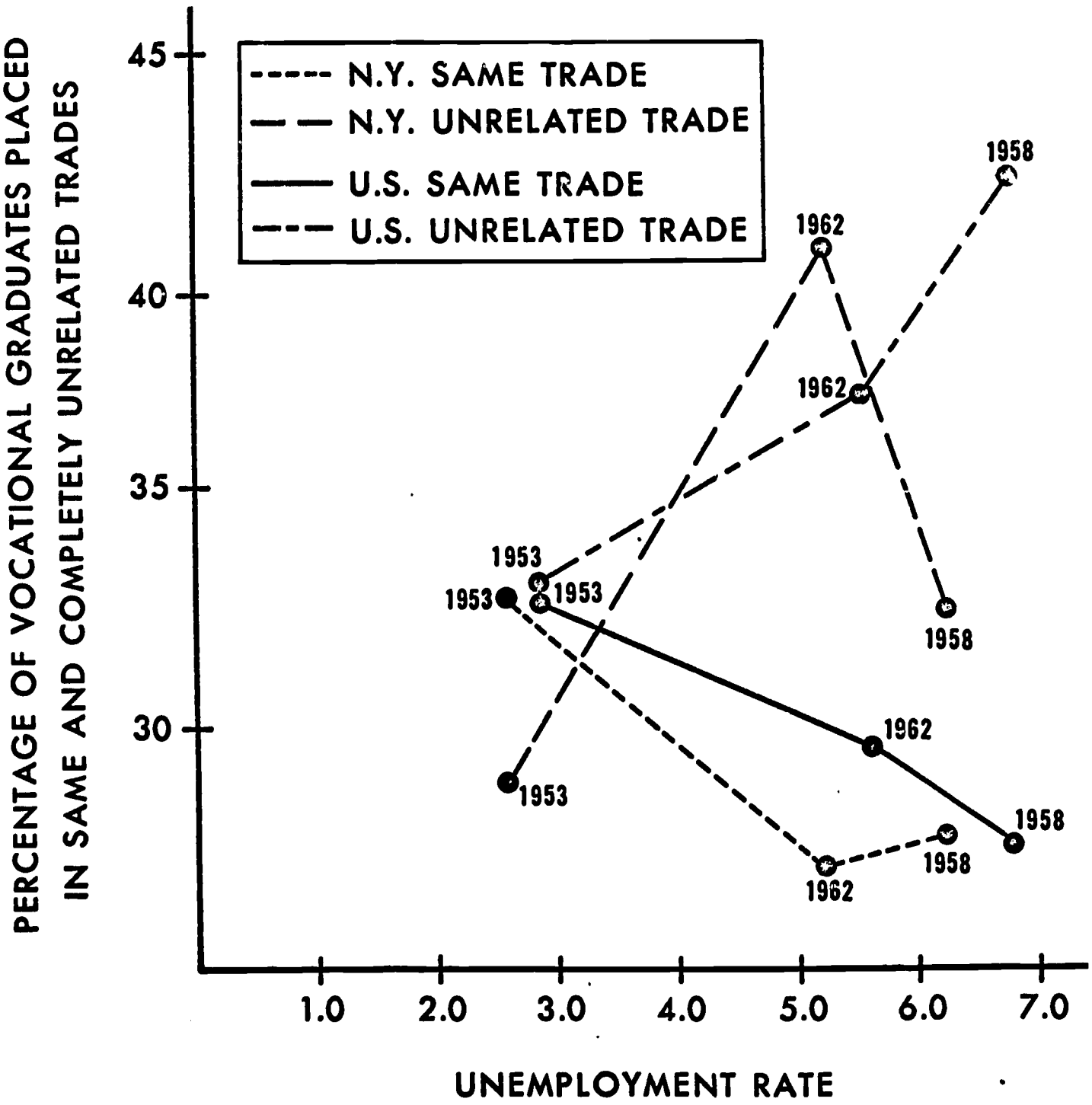
- FINDINGS: Figure 3 shows the relationship between rate of unemployment and the percentage of graduates placed in the occupation studied and in completely unrelated occupations for both New York and the United States.

  The United States trends are clear-cut. The percentage placed in the occupation for which trained decreases as unemployment increases, whereas, the percentage placed in completely unrelated occupations increases as unemployment increases.

  The New York trends are mixed, and not wholly in agreement with the United States trends. The probable reason for this disagreement is that the influence of economy levels is being distended by more basic trends in the New York data, namely, a decrease in the percentage of graduates who enter the occupations for which trained and an increase in the percentage who enter completely unrelated occupations. (See Table 23.) This explanation would account for the smaller percentage of 1962 New York graduates entering the occupation for which trained than 1958 New York graduates despite the higher economy level of 1962.

- COMMENT: It is quite possible that the limited New York sample of eight schools gives a misrepresentative reading on the anticipated relationship in New York between the unemployment rate and the two kinds of relatedness percentages. The data in Figures 2 and 3 do not disagree with the general principal that job-to-training relatedness suffers with increased general unemployment.

FIGURE 3. RELATIONSHIP BETWEEN UNEMPLOYMENT RATE AND PERCENTAGE OF GRADUATES PLACED IN THE TRADE STUDIED AND IN COMPLETELY UNRELATED TRADES



WHAT REASONS DO NEW YORK GRADUATES GIVE FOR NOT GETTING THEIR FIRST FULL-TIME JOB IN THE OCCUPATION FOR WHICH TRAINED? ARE THERE ANY TRENDS AMONG THE REASONS GIVEN? HOW DOES THE NEW YORK DATA COMPARE WITH THE UNITED STATES DATA ON THESE QUESTIONS?

- FINDINGS: Table 27 presents the data for graduates who sought for and found full-time work after high school. The combined data for the three class years indicates that 31 percent could not find a job in the occupation for which they were trained, 28 percent reported they preferred another line of work, and 14 percent reported they were not accepted into apprenticeship programs.

  The small number of New York cases in the cells describing reasons given by class year makes it inadvisable to place any trend interpretation on the data. In general, the New York data conforms to the United States data, for the combined class years. Fewer New York graduates report "no job available" as their reason for not getting their first job in the occupation for which trained.

- COMMENT: When 31 percent of those who did not get their first job in the occupation for which trained report as the reason "no job available", that is evidence of either (1) poor placement efforts by schools or other servicing organizations, or (2) the absence of job opportunity in the occupations for which vocational graduates are being trained. The former is more suspect since the percentage who so reported was about the same in the boom year of 1953 as it was in the recession year of 1958.

  What is the significance of 28 percent of the graduates who decided upon graduation that they liked other work better than the occupation for which trained? How flexible are the schools when a student wants to change his occupational choice <u>while in school</u>?

TABLE 27. REASONS FOR NOT GETTING FIRST JOB IN OCCUPATION STUDIED: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Reason Given For Not Getting First Job in Trade Studied		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
No job available in trade	NY	12	30.8	17	32.1	19	27.9	50	30.9
	US	107	28.8	204	39.4	243	36.4	554	35.6
Decided I liked other work better		8	20.5	10	18.9	28	41.2	46	28.4
		104	28.0	127	24.6	175	26.2	406	26.1
Not accepted as apprentice		7	17.9	12	22.6	4	5.9	23	14.2
		44	11.9	52	10.0	65	9.7	161	10.4
Insufficient pay		1	2.6	1	1.9	0	0.0	2	1.2
		13	3.5	10	1.9	11	1.6	34	2.2
Other than above		11	28.2	13	24.5	17	25.0	41	25.3
		103	27.7	124	24.1	173	25.9	400	25.8

▼ N.Y. > U.S. by ≥5% ▲ U.S. > N.Y. ≥5%

WHAT OPINION DO NEW YORK GRADUATES HAVE ON HOW WELL VOCATIONAL TRAINING PREPARED THEM TO ENTER THE OCCUPATION FOR WHICH TRAINED? DOES CLASS YEAR DATA SUGGEST A TREND IN OPINIONS EXPRESSED? HOW DOES NEW YORK COMPARE WITH UNITED STATES ON THIS QUESTION?

- FINDINGS: Table 28 shows that New York graduates, like the United States vocational graduates, have a high regard for the vocational training received. For the combined class years, 45 percent reported they were exceptionally well prepared, 48 percent said they were well prepared on the whole, and only 6.5 percent regarded themselves as poorly prepared.

  The weighted mean at the bottom of the table gives a single score for each class year, with a range from 3 (exceptionally prepared) to 1 (poorly prepared). The means do not indicate a consistent trend in either direction.

  The New York - United States differences are small, but favor the United States graduates. The weighted means are consistently in favor of the United States graduates.

- COMMENT: Two things need to be emphasized: (1) the graduates in question are those who entered the occupation for which trained. Whether those who entered slightly related or unrelated occupations had the same high regard is questionable, (2) the high regard expressed does not mean graduates are without criticism of their training. Unfortunately, few United States schools make any systematic effort to solicit opinions from graduates. A factor may be reluctance to expose themselves to criticism. If so, this is regrettable. Data of the kind shown in Table 28 reflect the basic good will that graduates have toward their schools. That is all the more reason why the opinions of graduates should be solicited for the improvement of vocational education.

TABLE 28. ADEQUACY OF OCCUPATIONAL TRAINING: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK IN THE OCCUPATION FOR WHICH TRAINED

How Well Did Vocational Course Prepare You For Job in Trade?		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Exceptionally well prepared	NY	27	50.0	26	42.6	38	45.2	91	45.5
	US	236	52.9	222	48.9	383	49.7	841	50.4
Well prepared on the whole		22	40.7	29	47.5	44	52.4	96	48.0
		191	42.8	211	46.5	365	47.4	767	45.9
Poorly prepared		5	9.3	6	9.8	2	2.4	13	6.5
		19	4.3	21	4.6	22	2.9	62	3.7
Weighted Mean		2.41		2.33		2.43		2.39	
		2.49		2.44		2.47		2.47	

↗ Consistent increase ▼ N.Y. > U.S. ≡5% ▲ U.S. > N.Y. by ≡5%

HOW COMPARABLE ARE SCHOOL TOOLS AND EQUIPMENT TO WHAT GRADUATES FIND ON THE JOB WHEN THEY ENTER THE OCCUPATION FOR WHICH TRAINED? WHERE THE REPORTED DIFFERENCE IS GREAT, HOW LONG DOES IT TAKE TO LEARN THAT WHICH WAS DIFFERENT? HOW DOES NEW YORK COMPARE WITH THE UNITED STATES ON THESE QUESTIONS?

- FINDINGS: Table 29 indicates that about 50 percent of the combined graduates found the tools and equipment on their first job almost identical to what they had in school. Another 40 percent reported there was little real difference. Only 11 percent felt there was a substantial difference. Notice the close agreement between New York and United States data.

  Of the 11 percent who reported a substantial difference, about 69 percent reported that it took from a few weeks to less than three months to learn or relearn what was so very much different. Clearly New York students are not being handicapped by a lack of comparability of tools and equipment. The small number of New York cases in Table 29 is vindicated by the essential agreement with the United States data.

- COMMENT: The desire for modern tools and equipment in vocational programs is understandable. So is the desire for tools and equipment comparable to what is found in industry. The relatively little time graduates require to learn or relearn what is not comparable makes one wonder whether comparability is so all-important. What are the hard arguments for a hardware race to keep up with industry? (Admittedly, the story may be different for different occupations. But even in a new comer occupational field such as data processing, would one want to argue that schools must have the latest computer to teach the fundamentals?)

TABLE 29. TOOLS AND EQUIPMENT COMPARABILITY: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK INTO THE SAME OR A HIGHLY RELATED OCCUPATION

Tools and Equipment: How Did They Compare with Those Used in School?		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Identical or almost so	NY	17	▲38.6	28	▼59.6	32	▼50.8	77	49.7
	US	155	▲49.8	182	▼52.8	265	▼56.7	604	53.5
Little real difference		19	▼43.2	18	38.3	24	38.1	61	39.4
		122	▼39.2	132	38.3	161	34.5	418	37.0
Very much different		8	▲18.2	1	2.1	7	11.1	17	10.9
		34	▲11.0	31	8.9	41	8.8	107	9.5
If Very Much Different, How Long Did it Take to Learn?									
Only about a few weeks		3	42.9	0	0.0	4	57.1	8	50.0
		13	39.4	10	37.0	3	43.6	41	41.0
Less than three months		1	14.3	0	0.0	2	28.6	3	18.8
		6	18.2	5	18.5	17	23.1	20	20.0
About three to six months		2	28.6	1	100.0	1	14.3	4	25.0
		8	24.2	6	22.2	9	7.7	17	17.0
About six months to a year		0	0.0	0	0.0	0	0.0	0	0.0
		0	0.0	3	11.1	3	12.8	8	8.0
More than a year		1	14.3	0	0.0	0	0.0	1	6.3
		6	18.2	3	11.1	5	12.8	14	14.0

▼N.Y. > U.S. by ≧5%

▲U.S. > N.Y. by ≧5%

HOW COMPARABLE ARE SCHOOL WORK METHODS TO WHAT GRADUATES FIND ON THE JOB WHEN THEY ENTER THE OCCUPATION FOR WHICH TRAINED? WHERE THE REPORTED DIFFERENCE IS GREAT, HOW LONG DOES IT TAKE TO LEARN THAT WHICH WAS DIFFERENT? HOW DOES NEW YORK COMPARE WITH UNITED STATES ON THESE QUESTIONS?

- FINDINGS: Table 30 indicates that about 29 percent of the combined graduates found the work methods on the first job almost identical to those used in school. Another 49 percent reported little real difference. About 22 percent said the work methods were very much different. This is twice the percentage of graduates who reported tools and equipment very much different. The New York data is remarkably similar to the United States data.

  Of the 22 percent who reported work procedures to be very much different on the first job, about 63 percent claimed it took from a few weeks to less than three months to learn the new procedures. It should be noted that the percentages in the lower table reflect a small number of cases. Nevertheless, there is essential agreement with the United States data which is based on a greater number of cases.

- COMMENT: It is to be expected that work methods used in schools will differ from those used on the job more than will tools and equipment. Employer concern for maximizing productivity is undoubtedly a factor in producing differences in work methods. However, it is the lack of real difference that is impressive. One can say, generally, that the schools are doing a good job in matching their shop work procedures to those used in comparable occupations in industry.

  That there is room for improvement is also clear. The fact that 22 percent do find work procedures in school and on the job very much different can not be ignored. A fourth of those who do find this magnitude of difference are taking in excess of six months to learn the new methods on the job. No doubt, some of this relearning and new learning could be reduced if schools made a greater effort to employ comparable work methods in all vocational courses. The learning process itself may require a degree of lack of comparability.

TABLE 30. WORK METHOD COMPARABILITY: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK INTO THE SAME OR A HIGHLY RELATED OCCUPATION

Work Methods: How did They Compare with Those Used in School?		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Identical or almost so	NY	11	24.4	12	25.5	22	34.9	45	28.8 ↗
	US	83	26.5	87	25.6	149	32.1	319	28.4
Little real difference		21	46.7	21	44.7	35	55.6	77	49.4
		159	50.8	166	48.8	221	47.6 ▼	551	49.1
Very much different		13	28.9	14	29.8	6	9.5	34	21.8
		71	22.7 ▼	87	25.6	94	20.3	253	22.5
If Very Much Different, How Long Did it Take to Learn?									
Only about a few weeks		4	36.4	3	27.3	3	75.0	11	40.7
		29	43.3	27	36.5	37	48.7	94	43.1
Less than three months		1	9.1	4	36.4	1	25.0	6	22.2
		14	20.9	24	32.4	20	26.3	58	26.6
About three to six months		2	18.2	1	9.1	0	0.0	3	11.1
		9	13.4	7	9.5	10	13.2	26	11.9
About six months to a year		1	9.1	0	0.0	0	0.0	1	3.7
		6	9.0	5	6.8	5	6.6	16	7.3
More than a year		3	27.3	3	27.3	0	0.0	6	22.2
		9	13.4	11	14.9	4	5.3	24	11.0

↗ Consistent increase

▼ N.Y. > U.S. by ≧5%

HOW COMPARABLE ARE SCHOOL WORK MATERIALS TO WHAT GRADUATES FIND ON THE JOB WHEN THEY ENTER THE OCCUPATION FOR WHICH TRAINED. WHERE THE REPORTED DIFFERENCE IS GREAT, HOW LONG DOES IT TAKE TO LEARN THAT WHICH WAS DIFFERENT? HOW DOES NEW YORK COMPARE WITH UNITED STATES ON THESE QUESTIONS?

- FINDINGS: Table 31 indicates that about 46 percent of the combined graduates found the work materials used on their first job almost identical to what they had in school. Another 37 percent reported little real difference. Only 17 percent felt there was a substantial difference. This is less than the 22 percent who reported substantial differences in work methods and more than the 11 percent who reported such differences for tools and equipment. Again, the New York data agrees with the United States data.

  The lower portion of the table indicates that 65 percent of those who did report a great difference in work materials used in school and on the job learned to make up the difference in less than three months, and most of these required only a few weeks to make the transition to new materials.

- COMMENT: The analysis presented in Tables 29, 30 and 31 do not, of course, take into account the differences one would find in specific vocational courses. Undoubtedly, the picture presented in these tables will vary somewhat with different occupations. It would be more useful if we knew what the comparability of tools and equipment, work methods and work materials was for the different vocational courses. Then, we would know more specifically where there is a problem and the magnitude of the problem. Such diagnostic analysis could be the starting point for remedial actions where serious comparability problems exist.

TABLE 31. WORK MATERIALS COMPARABILITY: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK INTO THE SAME OR HIGHLY RELATED OCCUPATION

Work Materials: How Did They Compare with Those Used in School?		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Identical or almost so	NY	19	43.2	23	50.0▼	29	45.3	71	45.8
	US	130	42.5	152	45.0	227	49.1	509	45.8
Little real difference		15	34.1▲	16	34.8	25	39.1	57	36.8
		124	40.5	128	37.9	168	36.4	424	38.1
Very much different		10	22.7▼	7	15.2	10	15.6	27	17.4
		52	17.0	58	17.1	67	14.5	179	16.1
If Very Much Different, How Long Did It Take to Learn?									
Only about a few weeks		6	66.7	2	28.6	3	42.9	11	47.8
		25	52.1	23	47.9	31	55.4	79	51.3
Less than three months		1	11.1	2	28.6	1	14.3	4	17.4
		8	16.7	10	20.8	14	25.0	34	22.1
About three to six months		1	11.1	1	14.3	2	28.6	4	17.4
		7	14.6	6	12.5	5	8.9	18	11.7
About six months to a year		0	0.0	0	0.0	1	14.3	1	4.3
		3	6.3	2	4.2	1	1.8	6	3.9
More than a year		1	11.1	2	28.6	0	0.0	3	13.0
		5	10.4	7	14.6	5	8.9	17	11.0

▼N.Y. > U.S. by ≧5%

▲U.S. > N.Y. by ≧5%

HOW DO THE VOCATIONAL GRADUATES OF COMPREHENSIVE AND VOCATIONAL SCHOOLS COMPARE IN TERMS OF FIRST JOB STARTING HOURLY EARNINGS? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 32 reveals that the vocational school graduates began their first job with slightly higher hourly earnings than vocational graduates from comprehensive schools in two of the three class years. The 1953 mean value for vocational graduates from comprehensive schools is based on a relatively small number of cases, and was distended upward by number of graduates with higher starting hourly earnings. With a larger sample, the 1953 mean hourly earnings for comprehensive school vocational graduates would undoubtedly be lower.

The lack of consistent and substantial differences in favor of either school negates a firm conclusion. However, the data do suggest that vocational school graduates start with slightly higher hourly earnings than do vocational graduates from comprehensive schools. This interpretation is consistent with the United States data which shows the vocational school graduates consistently starting at a higher hourly rate than comprehensive school vocational graduates.

Notice, incidentally, that the New York starting hourly rates are, with one exception, consistently higher than the United States starting hourly rates.

- COMMENT: What is lacking is a good explanation of why graduates of vocational schools start out with higher hourly rates than vocational graduates of comprehensive schools. Possible explanations include differences in type of courses offered, in employer receptivity to graduates, or in quality of graduates turned out. A more intensive study would be required to establish an explanation backed by data rather than conjecture.

TABLE 32. STARTING HOURLY EARNINGS ON FIRST JOB: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF CLASS YEAR MEANS, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		STARTING HOURLY EARNINGS					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	55	1.33	0.38 ←	26	1.41	0.61
	US	533	1.31	0.46	317	1.27	0.50
1958		84	1.45	0.42	29	1.42	0.40
		628	1.46	0.48	448	1.36	0.49
1962		87	1.64	0.54 →	58	1.54	0.56
		930	1.48	0.54	617	1.43	0.55
Combined		227	1.49	0.48	114	1.49	0.54
		2101	1.43	0.51	1383	1.37	0.52

→ Vocational > Comprehensive by ≧ $.05
← Comprehensive > Vocational by ≧ $.05

HOW DO NEW YORK VOCATIONAL AND ACADEMIC GRADUATES COMPARE IN TERMS OF STARTING HOURLY EARNINGS ON THEIR FIRST FULL-TIME JOB AFTER HIGH SCHOOL? IS THE NEW YORK DATA CONSISTENT WITH THE UNITED STATES DATA?

- FINDINGS: Table 33 provides the comparison data and gives a mixed picture. Both New York and United States 1953 academic graduates had impressively higher starting hourly rates than did vocational graduates. For the 1958 graduates who entered a recession economy, the New York and United States findings are inconsistent. New York academics started at three cents an hour more than New York vocationals, whereas, the reverse was the case for the United States data. For the 1962 graduates, both New York and United States vocationals started at higher hourly rates than the academics. What conclusion can be drawn? The admittedly tentative conclusion is this: The data represent a trend in which vocational graduates have come from behind, caught up with, and then surpassed the academic graduates in first job hourly earnings. It would take another data point for 1967 graduates to check the interpretation.

- COMMENT: If the above interpretation is correct, then the vocational graduate has a head start on the noncollege bound academic graduate in terms of accumulated total earnings. It takes a relatively small hourly rate difference to generate an impressive year-end difference. A difference of ten cents an hour amounts to $208 at the end of a year.

TABLE 33. STARTING HOURLY EARNINGS ON FIRST JOB: ANALYSIS BY TYPE OF GRADUATE IN TERMS OF CLASS YEAR MEANS, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		STARTING HOURLY EARNINGS					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	81	1.36	0.47 ←	22	1.42	0.47
	US	850	1.30	0.48	157	1.40	0.63
1958		113	1.44	0.42	27	1.47	0.53
		1076	1.42	0.49	175	1.39	0.57
1962		145	1.60	0.55 →	30	1.50	0.40
		1547	1.46	0.55	221	1.42	0.48
Combined		341	1.49	0.50	79	1.47	0.47
		3484	1.41	0.52	553	1.41	0.55

→ Vocational > Academic by ≦ $.05
← Academic > Vocational by ≦ $.05

HOW DO THE STARTING HOURLY EARNINGS REPORTED BY VOCATIONAL GRADUATES WHOSE FIRST JOB WAS THE SAME AS OR HIGHLY RELATED TO THE OCCUPATION STUDIED COMPARE WITH THE EARNINGS OF GRADUATES WHO WENT INTO UNRELATED OR ONLY SLIGHTLY RELATED OCCUPATIONS? HOW DOES NEW YORK COMPARE WITH THE UNITED STATES ON THIS QUESTION?

- FINDINGS: Table 34 gives the mean starting hourly earnings for the two groups of graduates for each class year separately and for the combined class years. There is a difference of 21, 17 and 12 cents an hour in favor of those who entered completely unrelated or only slightly related occupations for the class years of 1953, 1958 and 1962. The trend suggests that the gap is being closed, but the difference still favors those who do <u>not</u> go into the occupation for which trained or highly related occupations.

  For the combined graduates, the difference is 16 cents per hour, or about $28.00 per month or about $332.00 per year, assuming no change in earnings. Thus, the small hourly difference does amount to a substantial difference at the end of the year.

- COMMENT: The finding that the vocational graduates who enter the same or highly related occupations for which trained earn <u>less</u> to start than those who do not enter the field for which trained can not be used as an argument against the view that a high degree of job-to-training relatedness is desirable. There are other factors that must be considered, such as earnings progression over the years and personal job satisfaction. These will be looked at in later analyses (Tables 47 and 50).

  Also, the lower starting earnings of those who enter the fields for which trained may be caused by the relatively low apprenticeship rates in certain trades.

TABLE 34. STARTING HOURLY EARNINGS ON FIRST JOB: ANALYSIS IN TERMS OF RELATEDNESS TO HIGH SCHOOL TRAINING, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		STARTING HOURLY EARNINGS					
		Same/highly Related ←			←Slightly Related/unrelated		
		N	M	S.D.	N	M	S.D.
1953	NY	41	1.25	0.33	40	1.46	0.56
	US	429	1.25	0.42	416	1.34	0.53
1958		48	1.34	0.28	65	1.51	0.48
		475	1.41	0.43	596	1.42	0.53
1962		66	1.53	0.38	77	1.65	0.64
		737	1.45	0.41	790	1.48	0.65
Combined		155	1.40	0.36	184	1.56	0.57
		1647	1.38	0.43	1807	1.43	0.54

←Consistent trend for all years

HOW DO THE VOCATIONAL GRADUATES OF COMPREHENSIVE AND VOCATIONAL SCHOOLS COMPARE IN TERMS OF SELF-RATED JOB SATISFACTION WITH THE FIRST JOB HELD? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Graduates rated their job satisfaction on a four point scale: 4-very satisfied, 3-satisfied, 2-dissatisfied and 1-very disssatisfied. Table 35 shows no consistent or substantial differences in mean job satisfaction between the graduates of the two types of schools. Conclus.on: In New York, the job satisfaction reported by a vocational graduate for his first full-time job is unrelated to the type of school attended.

  The United States data supports the conclusion drawn from the New York data. Although the differences favor the vocational school graduates, they are not impressive. One would not want to say, on the basis of Table 35, that vocational school graduates enjoy greater job satisfaction on their first job than do comprehensive school vocational graduates.

- COMMENT: The satisfaction vocational graduates experience from their work is probably little, if at all, related to the type of school attended. Job satisfaction is more likely to be related to characteristics of the individual graduate and his work situation.

TABLE 35. SATISFACTION RATING ON FIRST JOB: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF CLASS YEAR MEANS, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		SATISFACTION ON FIRST JOB					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	61	2.90	0.84	28	3.21	0.67
	US	571	3.00	0.86	339	2.99	0.87
1958		86	3.00	0.92	28	2.93	0.88
		653	2.94	0.90	467	2.86	0.92
1962		89	3.04	0.95	60	3.03	0.80
		968	2.97	0.92	640	2.86	0.91
Combined		238	2.99	0.92	117	3.04	0.80
		2203	2.97	0.90	1447	2.89	0.90

HOW DO NEW YORK VOCATIONAL AND ACADEMIC GRADUATES COMPARE IN TERMS OF REPORTED JOB SATISFACTION FOR THE FIRST FULL-TIME JOB HELD? IS THE NEW YORK DATA CONSISTENT WITH THE UNITED STATES DATA?

- FINDINGS: Table 36 shows the comparison data between all vocational and academic graduates, whereas Table 37 compares vocational and academic from the same comprehensive schools. The general conclusion from both tables is the same, namely, vocational graduates report consistently and substantially greater job satisfaction with their first job than do academic graduates who went to work after high school graduation. The conclusion is supported by the United States data in both tables. It is, therefore, not peculiar to New York.

- COMMENT: Why do vocational graduates experience or report greater job satisfaction than academic graduates who go directly to work after high school? The study has no data-supported answer. There are many plausible hypothesis. Vocationals may have a lower level of aspiration, and, therefore, find their work more satisfying. Vocationals may be involved in more skill-demanding work than academics, and, therefore, experience greater satisfaction. These are not explanations. They are educated guesses, and the reader may have more plausible ones. The question, however, is an important one. Only half of all academic program graduates in the United States attend college. Almost all of the balance go directly to work. Why they should experience less job satisfaction than vocational graduates may have worth-while implications for United States secondary education.

TABLE 36. SATISFACTION RATING ON FIRST JOB: ANALYSIS BY TYPE OF GRADUATE IN TERMS OF CLASS YEAR MEANS, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		SATISFACTION ON FIRST JOB					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	89	3.00	0.81	25	2.60	0.94
	US	910	3.00	0.86	167	2.71	0.86
1958		114	2.98	0.91	31	2.68	0.89
		1120	2.91	0.91	190	2.76	0.89
1962		149	3.03	0.89	31	2.68	1.00
		1608	2.93	0.92	230	2.76	0.94
Combined		355	3.01	0.88	87	2.66	0.94
		3650	2.94	0.90	587	2.75	0.90

TABLE 37. SATISFACTION RATING ON FIRST JOB: ANALYSIS BY TYPE OF COMPREHENSIVE SCHOOL GRADUATE, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		SATISFACTION ON FIRST JOB					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	28	3.21	0.67 →	25	2.60	0.94
	US	339	2.99	0.87	167	2.71	0.86
1958		28	2.93	0.88	31	2.68	0.89
		467	2.86	0.92	190	2.76	0.89
1962		60	3.03	0.80	31	2.68	1.00
		640	2.86	0.91	230	2.76	0.94
Combined		117	3.04	0.80	87	2.66	0.94
		1447	2.89	0.90	587	2.75	0.90

→ Vocational > Academic

WHAT DEGREE OF JOB SATISFACTION IS REPORTED BY VOCATIONAL GRADUATES WHO ENTER THE OCCUPATION FOR WHICH TRAINED OR A HIGHLY RELATED OCCUPATION? HOW DOES THIS COMPARE WITH JOB SATISFACTION REPORTED BY THOSE WHO ENTER SLIGHTLY RELATED OR COMPLETELY UNRELATED OCCUPATIONS? HOW DOES NEW YORK AND UNITED STATES DATA ON THESE QUESTIONS COMPARE?

- FINDINGS: Table 38 tells the story for the three class years separately and combined. For each class year, the mean job satisfaction of those in the same or highly related occupation was greater than the mean job satisfaction of those in slightly related or completely unrelated occupations. Furthermore, the New York data agrees with the United States data. The consistency is impressive. Graduates who take their first full-time job in occupations for which trained or highly related occupations report greater job satisfaction than those who enter only slightly related or completely unrelated occupations.

- COMMENT: Here for the first time we have some independent evidence to support the argument that it is desirable for graduates to enter occupations the same or highly related to the occupations for which trained. They experience greater job satisfaction. There remain other aspects which also have to be looked at. Do they also experience greater employment security? Greater employer stability? Greater earnings? Greater earnings progression? Does their job satisfaction remain high if they stay with occupations the same or highly related to training? Subsequent analyses will examine these questions.

TABLE 38. SATISFACTION RATING ON FIRST JOB: ANALYSIS IN TERMS OF RELATEDNESS TO HIGH SCHOOL TRAINING, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Year of Graduation		SATISFACTION ON FIRST JOB					
		Same/highly Related →			Slightly Related/unrelated		
		N	M	S.D.	N	M	S.D.
1953	NY	45	3.20	0.80	44	2.80	0.76
	US	462	3.28	0.72	442	2.70	0.89
1958		47	3.33	0.72	67	2.74	0.94
		497	3.29	0.73	620	2.60	0.92
1962		69	3.37	0.72	78	2.78	0.92
		771	3.28	0.76	817	2.60	0.92
Combined		162	3.32	0.75	191	2.75	0.90
		1737	3.28	0.74	1884	2.62	0.92

→ Consistent trend for all years

WHAT REASONS DO NEW YORK VOCATIONAL GRADUATES GIVE FOR LEAVING THEIR FIRST FULL-TIME JOB? ARE THERE ANY CLASS YEAR TRENDS AMONG THE REASONS GIVEN? HOW DOES NEW YORK AND UNITED STATES DATA COMPARE?

- FINDINGS: Table 39 shows the reasons cited for leaving the first job for the class years separately and combined. The reasons cited are ranked below for the combined graduates.

New York	%	United States	%
lack of work	23.7	better position	27.3
better position	22.9	lack of work	23.8
military service	16.2	military service	15.5
job dissatisfaction	15.4	job dissatisfaction	12.5

The New York and United States patterns are clearly the same. Layoffs because of slow work and wanting to better positions are the two major reasons for terminating the first job. It must be admitted that these general reasons are statements by graduates. One would want to delve into such general reasons more deeply before coming to a final conclusion. The real reasons and the admitted reasons are not necessarily one and the same.

- COMMENT: If one is ready to accept the assumption that the responses given by graduates to this touchy question are essentially correct, as the general pattern of response seems to suggest, one can say that vocational graduates leave their jobs for generally acceptable reasons. The point is made for the benefit of some who look upon vocational students as a type of undefined problem student who has to be given tools to be kept out of trouble. The pattern does not suggest irresponsible citizens.

TABLE 39. REASONS FOR LEAVING FIRST JOB: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO WENT DIRECTLY TO WORK

Reason for Leaving Job		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Military service	NY	16	21.6	16	17.6	10	10.1	43	16.2 ↘
	US	160	21.2	145	16.1	126	11.2	433	15.5
Attend college		1	1.4	4	4.4	3	3.0	8	3.0
		28	3.7	45	5.0	37	3.3	110	3.9
Better position		20	27.0	21	23.1 ▲	20	20.2 ▲	61	22.9 ↘ ▲
		199	26.4	271	30.1	288	25.6	761	27.3
Health		0	0.0	0	0.0	1	1.0	1	0.4
		4	0.5	9	1.0	16	1.4	29	1.0
Lack of work		14	18.9 ▲	24	26.4 ▽	24	24.2	63	23.7
		179	23.7	193	21.4	292	25.9	665	23.8
Job dissatisfaction		10	13.5	11	12.1	20	20.2 ▽	41	15.4
		80	10.6	100	11.1	168	14.9	349	12.5
Dismissal		0	0.0	1	1.1	1	1.0	2	0.8
		2	0.3	12	1.3	13	1.2	27	1.0
Other voluntary		10	13.5	11	12.1	13	13.1	34	12.8
		75	9.9	102	11.3	145	12.9	322	11.5
Other involuntary		3	4.0	3	3.3	7	7.1	13	4.9
		27	3.6	24	2.7	42	3.7	93	3.3

↘ Consistent decrease ▼ N.Y. > U.S. by ≧5% ▲ U.S. > N.Y. by ≧5%

SECTION 5 THE PRESENT JOB: TWO, SIX, AND ELEVEN YEARS LATER

Introduction

This section takes a look at the present job (June, 1964) held by the vocational graduates of 1953, 1958 and 1962. It describes what they are now doing, how related their present jobs are to their vocational training, what their present hourly earnings are, and how satisfied they are with the jobs they hold.

Summary

1. Where are they now? About 98 percent of the 1953 graduates were employed. The percentage employed was less for other class years because of the number in college or military service.

2. Relatedness of job to training. The percentage of graduates who held their present job in the field for which trained was 35, 35 and 43 percent respectively for the graduates of 1953, 1958 and 1962. ● A higher percentage of vocational school graduates had their present job in the field for which trained than did comprehensive school graduates. ● Of those who take their first job in the field for which trained, there is a gradual loss to unrelated occupations over the years that exceeds the gain by those who enter the field after holding jobs in unrelated occupations.

3. Present job hourly earnings. The present job hourly earnings of vocational school graduates are slightly higher than those from comprehensive schools. ●The present job hourly earnings of vocational graduates are higher than those of noncollege academic graduates. ● Vocational graduates in the field for which trained have higher earnings than those in unrelated fields.

4. Present job satisfaction. The satisfaction vocational graduates express with their present jobs is high. ● Vocational graduates from comprehensive and vocational schools report about the same degree of job satisfaction. ● Vocational graduates report greater job satisfaction than do noncollege academic graduates. ●Graduates who are presently in the field for which trained report greater job satisfaction than those in unrelated fields.

WHERE ARE THE NEW YORK VOCATIONAL GRADUATES TWO, SIX AND ELEVEN YEARS AFTER GRADUATION FROM HIGH SCHOOL?

- FINDINGS: Table 40 shows what New York vocational graduates were doing as of June, 1964, the terminal date of the period covered by the survey. The picture is different for each class year, as one would expect, considering the age and experience differences. The percentage unemployed ranged from zero percent for the 1953 graduates to 3.6 percent for the 1958 graduates. The percentage in military service ranged from 1.5 percent of the 1953 graduates to 17.8 percent of the 1962 graduates.

- COMMENT: The low unemployment rates are impressive as is the relatively high percentage of 1962 graduates who were attending college.

TABLE 40. WHERE THEY ARE NOW: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE FOR EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL GRADUATES

Activity as of June, 1964	YEAR OF GRADUATION							
	1953		1958		1962		Combined	
	N	%	N	%	N	%	N	%
Employed full-time	127	97.7	133	80.1	152	60.3	412	75.2
Military service	2	1.5	20	12.0	45	17.8	67	12.2
Attending college	0	0.0	6	3.6	45	17.8	51	9.3
Attending other school	0	0.0	0	0.0	2	0.8	2	0.4
Unemployed	0	0.0	6	3.6	7	2.8	13	2.4
Indeterminate	1	0.8	1	0.6	1	0.4	3	0.5

HOW RELATED IS THE PRESENT JOB HELD BY NEW YORK VOCATIONAL GRADUATES, TWO, SIX AND ELEVEN YEARS AFTER GRADUATION, TO THEIR HIGH SCHOOL VOCATIONAL TRAINING? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 41 indicates, for the class years of 1953, 1958 and 1962, that 35.1, 34.9 and 43.5 percent respectively held a present job that was the same or highly related to the occupation studied in high school. The comparable United States figures for the three class years are 36.3, 39.4 and 43.8 percent respectively, indicating close agreement with the New York data.

  Notice that after two, six and eleven years from graduation 22.4, 22.1 and 21.6 percent of the graduates are in the same occupation for which trained, whereas 42.2, 40.3 and 39.6 percent are in completely unrelated occupations.

- COMMENT: It is to be expected that experience and new occupational opportunities will result through the years in a loss of graduates from the same or highly related occupations for which they were trained. Even so, the loss reflected by Table 44 data is impressive. Not only is high school vocational education not the major source of entry into the occupations for which students are trained, but the majority of the graduates find themselves in completely unrelated or only slightly related occupations within two years after graduation. Indeed, eleven years after graduation approximately 65 percent are not in the field for which trained. The data indicates the need for a study to determine the factors responsible for graduates leaving the occupations for which trained.

TABLE 41. RELATEDNESS OF PRESENT JOB TO TRAINING: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE IN EACH OF THE FOUR RELATEDNESS CATEGORIES, BASED ON GRADUATES WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Relation of Last Job to Trade Studied in High School		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Same trade	NY	24	21.6	33	22.1	36	22.4	94	22.1 ↗
	US	208	20.6	312	22.4	423	25.3	948	23.2
Highly related		15	13.5	19	12.8	34	21.1	68	16.0
		159	15.7	237	17.0	310	18.5	707	17.3
Slightly related		28	25.2	37	24.8	23	14.3	88	20.7 ↘
		227	22.5	274	19.6 ▼	304	18.1	806	19.7
Completely unrelated		44	39.6	60	40.3	68	42.2	175	41.2 ↘
		417	41.2	572	41.0	638	38.1	1633	39.9
Number		111		149		161		425	
		1011		1395		1675		4049	
Mean		2.17		2.17		2.24		2.19	
		2.16		2.21		2.31		2.24	
Median		2		2		2		2	
		2		2		2		2	
S.D.		1.17		1.18		1.21		1.19	
		1.17		1.20		1.22		1.20	

↗ Consistent increase ↘ Consistent decrease ▼ N.Y. > U.S. by ≧5%

HOW DO NEW YORK VOCATIONAL GRADUATES FROM VOCATIONAL AND COMPREHENSIVE SCHOOLS COMPARE IN TERMS OF THE RELATEDNESS OF PRESENT JOB TO OCCUPATION STUDIED IN HIGH SCHOOL? HOW DOES THE NEW YORK DATA COMPARE WITH UNITED STATES DATA ON THIS QUESTION?

- FINDINGS: Table 42 indicates no significant differences between the graduates from the two types of schools in terms of relatedness of present job, held two, six and eleven years after graduation, and occupation studied in high school. The slightly higher job relatedness for vocational school graduates is negligible.

  The United States differences between graduates of the two types of schools are somewhat greater than the New York differences. Again, the vocational school graduates have a slightly greater present job-to-training relatedness than do the comprehensive school vocational graduates. Table 43 shows the percentage of graduates from both schools who were in each of four categories of job-to-training relatedness for the present job.

- COMMENT: There is no substantial difference between vocational and comprehensive school vocational graduates in terms of present job-to-training relatedness after two, six and eleven years out of school. The relatedness value is low for both.

TABLE 42. RELATEDNESS OF PRESENT JOB TO TRAINING: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF CLASS YEAR MEANS, BASED ON GRADUATES WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Year of Graduation		PRESENT JOB RELATEDNESS					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	75	2.17	1.17	36	2.17	1.17
	US	621	2.22	1.19	390	2.05	1.13
1958		106	2.21	1.21	43	2.07	1.09
		801	2.32	1.21	594	2.06	1.16
1962		96	2.24	1.26	65	2.23	1.13
		1002	2.42	1.23	673	2.14	1.17
Combined		279	2.21	1.22	146	2.15	1.13
		2435	2.34	1.22	1659	2.09	1.16

TABLE 43. RELATEDNESS OF PRESENT JOB TO TRAINING: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF NUMBER AND PERCENTAGE IN EACH OF THE FOUR RESPONSE CATEGORIES, BASED ON GRADUATES WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Relation of Last Job to Trade Studied in High School		TYPE OF SCHOOL			
		Vocational		Comprehensive	
		N	%	N	%
Same trade	NY	67	24.0 →	27	18.5
	US	637	26.2	311	18.7
Highly related		43	15.4	25	17.1
		446	18.3	261	15.7
Slightly related		51	18.3 ←	37	25.3
		455	18.7	351	21.2
Completely unrelated		118	42.3 ▼	57	39.0 ▲
		897	36.8	736	44.4

→ Vocational > Comprehensive by ≧5%
← Comprehensive > Vocational by ≧5%

▼ N.Y. > U.S. by ≧5%
▲ U.S. > N.Y. by ≧5%

DO NEW YORK VOCATIONAL GRADUATES STAY IN THE JOB-TO-TRAINING RELATEDNESS CATEGORY THAT CHARACTERIZED THEIR FIRST FULL-TIME JOB? IF NOT, WHAT IS THE DIRECTION OF THE SHIFT?

- FINDINGS: Table 44 shows the job-to-training relatedness of present job for the graduates in each of four first job relatedness categories. Of those whose first job was in the same trade studied in high school, only 66 percent remained in the trade and 28.8 percent moved on into completely unrelated or only slightly related jobs in time. At the other extreme, of those whose first job was completely unrelated to training, only 13 percent found their way back to the trade for which trained or a highly related trade. Thus, while there is movement in both directions, the net movement is into occupations unrelated or only slightly related to those for which trained.

  The New York pattern is confirmed by the United States data.

- COMMENT: One must remember that Table 44 data includes graduates two, six and eleven years out of school. It is to be expected there will be more movement <u>out</u> of the occupations for which trained as the years go by than <u>into</u> trades for which trained. Those who never entered the trades for which trained or at least highly related trades are less likely to enter such trades as each passing year removes them further from their vocational training. Similarly, with each passing year, more of those who started in the occupations for which trained or highly related occupations are likely to leave because of new job opportunities in other fields, promotions to other positions within the companies for whom they work, and even instances of incapacity to continue in physically demanding jobs.

TABLE 44. RELATEDNESS OF PRESENT JOB TO TRAINING: ANLAYSIS BY RELATEDNESS OF FIRST JOB IN TERMS OF NUMBER AND PERCENTAGE IN EACH OF THE RESPONSE CATEGORIES, BASED ON GRADUATES WHO HAVE ≥ 6 MONTHS EMPLOYABLE TIME

First Job	PRESENT JOB		N	%
Same Trade	Same trade	NY	78	66.1
		US	731	65.4
	Highly related		6	5.1
			92	8.2
	Slightly related		8	6.8
			93	8.3
	Completely unrelated		26	22.0
			201	18.0
Highly Related	Same trade		4	5.3
			56	7.5
	Highly related		51	67.1
			459	61.6
	Slightly related		8	10.5
			83	11.1
	Completely unrelated		13	17.1
			147	19.7
Slightly Related	Same trade		5	5.9
			30	4.7
	Highly related		4	4.7
			56	8.8
	Slightly related		60	70.6
			421	66.5
	Completely unrelated		16	18.8
			126	19.9
Completely Unrelated	Same trade		11	7.3
			128	8.1
	Highly related		9	6.0
			97	6.1
	Slightly related		12	7.9
			207	13.1
	Completely unrelated		119	78.8
			1151	72.7

HOW DO NEW YORK VOCATIONAL GRADUATES FROM COMPREHENSIVE AND VOCATIONAL SCHOOLS COMPARE IN TERMS OF PRESENT HOURLY EARNINGS TWO, SIX AND ELEVEN YEARS AFTER GRADUATION? IS THE NEW YORK DATA CONSISTENT WITH THE UNITED STATES DATA?

- FINDINGS: Table 45 presents the comparison data for the three class years, and the results are mixed. For the 1953 graduates, those from comprehensive schools have a higher present hourly rate than those from vocational schools. The United States data confirms the New York data for the class year. However, for the other two class years, those from vocational schools have a higher present hourly rate than those from comprehensive schools. Again, the difference is confirmed by the United States data.

  Tentatively, the conclusion is that recent vintage graduates from vocational schools have slightly higher present earnings than vocational graduates from comprehensive schools after the same number of years out of school.

- COMMENT: It is appropriate to point out that the differences are less impressive than the similarities, particularly in the United States data. Neither type of school can claim any <u>substantial</u> earnings advantage for its vocational graduates.

TABLE 45. PRESENT HOURLY EARNINGS: ANALYSIS BY TYPE OF SCHOOL, BASED ON GRADUATES WHO HAVE ≥ 6 MONTHS EMPLOYABLE TIME

Year of Graduation		PRESENT HOURLY EARNINGS					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	48	3.11	1.13 ←	24	3.34	1.09
	US	463	2.97	0.91	276	3.04	1.03
1958		74	2.68	0.82 →	28	2.63	0.72
		551	2.55	0.81	420	2.38	0.78
1962		86	2.24	0.56 →	56	2.12	0.76
		928	2.01	0.68	606	1.95	0.70
Combined		209	2.60	0.89 →	109	2.53	0.96
		1952	2.39	0.87	1303	2.32	0.91

→ Vocational > Comprehensive by ≥ $.05
← Comprehensive > Vocational by ≥ $.05

HOW DO PRESENT EARNINGS OF NEW YORK VOCATIONAL AND ACADEMIC GRADUATES COMPARE AFTER TWO, SIX AND ELEVEN YEARS OUT OF HIGH SCHOOL? HOW DOES THE NEW YORK DATA COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 46 shows that for the 1962 class year, the vocational graduate's hourly earnings ($2.23) exceed the academic graduate's hourly earnings ($1.83) by a very substantial forty cents an hour or sixty-nine dollars per month, after two years out of school. For the 1958 class year, the difference still favors the vocational graduate, but by only five cents per hour or about nine dollars per month. For the 1953 graduates, the difference has reversed in favor of the academic graduates by about thirty-nine cents per hour. The small number of New York academic cases make the absolute earnings values for these graduates unreliable estimates of true earnings. However, the United States data, based upon a much larger number of cases, shows the same basic pattern. With time, the academic graduates narrow the earnings gap, catch up with the vocationals, and then slightly surpass the vocationals after eleven years after school.

- COMMENT: The data indicate that the accumulated earnings of vocational graduates are substantially greater up to and probably considerably beyond the 11th year out of school. However, the suggestion in the data that hourly earnings of academic graduates catch up with and exceed those of vocational graduates, means that eventually the accumulated earnings of academics may also catch up with and possibly exceed comparable earnings of vocational graduates. One can not be certain about this, however, because the noncollege academic graduates also have less employment security.

TABLE 46. PRESENT HOURLY EARNINGS: ANALYSIS BY TYPE OF GRADUATE, BASED ON GRADUATES WITH NO COLLEGE EDUCATION WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Year of Graduation		PRESENT HOURLY EARNINGS					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	82	3.19	1.10 ←	18	3.58	1.50
	US	822	3.02	0.95	152	3.06	1.22
1958		121	2.67	0.76 →	32	2.62	1.12
		1198	2.46	0.79	221	2.35	0.88
1962		141	2.23	0.64 →	30	1.83	0.69
		1536	2.01	0.70	208	1.87	0.62
Combined		347	2.62	0.89 →	80	2.54	1.28
		3568	2.40	0.89	581	2.36	1.02

→ Vocational > Academic by ≧$.05
← Academic > Vocational by ≧$.05

HOW DO NEW YORK VOCATIONAL GRADUATES WHOSE PRESENT JOB IS IN THE FIELD FOR WHICH TRAINED COMPARE WITH THOSE IN UNRELATED OCCUPATIONAL FIELDS IN TERMS OF PRESENT EARNINGS? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH UNITED STATES DATA?

- FINDINGS: Table 47 shows the present hourly earnings for the two groups of graduates for each of the three class years. All differences favor those in the same or highly related occupations for which trained. Over a year period, the hourly rate differences amount to total dollars as indicated below:

NEW YORK

Class Year	Hourly Rate Difference	Dollars per Year
1953	.23	$478.40
1958	.05	104.00
1962	.04	83.20

UNITED STATES

Class Year	Hourly Rate Difference	Dollars per Year
1953	.30	$624.00
1958	.19	395.20
1962	.11	228.80

- COMMENT: The data clearly indicate that those who are in the field for which trained, after two, six and eleven years from high school training, are earning more than those who have left the field. The earnings advantage tends to be less for the New York graduates. However, this may be a distortion caused by the relatively few New York schools included in the sample.

TABLE 47. PRESENT HOURLY EARNINGS: ANALYSIS IN TERMS OF RELATEDNESS TO HIGH SCHOOL TRAINING, BASED ON GRADUATES WHO HAVE ≷6 MONTHS EMPLOYABLE TIME

Year of Graduation		PRESENT HOURLY EARNINGS					
		Same/highly Related →			Slightly Related/unrelated		
		N	M	S.D.	N	M	S.D.
1953	NY	33	3.55	1.21	68	3.32	1.09
	US	355	3.26	0.90	627	2.96	1.00
1958		52	2.69	0.85	94	2.64	0.64
		536	2.60	0.81	821	2.41	0.79
1962		69	2.21	0.64	89	2.17	0.65
		718	2.07	0.64	931	1.96	0.74
Combined		154	2.66	1.00	254	2.65	0.91
		1614	2.51	0.89	2386	2.38	0.92

→Consistent trend for all class years

HOW DO NEW YORK VOCATIONAL GRADUATES FROM COMPREHENSIVE AND VOCATIONAL SCHOOLS COMPARE IN TERMS OF PRESENT JOB SATISFACTION? IS THE NEW YORK DATA CONSISTENT WITH THE UNITED STATES DATA?

- FINDINGS: Table 48 presents a picture of no real difference in mean job satisfaction reported by the graduates of the two types of schools. The conclusion agrees with the United States data. After two, six and eleven years out of school, the present job satisfaction experienced by vocational graduates is unrelated to the type of school from which they graduated.

  It should be noted in passing that both graduates from comprehensive and vocational schools do report a relatively high mean job satisfaction for present jobs held. The relatively high job satisfaction that vocational graduates experience on their first job after high school continues throughout their careers, within the time span covered by the present study.

- COMMENT: Again, neither type school can claim an advantage for its graduates.

TABLE 48. PRESENT JOB SATISFACTION: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF CLASS YEAR MEANS, BASED ON GRADUATES WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Year of Graduation		PRESENT JOB SATISFACTION					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	51	3.59	0.53	23	3.52	0.65
	US	468	3.56	0.64	276	3.51	0.66
1958		74	3.57	0.60	26	3.77	0.42
		552	3.50	0.68	418	3.36	0.74
1962		87	3.48	0.69	59	3.49	0.53
		938	3.26	0.83	612	3.22	0.79
Combined		214	3.53	0.65	109	3.56	0.55
		1969	3.40	0.76	1307	3.33	0.76

HOW DO NEW YORK VOCATIONAL AND NONCOLLEGE GRADUATES COMPARE IN TERMS OF PRESENT JOB SATISFACTION TWO, SIX AND ELEVEN YEARS OUT OF HIGH SCHOOL? IS THE NEW YORK DATA ON THIS QUESTION CONSISTENT WITH THE UNITED STATES DATA?

- FINDINGS: Table 49 shows that New York vocational graduates of 1958 and 1962 report significantly greater present job satisfaction than academic graduates from the same years. There is no significant difference in reported present job satisfaction between vocational and academic graduates from 1953, although the direction of the difference still favors the vocationals.

  The United States data confirms the New York conclusions. Vocational graduates, after two, six and eleven years out of high school, report a higher degree of present job satisfaction than academic graduates who did not attend college. The magnitude of the difference in reported job satisfaction is not what is impressive. What is more impressive is the fact that a significant difference should exist at all.

- COMMENT: What is it about the vocational graduate and the work he does that makes him report higher present job satisfaction than the noncollege academic graduate so many years after high school?

TABLE 49. PRESENT JOB SATISFACTION: ANALYSIS BY TYPE OF GRADUATE IN TERMS OF CLASS YEAR MEANS, BASED ON GRADUATES WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Year of Graduation		PRESENT JOB SATISFACTION					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	74	3.57	0.57	16	3.50	0.50
	US	744	3.55	0.65	112	3.33	0.82
1958		100	3.62	0.56 →	25	3.20	0.85
		970	3.44	0.71	147	3.28	0.84
1962		146	3.49	0.63 →	27	3.07	0.98
		1550	3.24	0.81	206	3.01	0.86
Combined		323	3.54	0.62 →	68	3.22	0.86
		3276	3.37	0.76	465	3.17	0.86

→ Vocational > Academic

HOW DO VOCATIONAL GRADUATES WHO HAVE THEIR PRESENT JOB IN THE FIELD FOR WHICH TRAINED IN HIGH SCHOOL COMPARE IN TERMS OF PRESENT JOB SATISFACTION WITH THOSE WHO ARE WORKING IN UNRELATED OCCUPATIONAL FIELDS? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 50 shows that the graduates who are in the same or highly related occupations for which trained have a higher present job satisfaction rating than those who are in completely unrelated or only slightly related occupations. The differences are small, but consistent for all class years. The United States data also confirms the New York data. Present job satisfaction increases with increased years out of school for both groups. The generalization is further supported by comparing job satisfaction reported for the first job held by both groups (Table 38) with present job satisfaction (Table 50). Both groups for each class year show an increase in job satisfaction from first to present job.

- COMMENT: The data clearly indicate that those who stay with or return to the same or highly related occupation for which trained enjoy greater job satisfaction than those who never entered or left the field for which trained. The latter, however, show a greater increase in satisfaction with increased years out of school, even though they are still short of the job satisfaction reported by those in the field for which trained.

The findings suggest that schools who make a vigorous effort to place more graduates into the fields for which trained are indirectly serving to increase future job satisfaction of their graduates.

TABLE 50. PRESENT JOB SATISFACTION: ANALYSIS IN TERMS OF RELATEDNESS TO HIGH SCHOOL TRAINING, BASED ON GRADUATES WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Year of Graduation		PRESENT JOB SATISFACTION					
		Same/highly related			Slightly related/unrelated		
		N	M	S.D.	N	M	S.D.
1953	NY	39	3.74	0.49	73	3.56	0.55
	US	364	3.70	0.52	638	3.43	0.72
1958		50	3.76	0.43	97	3.54	0.67
		545	3.65	0.56	839	3.29	0.78
1962		69	3.68	0.47	89	3.30	0.74
		726	3.54	0.62	935	3.03	0.86
Combined		159	3.72	0.46	262	3.45	0.69
		1641	3.62	0.58	2419	3.23	0.81

SECTION 6 SOME ASPECTS OF ALL JOBS HELD

Introduction

This section takes a look at all full-time jobs held by the vocational graduates of 1953, 1958 and 1962. It describes the number of jobs held, the relatedness of the jobs to high school training, the overall job satisfaction experienced, and the geographic mobility involved. In addition, it describes the employment security of the graduates since leaving high school.

Summary

1. Number of jobs held. The vocational graduates of 1953, 1958 and 1962 have held a mean of 3.1, 2.3 and 1.9 jobs since leaving school. ● Graduates of vocational and comprehensive schools show no difference in number of jobs held.

2. Employment security. The graduates of 1953, 1958 and 1962 reveal a median employment security of 98, 95 and 92 percent respectively. Mean values are somewhat lower. ● Graduates from vocational and comprehensive schools have about the same employment security. ● Vocational graduates from comprehensive schools have consistently greater employment security than do academic graduates from the same schools.

3. Relatedness of jobs to training. The overall relatedness of all jobs held to high school training is low. Only about one-third have held all their jobs in the field for which trained. There is no substantial difference between vocational and comprehensive schools in the relatedness of jobs to training reported by graduates.

4. Satisfaction with jobs held. The overall satisfaction with jobs held since high school graduation is high, and seems to increase with years out of school. Vocational graduates report greater job satisfaction than do academic graduates.

5. Geographic mobility. There is very little geographic mobility among New York vocational graduates. Respectively 93, 84 and 76 percent of the 1962, 1958 and 1953 graduates have never moved out of the city in which they went to school. Again, 1.3, 4.8 and 10.9 percent of the 1962, 1958 and 1953 graduates have made two or more new city moves since leaving high school.

HOW MANY JOBS (EMPLOYERS) DO NEW YORK VOCATIONAL GRADUATES HOLD WITHIN TWO, SIX AND ELEVEN YEARS AFTER GRADUATION? IN OTHER WORDS, HOW MUCH EMPLOYER STABILITY DO THEY DEMONSTRATE? HOW DOES NEW YORK COMPARE WITH UNITED STATES ON THIS QUESTION?

- FINDINGS: Table 51 shows that the 1953, 1958 and 1962 vocational graduates have held about 3.1, 2.5 and 2.0 jobs respectively in the eleven, six and two years they were out of school at the time the survey was made. The data in the upper portion of the table gives more details. Thus, almost 80 percent of the 1953 graduates have had 4 or fewer jobs since graduation. Notice that 24 percent have had only one full-time job in the eleven year period. The general picture is one of considerable employer stability. They do not do a lot of hopping from employer to employer.

  Notice also that most moves are made within the first two years. The 1953 graduates have made on an average only <u>one</u> more employer move than the 1962 graduates. The fact that the employer changes implied by Table 51 are both voluntary <u>and</u> involuntary, e.g., layoffs beyond control of the graduate, is a further testament to the high degree of employer stability found among vocational graduates.

- COMMENT: The regrettable reputation that has at times been attached to vocational students can be reputed if vocational educators would cite such findings to the public, particularly the employer public. They are not misfits who had to be handled in vocational programs. Cold analysis of their occupational histories reveals them to be pretty solid citizens.

TABLE 51. NUMBER OF JOBS HELD: ANALYSIS BY CLASS YEAR IN TERMS OF FREQUENCY, PERCENTAGE AND CUMULATIVE PERCENTAGE DISTRIBUTIONS, BASED ON GRADUATES WHO HAVE ≥ 6 MONTHS EMPLOYABLE TIME

Number of Full-time Jobs Held	YEAR OF GRADUATION											
	1953			1958			1962			Combined		
	N	%	C%	N	%	C%	N	%	C%	N	%	C%
10	1	0.8	100.0	0	0.0	100.0	0	0.0	100.0	1	0.2	100.0
9	0	0.0	99.2	0	0.0	100.0	0	0.0	100.0	0	0.0	99.9
8	3	2.4	99.2	0	0.0	100.0	0	0.0	100.0	3	0.7	99.9
7	2	1.6	96.8	1	0.6	100.0	0	0.0	100.0	3	0.7	99.2
6	10	8.0	95.2	2	1.3	99.4	1	0.6	100.0	13	2.9	98.5
5	10	8.0	87.2	14	8.9	98.1	2	1.2	99.4	26	5.7	95.6
4	17	13.6	79.2	15	9.6	89.2	17	10.1	98.2	49	10.8	89.9
3	32	25.6	65.6	25	15.9	79.6	24	14.2	88.1	82	18.0	79.1
2	20	16.0	40.0	44	28.0	63.7	45	26.6	73.9	110	24.2	61.1
1	30	24.0	24.0	56	35.7	35.7	80	47.3	47.3	168	36.9	36.9
Number	125			157			169			445		
	1114			1491			1764			4382		
Mean	3.14			2.34			1.93			2.40		
	3.08			2.48			1.96			2.42		
Median	3			2			2			2		
	3			2			2			2		
S.D.	1.88			1.40			1.10			1.53		
	1.84			1.50			1.14			1.53		

HOW DO NEW YORK VOCATIONAL GRADUATES FROM COMPREHENSIVE SCHOOLS COMPARE WITH THOSE FROM VOCATIONAL SCHOOLS IN TERMS OF NUMBER OF FULL-TIME JOBS HELD SINCE GRADUATION? HOW DOES NEW YORK COMPARE WITH THE UNITED STATES?

- FINDINGS: Table 52 shows the comparison data for each of the three class years separately and for the combined class years. Very clearly, the mean number of full-time jobs held is essentially the same for the graduates from the two types of schools. Stated another way, the type of school attended has no bearing on the employer stability of graduates defined in terms of number of full-time jobs (employers) held. The close correspondence of New York data to United States data is impressive, and again verifies the results obtained from the very much smaller New York sample.

- COMMENT: The reader is reminded that the purpose of comparing the two types of schools in terms of the experiences of their graduates is to (1) determine whether there are substantial differences, and (2) raise questions of why, and where such differences can be shown. The purpose is <u>not</u> to determine which is the better type of school. The analyses are much too limited for the latter purpose, even if one were to grant that it was a sound purpose.

TABLE 52. NUMBER OF JOBS HELD: ANALYSIS BY TYPE OF SCHOOL, BASED ON GRADUATES WHO HAVE ≧ 6 MONTHS EMPLOYABLE TIME

Year of Graduation		NUMBER OF FULL-TIME JOBS					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	85	3.2	1.8	40	3.1	2.0
	US	689	3.2	1.8	425	3.0	1.9
1958		113	2.3	1.4	44	2.4	1.3
		858	2.4	1.4	634	2.6	1.6
1962		101	2.0	1.1	68	1.8	1.1
		1050	2.0	1.2	714	1.9	1.1
Combined		301	2.5	1.5	154	2.3	1.5
		2608	2.4	1.5	1775	2.4	1.6

WHAT DEGREE OF EMPLOYMENT SECURITY DO NEW YORK VOCATIONAL GRADUATES EXPERIENCE OVER PERIODS OF TWO, SIX AND ELEVEN YEARS OUT OF SCHOOL? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: See the definition of employment security on the next page before reading further. Table 53 indicates that the vocational graduates for the class years 1953, 1958 and 1962 have experienced a median value of 98, 95 and 92 percent employment security since high school, with the corresponding mean values being 93, 87 and 82 percent. The apparent untrend is an artifact attributable to the inclusion of pre-first job unemployment into the equation for calculating employment security. Had it been excluded, no fictitious trend would have occurred.

  It is clear that the graduates are fully employed a very high percentage of their employable time. The mean values are depressed by a small minority of cases whose employability may be questioned. Unfortunately, the study did not delve into the reasons behind the cases with 50 percent or more of unemployment. No doubt, such cases have special employability problems that are no reflection on vocational education.

  Again, the New York and United States data show remarkable correspondence.

- COMMENT: Vocational graduates, as a group, show a high level of employment security, especially considering the layoff potential that characterizes some of their occupations, e.g., building trades. Table 53 does not show the data on graduates who had more than 100 percent employment security by virtue of holding a second part-time job much of their work history time. Such cases were scored 100 percent for Table 53 purposes. Their impressive numbers, however, again say something about the character of the vocational graduate.

TABLE 53. EMPLOYMENT SECURITY*: ANALYSIS BY CLASS YEAR IN TERMS OF FREQUENCY, PERCENTAGE AND CUMULATIVE PERCENTAGE DISTRIBUTIONS, BASED ON GRADUATES WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Employment Security	YEAR OF GRADUATION											
	1953			1958			1962			Combined		
C.I.	N	%	C%	N	%	C%	N	%	C%	N	%	C%
91-100	93	81.6	81.6	88	60.7	60.7	85	51.8	51.8	267	62.5	62.5
81- 90	10	8.8	90.4	20	13.8	74.5	22	13.4	65.2	55	12.9	75.4
71- 80	6	5.3	95.7	21	14.5	89.0	24	14.6	79.8	51	11.9	87.3
61- 70	2	1.8	97.5	5	3.4	92.4	9	5.5	85.3	16	3.7	91.0
51- 60	1	0.8	98.3	2	1.4	93.8	8	4.9	90.2	11	2.6	93.6
41- 50	0	0.0	98.3	2	1.4	95.2	6	3.6	93.8	8	1.9	95.5
31- 40	0	0.0	98.3	3	2.1	97.3	3	1.8	95.6	6	1.4	96.9
21- 30	0	0.0	98.3	1	0.7	98.0	1	0.6	96.2	2	0.5	97.4
11- 20	0	0.0	98.3	2	1.4	99.4	0	0.0	96.2	2	0.5	97.9
1- 10	1	0.8	99.1	0	0.0	99.4	0	0.0	96.2	1	0.2	98.1
0	1	0.8	100.0	1	0.7	100.0	6	3.6	100.8	8	1.9	100.0
Number	114			145			164			427		
	1026			1421			1701			4161		
Mean	92.9			86.9			82.0			86.6		
	92.7			87.3			84.0			89.3		
Median	98			95			92			95		
	98			95			92			95		
S.D.	14.4			18.6			23.2			20.0		
	15.5			20.2			23.2			20.7		

* The employment security measure expresses a graduate's total months of employment since leaving high school as a percentage of his total employable months. Excluded from the latter are months spent in military service, full-time school attendance or incapacitating illnesses. Included in months employed are part-time jobs converted to equivalent full-time months, e.g., a six month, 20-hour a week job became three months of full-time employment.

HOW DOES THE EMPLOYMENT SECURITY OF NEW YORK VOCATIONAL GRADUATES FROM COMPREHENSIVE HIGH SCHOOLS COMPARE WITH THAT OF GRADUATES FROM VOCATIONAL SCHOOLS? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 54 reveals that the comprehensive school graduates report slightly higher employment security for two of the three class years. On the overall, comprehensive school graduates had a 3 percent higher level of employment security. The New York results are just the reverse of the United States findings, in which the vocational school graduates reported slightly higher employment security in two out of the three class years, and had about a 2 percent higher employment security in the overall. The conclusion is that the differences are negligible and attributable to sampling factors rather than any real underlying difference in the graduates from the two types of schools. A larger New York sample of schools would have been desirable for this analysis.

- COMMENT: The analysis offers no conclusive evidence in favor of either type of school based on the employment security of graduates. Even if a larger sample of schools were employed, the issue could not be resolved without first having matched the schools on their course "product mix". If one or the other type of school offered a greater percentage of courses in occupations subject to seasonal layoffs or economic cycle effects, its graduates would be predisposed to greater unemployment. The building trade occupations are an example of trades highly subject to seasonal layoffs and economic cycle effects.

TABLE 54. EMPLOYMENT SECURITY: ANALYSIS BY TYPE OF SCHOOL, BASED ON GRADUATES WHO HAVE ≥6 MONTHS EMPLOYABLE TIME

Year of Graduation		EMPLOYMENT SECURITY					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	77	93.2	12.9	37	92.4	17.1
	US	622	93.6	12.9	404	91.2	18.6
1958		104	85.8	18.7	41	89.6	18.0
		808	87.2	19.5	613	87.5	21.1
1962		99	79.5	22.8	65	85.8	23.2
		1015	85.2	22.4	686	82.2	24.2
Combined		282	85.6	19.7	145	88.6	20.4
		2456	88.0	19.7	1705	86.3	22.1

HOW DO NEW YORK VOCATIONAL GRADUATES COMPARE WITH NONCOLLEGE ACADEMIC GRADUATES IN TERMS OF EMPLOYMENT SECURITY? HOW DOES THE NEW YORK DATA COMPARE WITH THE UNITED STATES DATA ON THIS QUESTION?

- FINDINGS: Table 55 presents the comparison data for the three class years. Vocational graduates have 8.5, 0.3 and 1.8 percent greater employment security respectively for the class years 1953, 1958 and 1962 than the academic graduates who did not go to college. The impressive difference seems to be for the 1953 graduates. The United States data brings out the difference more substantially. The vocationals are ahead by 2.6, 4.6 and 7.8 percent greater employment security respectively for 1953, 1958 and 1962 than the academics who did not go to college. For the combined class years, the New York vocationals are 2.7 percentage points of employment security ahead of the noncollege academics, whereas the United States vocationals are 4.1 percent ahead.

- COMMENT: Earlier, Table 18 showed that vocational graduates find their first full-time job about 1 month sooner than work-bound academic graduates. Some of the difference in overall employment security is accounted for by unemployment prior the first full-time job.

The United States data trend suggests that the difference in employment security enjoyed by the two kinds of graduates decreases with increased years out of school.

TABLE 55. EMPLOYMENT SECURITY: ANALYSIS BY TYPE OF GRADUATE, BASED ON GRADUATES WITH NO COLLEGE EDUCATION WHO HAVE ≥6 MONTHS EMPLOYABLE TIME

Year of Graduation		EMPLOYMENT SECURITY					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	114	92.9	14.4	32	84.4	24.6
	US	1026	92.7	15.5	364	90.1	17.0
1958		145	86.9	18.6	46	86.6	24.3
		1421	87.3	20.2	410	82.7	24.3
1962		164	82.0	23.2	37	80.2	18.2
		1701	84.0	23.2	324	76.2	30.2
Combined		427	86.6	20.0	115	83.9	22.8
		4161	87.3	20.7	1098	83.2	24.8

HOW DOES THE EMPLOYMENT SECURITY OF NEW YORK VOCATIONAL GRADUATES COMPARE WITH ACADEMIC GRADUATES FROM THE SAME COMPREHENSIVE SCHOOLS? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 56 shows that for the class year 1953 vocational graduates reported 8 percent greater employment security than academics from the same schools; for class year 1958, the vocationals were 3 percent ahead of the academics; and for 1962, the vocationals were 5.6 percent ahead. It can be concluded that, over periods of two, six and eleven years after graduation, vocational graduates enjoy greater employment security than their academic counterparts who did not go to college. Moreover, the difference is large enough to be impressively in favor of the vocationals.

  The New York data concurs with the United States data. Apparently, vocational graduates everywhere experience less unemployment than academic graduates who did not go to college.

- COMMENT: Thus far, the study has shown that vocational graduates get their first full-time job sooner than academic graduates who did not go to college (Table 18), that they experience higher starting hourly rates (Table 33), and they have significantly greater employment security (Table 55). This is all the more impressive when one recalls that the majority of high school academic program graduates do not attend college, and of those who do, about 40 percent complete their college education. (The 40 percent figure does not take into account those who may have dropped out of college and returned in later years.)

TABLE 56. EMPLOYMENT SECURITY: ANALYSIS BY TYPE OF GRADUATE, BASED ON GRADUATES FROM THE SAME COMPREHENSIVE SCHOOLS WHO HAVE ≧ 6 MONTHS EMPLOYABLE TIME

Year of Graduation		EMPLOYMENT SECURITY					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	37	92.4	17.1	32	84.4	24.6
	US	819	93.5	14.4	149	89.6	20.0
1958		41	89.6	18.0	46	86.6	24.3
		1188	88.0	19.5	212	83.2	21.4
1962		65	85.8	23.2	37	80.2	18.2
		1528	85.0	22.1	230	76.2	29.0
Combined		145	88.6	20.4	115	83.9	22.8
		3548	88.0	19.9	591	82.1	24.9

WHAT IS THE OVERALL JOB-TO-TRAINING RELATEDNESS FOR JOBS HELD BY NEW YORK VOCATIONAL GRADUATES SINCE LEAVING HIGH SCHOOL? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: The Table 57 footnote explains the measure, and the table gives the mean and median relatedness values for the three class years, as well as the frequency distributions for New York graduates.

  The mean values of 2.3 for all class years indicate that the relationship between high school occupational training and all jobs held by <u>all</u> graduates is only little better than "slightly related". Stated another way, more of the jobs held by the graduates are completely unrelated or only slightly related to the occupation studied than are in the same or highly related occupations. The New York and United States mean and median job relatedness values are eventually identical.

- COMMENT: Unless there are unknown factors in the future that operate to place more of the graduates into the fields for which trained <u>and keep them in those fields</u>, the vocational educator may well consider curriculum modifications that anticipate the loss of a very substantial percentage of graduates to the fields for which they were trained. It may be better to devise curricula for broader-based occupational skills when so many do not enter or stay in the occupational field for which trained than to intensify skill training for a specific occupation. The idea is offered to provide discussion rather than a recommendation to educators.

TABLE 57. RELATEDNESS* OF JOBS TO TRAINING: ANALYSIS BY CLASS YEAR IN TERMS OF FREQUENCY, PERCENTAGE AND CUMULATIVE PERCENTAGE DISTRIBUTIONS, BASED ON GRADUATES WHO HAVE ≥6 MONTHS EMPLOYABLE TIME

Job Relatedness	YEAR OF GRADUATION											
	1953			1958			1962			Combined		
C.I.	N	%	C%	N	%	C%	N	%	C%	N	%	C%
4.0	20	16.1	16.1	27	17.3	17.3	28	16.7	16.7	76	16.8	16.8
3.7-3.9	0	0.0	16.1	0	0.0	17.3	1	0.6	17.3	1	0.2	17.0
3.4-3.6	1	0.8	16.9	1	0.6	17.9	5	2.9	20.2	7	1.5	18.5
3.1-3.3	4	3.2	20.1	1	0.6	18.5	1	0.6	20.8	6	1.3	19.8
2.8-3.0	15	12.1	32.2	21	13.5	32.0	28	16.7	37.5	64	14.2	34.0
2.5-2.7	13	10.5	42.7	9	5.8	37.8	12	7.1	44.6	34	7.5	41.5
2.2-2.4	6	4.8	47.5	4	2.6	40.4	5	2.9	47.5	15	3.3	44.8
1.9-2.1	18	14.5	62.0	38	24.4	64.8	22	13.1	60.6	78	17.3	62.1
1.6-1.8	12	9.7	71.7	8	5.1	69.9	11	6.5	67.1	32	7.1	69.2
1.3-1.5	9	7.3	79.0	16	10.2	80.1	4	2.4	69.5	29	6.4	75.6
1.0-1.2	26	21.0	100.0	31	19.9	100.0	51	30.4	100.0	110	24.3	100.0
Number	124			156			168			452		
	1106			1473			1736			4328		
Mean	2.3			2.3			2.3			2.3		
	2.3			2.2			2.3			2.3		
Median	2.0			2.0			2.0			2.0		
	2.0			2.0			2.0			1.9		
S.D.	1.01			1.02			1.09			1.05		
	1.01			1.05			1.11			1.07		

* A job relatedness score was obtained for each graduate by having him rate the relatedness of each job held since high school to the vocational course studied, and obtaining the mean of such ratings. The rating scale was as follows: 1-same as occupation studied, 2-highly related [to occupation studied], 3-slightly related, and 4-completely unrelated [to occupational studied].

HOW DO NEW YORK VOCATIONAL GRADUATES FROM COMPREHENSIVE SCHOOLS COMPARE WITH THOSE FROM VOCATIONAL SCHOOLS IN TERMS OF THE RELATEDNESS OF ALL JOBS HELD TO HIGH SCHOOL OCCUPATIONAL TRAINING? DO THE NEW YORK FINDINGS AGREE WITH THE UNITED STATES FINDINGS ON THIS QUESTION?

- FINDINGS: Table 58 gives the mean job relatedness values for the graduates of the two types of schools. See Table 57 footnote for an explanation of the job relatedness measure. The difference in mean job relatedness between graduates of the two types of schools is slight, but consistently in favor of the vocational schools, particularly when one examines the United States data for supporting evidence. Stated differently, vocational school graduates have a higher job-to-training relatedness score, over all jobs held since leaving high school, than do vocational graduates from comprehensive schools.

- COMMENT: Despite the consistent differences in relatedness of all jobs held to training by graduates from the two types of schools, the magnitude of the differences is not so great that one would want to make capital of them by saying that vocational schools clearly out outperform comprehensive schools in the degree to which graduates go into and stay in the fields for which trained. What are statistically significant differences are not necessarily differences of a practical magnitude.

Even so, one can raise the question of why. Why do graduates of vocational schools work in occupations more closely related to their high school training than those from comprehensive schools? The present study, unfortunately provides no data. Any answers are necessarily speculative. One possibility is that a stronger trade indoctrination takes place in vocational schools where vocational education is the primary purpose of the school. The main thrust of comprehensive schools is in nonvocational education, and some of this may rub off on the graduates. This interpretation, if correct, is not necessarily a negative reflection on comprehensive schools. Some may even argue that the findings indirectly imply a broader-based education in the comprehensive schools.

TABLE 58. RELATEDNESS OF JOBS TO TRAINING: ANALYSIS BY TYPE OF SCHOOL, BASED ON GRADUATES WHO HAVE ≥6 MONTHS EMPLOYABLE TIME

Year of Graduation		JOB RELATEDNESS					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
1953	NY	84	2.32	1.00	40	2.24	1.05
	US	685	2.35	1.01	421	2.10	1.01
1958		112	2.32	1.05	44	2.10	0.93
		846	2.31	1.06	628	2.06	1.03
1962		100	2.28	1.09	68	2.28	1.09
		1035	2.45	1.12	701	2.14	1.07
Combined		298	2.31	1.05	154	2.21	1.04
		2577	2.38	1.07	1752	2.10	1.04

HOW SATISFIED ARE NEW YORK VOCATIONAL GRADUATES WITH THE JOBS THEY HAVE HELD OVER TWO, SIX AND ELEVEN YEARS AFTER GRADUATION? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 59 presents the frequency distribution of satisfaction ratings reported by the class years 1953, 1958 and 1962, together with mean and median values. See the table footnote for an explanation of the job satisfaction measure.

  The findings indicate the average vocational graduate was "satisfied" with the jobs he held since graduation. For the combined class years, 28 percent reported "very satisfied" for all jobs held since graduation. At the other end, less than 4 percent of the graduates reported "very dissatisfied" over all jobs held.

  The New York graduates report a consistent and slightly higher overall job satisfaction than do the United States graduates. The difference, however, is not impressive.

- COMMENT: The data make clear that vocational graduates are able to report a considerable degree of satisfaction with the jobs they have held since leaving high school. The satisfaction reported in Table 36 with their first full-time job apparently continues to other full-time jobs later. This is not surprising. More people are inclined to be satisfied than dissatisfied with the work they do. Vocational graduates are no exception. While the table does not provide comparison data, it does testify to the relatively high degree of personal satisfaction that most vocational graduates derive from their work.

TABLE 59. SATISFACTION RATING* OF JOBS HELD: ANALYSIS BY CLASS YEAR IN TERMS OF FREQUENCY, PERCENTAGE AND CUMULATIVE PERCENTAGE DISTRIBUTIONS, BASED ON GRADUATES WHO HAVE ≧6 MONTHS EMPLOYABLE TIME

Job Satisfaction	YEAR OF GRADUATION											
	1953			1958			1962			Combined		
C.I.	N	%	C%	N	%	C%	N	%	C%	N	%	C%
4.0	29	23.4	23.4	47	30.1	30.1	48	28.9	28.9	125	27.8	27.8
3.7-3.9	9	7.2	30.6	6	3.8	33.9	4	2.4	31.3	19	4.2	32.0
3.4-3.6	10	8.1	38.7	18	11.5	45.4	9	5.4	36.7	37	8.2	40.2
3.1-3.3	14	11.3	50.0	11	7.1	52.5	9	5.4	42.1	34	7.6	47.8
2.8-3.0	44	35.5	85.5	51	32.7	85.2	63	38.0	80.1	159	35.3	83.1
2.5-2.7	11	8.9	94.4	10	6.4	91.6	17	10.2	90.3	38	8.4	91.5
2.2-2.4	3	2.4	96.8	7	4.5	96.1	4	2.4	92.7	15	3.3	94.8
1.9-2.1	3	2.4	99.2	2	1.3	97.4	10	6.0	98.7	15	3.3	98.1
1.6-1.8	1	0.8	100.0	1	0.6	98.0	0	0.0	98.7	2	0.4	98.5
1.3-1.5	0	0.0	100.0	0	0.0	98.0	1	0.6	99.3	1	0.2	98.7
1.0-1.2	0	0.0	100.0	3	1.9	100.0	1	0.6	100.0	5	1.1	100.0
Number	124			156			166			450		
	1107			1473			1743			4336		
Mean	3.26			3.28			3.20			3.24		
	3.19			3.13			3.06			3.12		
Median	3.1			3.3			3.0			3.0		
	3.0			3.0			3.0			2.9		
S.D.	0.54			0.64			0.64			0.62		
	0.61			0.66			0.74			0.68		

* A job satisfaction score was obtained for each graduate by having him rate his satisfaction with each job held since high school, and obtaining the mean of such values. The rating scale was as follows: 4-highly satisfied, 3-slightly satisfied, 2-slightly dissatisfied, and 1-highly dissatisfied.

HOW DOES THE REPORTED JOB SATISFACTION OF NEW YORK VOCATIONAL GRADUATES COMPARE WITH THAT OF ACADEMIC PROGRAM GRADUATES? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 60 presents the mean job satisfaction ratings reported by the two types of graduates. For each class year, the vocational graduates reported a significantly higher degree of job satisfaction than did the academic graduates. Moreover, the difference is greater for the New York graduates than the United States graduates. While the differences are not great, they are impressive because of their consistency. More vocational graduates are reporting satisfaction with their work than academic program graduates.

- COMMENT: A more detailed analysis of the job satisfaction of the two types of graduates would be in order before any conclusions could be drawn about the ingredients of job satisfaction for vocational and academic graduates. Such an analysis would be particularly appropriate because the factor of personal satisfaction with work has largely been overlooked in the total assessment of the merits of vocational education. Such education is doing more than providing job skills and know-how. If the data in Tables 36, 49 and 60 are an indication, vocational education is providing vocational graduates with some lasting overall job satisfaction, more so than that experienced by academic graduates.

TABLE 60. SATISFACTION RATING OF JOBS HELD: ANALYSIS BY TYPE OF GRADUATE, BASED ON GRADUATES WHO HAVE ≥6 MONTHS EMPLOYABLE TIME

Year of Graduation		JOB SATISFACTION					
		Vocational			Academic		
		N	M	S.D.	N	M	S.D.
1953	NY	124	3.26	0.54	31	3.17	0.52
	US	1107	3.19	0.61	385	3.19	0.64
1958		156	3.28	0.64	46	3.03	0.68
		1473	3.13	0.66	421	3.07	0.71
1962		166	3.20	0.64	39	2.87	0.76
		1743	3.06	0.74	301	2.92	0.78
Combined		450	3.24	0.62	116	3.01	0.68
		4336	3.12	0.68	1107	3.07	0.72

HOW MANY NEW CITY MOVES HAVE NEW YORK VOCATIONAL GRADUATES MADE WITHIN TWO, SIX AND ELEVEN YEARS AFTER HIGH SCHOOL? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: The upper portion of Table 61 shows the number and percentage of graduates from each class year who have made from zero to six new city moves. Notice that 76.5, 84.4 and 93.1 percent of the 1953, 1958 and 1962 New York graduates have made no new city moves. The basic picture is one of stability rather than mobility, especially during the first few years after graduation. The data represents new city moves for any reason, not necessarily to get jobs in other towns or cities.

  The mean number of new city moves for New York graduates is slightly but consistently less than for the United States graduates. This may reflect the relatively greater job stability and job opportunity that is found in New York compared with the United States as a whole. One can not be certain of what accounts for the difference.

- COMMENT: The finding confirms the tentative conclusion reached in the discussion of Table 15, i.e., new city moves in connection with the first full-time job after graduation. Such moves were practically nil, and it was concluded that there was little geographic mobility among vocational graduates. The above analysis leads to the same conclusion. The practical implication for vocational educators is that course offerings should be based upon the occupational requirements of the local community rather than national forecasts of manpower requirements - at least, until such a time when greater geographic mobility can be induced in such graduates. Curriculum planning must be based upon what is the rule, not the exception. The rule seems to be that, even after eleven years out of high school, the greater majority of graduates have never made a new city move.

TABLE 61. GEOGRAPHIC MOBILITY: ANALYSIS BY CLASS YEAR IN TERMS OF FREQUENCY, PERCENTAGE AND CUMULATIVE PERCENTAGE DISTRIBUTIONS OF THE TOTAL NUMBER OF MOVES, BASED ON GRADUATES WHO HAVE ≥6 MONTHS EMPLOYABLE TIME

Number of New City Job Moves	Year of Graduation								
	1953			1958			1962		
	N	%	C%	N	%	C%	N	%	C%
6	1	0.8	100.0	0	-	-	0	-	-
5	0	0.0	99.2	0	-	-	0	-	-
4	0	0.0	99.2	2	1.4	100.0	0	-	-
3	2	1.7	99.2	2	1.4	98.6	0	0.0	100.0
2	10	8.4	97.5	3	2.0	97.2	2	1.3	100.0
1	15	12.6	89.1	16	10.8	95.2	9	5.6	98.7
0	91	76.5	76.5	125	84.4	84.4	149	93.1	93.1
Number	119			148			160		
	1037			1393			1666		
Mean	0.40			0.24			0.08		
	0.42			0.32			0.18		
Median	0.0			0.0			0.0		
	0.0			0.0			0.0		
S.D.	0.87			0.68			0.32		
	0.83			0.67			0.52		

WHEN NEW YORK VOCATIONAL GRADUATES DO MAKE NEW CITY MOVES, HOW FAR DO THEY MOVE? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 62 shows for each class year the distribution of new city moves in six distance-moved categories. Since a person may have moved more than once, the number of moves made do not correspond to persons who made moves. Notice that 54 percent of the new city moves made by 1953 graduates were 150 miles or less, with 32.4 percent being 50 miles or less. Similarly, 64.5 percent of the 1958 graduates' moves were within 150 miles of the city of origin, and as were 50 percent of the 1962 graduates' moves. Some, of course, do move relatively great distances, out of the state and even out of the Northeast region. These are the minority.

  The United States data shows even more clearly the relatively small percentage of moves more than 600 miles. Of the 1953 graduates' moves, 19.5 percent were more than 600 miles. Corresponding percentages for the 1958 and 1962 graduates are 16.6 and 13.0 percent.

- COMMENT: More than half of all moves made involve distances less than 150 miles. This supports the recommendation that vocational educators base their occupational course offerings primarily on forecasts of manpower requirements of their communities and surrounding areas that are relatively short distances from their communities.

TABLE 62. GEOGRAPHIC MOBILITY: ANALYSIS BY CLASS YEAR IN TERMS OF FREQUENCY, PERCENTAGE AND CUMULATIVE PERCENTAGE DISTRIBUTIONS OF THE DISTANCES MOVED, BASED ON GRADUATES WHO HAVE ≥6 MONTHS EMPLOYABLE TIME

Distances Moved For Jobs (miles)		YEAR OF GRADUATION								
		1953			1958			1962		
		N	%	C%	N	%	C%	N	%	C%
> 1200	NY	9	24.3	100.0	4	12.9	100.0	3	25.0	100.0
	US	45	11.4	100.0	34	9.1	100.0	16	6.5	100.0
601 - 1200		2	5.4	75.6	0	0.0	87.1	0	0.0	75.0
		32	8.1	88.6	28	7.5	90.9	16	6.5	93.5
301 - 600		6	16.2	70.2	4	12.9	87.1	2	16.7	75.0
		55	13.9	80.5	50	13.4	83.4	34	13.8	87.0
151 - 300		0	0.0	54.0	3	9.7	74.2	1	8.3	58.3
		74	18.7	66.6	55	14.7	70.0	44	17.9	73.2
51 - 150		8	21.6	54.0	1	3.2	64.5	4	33.3	50.0
		96	24.2	47.9	94	25.1	55.3	58	23.6	55.3
> 50		12	32.4	32.4	19	61.3	61.3	2	16.7	16.7
		94	23.7	23.7	113	30.2	30.2	78	31.7	31.7
Number of Moves		37			31			12		
		396			374			246		

SECTION 7 MISCELLANEOUS DATA ABOUT GRADUATES

Introduction

This section is mainly concerned with the opinions vocational graduates express about how much of their vocationally-related skills were learned in high school, where they learned most of such skills, and their needs for additional training. It was felt that such opinions may have a bearing on the problem of assessing vocational education. Data is also provided on how graduates rated ten factors associated with the schools they attended and on the kinds of post-high school education reported by the graduates.

Summary

1. Learning attributed to high schools. Vocational graduates attribute much of their vocationally-related skills to high school learning. Exceptions are clerical skills, human relations skills, and other supervisory skills. Some problem-areas are indicated by their responses. For example, 41 percent claim they learned "almost nothing" or "some, but not much" of practical job knowledge in high school. There are no impressive differences in the amount of vocationally-related skills attributed to high school learning between graduates of vocational and comprehensive schools.

2. Where graduates claim they learned the most. Mathematical and communication skills are predominantly learned in high school, not on the job. Personal relations and supervisory skills are predominantly learned on the job, not in school.

● There is a wide split of opinion on where most was learned about manual job skills, practical job knowledge, and theoretical job knowledge.

3. Training needs reported by graduates. Training needs reported vary with years out of school. ●The majority of vocational graduates report a wide variety of additional training needs. ●The high percentage who report a need for additional training is taken to be a reflection of increased job experience and responsibility rather than inadequate vocational training in high school. ●The high level of expressed training needs raises a question of whether more should be done in the public sector to provide post-high school training opportunities.

4. Ratings of ten selected school factors. High, favorable ratings were given to the (1) quality of vocational instruction and (2) quality of academic instruction. ●Lower but still favorable ratings were given to the (1) condition of shop facilities and equipment, (2) opportunity for extracurricular activities, and (3) school's reputation in the community. ● Relatively low ratings were given to (1) the vocational counseling given to students, (2) the help given students to find jobs and (3) the general physical condition of New York schools.

5. Post-high school education. The most frequently reported source of post-high school education is the military service. ●About 16 percent of the vocational graduates report some kind of college education. ●For the majority, high school is the last major formal education.

HOW MUCH OF THEIR OCCUPATIONALLY-RELATED SKILLS DO NEW YORK VOCATIONAL GRADUATES ATTRIBUTE TO HIGH SCHOOL LEARNING? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH UNITED STATES DATA?

- FINDINGS: Table 63 indicates that most of the basic occupationally related skills are learned to a large degree in high school. The exceptions are clerical skills, personal relations skills and supervisory skills. The great majority of graduates claimed they learned "almost nothing" or "some, but not much" of these skills in high school. This is not unexpected since high schools normally do not emphasize the development of such skills. It should be noted that about 41.5 percent of the graduates claim they learned "almost nothing" or "some, but not much" of practical job knowledge. Since these are graduates who are working in the same or highly related occupation for which trained, the percentage assures considerable importance. It is high and the question is why. Apparently shop practices and instructions are not always relevant to the job world outside.

In every category, the United States graduates attribute a greater amount of skill learning to their high school than does the New York graduate. Some differences are very slight. Substantial differences are shown for supervisory skills, personal relations skills, clerical skills, manual job skills and practical job knowledge.

- COMMENT: The percentages that result from combining the "almost nothing" and "some, but not much" categories suggest a problem in many of the skill areas. It can not be said that one is dealing with disgruntled former students. Table 69 shows they have a generally high regard for their former high school. One can not say they are unqualified to judge. These are the graduates in the trades for which trained or other highly related trades. Who should be more competent to judge where they learned most? Besides, the internal consistencies of the data bear them out. That being so, the vocational educator might be concerned about the implications of some of the percentages shown in Table 63.

TABLE 63. AMOUNT OF SKILL LEARNED IN HIGH SCHOOL: ANALYSIS IN TERMS OF NUMBER AND PERCENTAGE IN EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO ARE EMPLOYED IN THE SAME OR A HIGHLY RELATED OCCUPATION

Knowledge or Skill Rated by Graduates in Same or Highly Related Trade		AMOUNT OF SKILL LEARNED IN HIGH SCHOOL							
		Almost Nothing		Some, But Not Much		Large Amount		Almost All	
		N	%	N	%	N	%	N	%
Manual job skills	NY	5	3.1	48	30.2	83	52.2	23	14.5
	US	71	4.5	318	20.2	835	55.1	303	19.2
Practical job knowledge		15	9.7	49	31.8	74	48.1	16	10.4
		97	6.3	470	30.6	791	51.5	177	11.5
Theoretical job knowledge		5	3.4	38	25.5	69	46.3	37	24.8
		72	4.8	327	22.0	739	49.6	351	23.6
Mathematical skills		6	4.0	36	24.0	67	44.7	41	27.3
		66	4.4	287	19.0	565	37.5	588	39.0
Communication skills		7	4.7	50	33.8	63	42.6	28	18.9
		108	7.2	403	26.9	655	43.7	333	22.2
Reading and interpretive skills		11	7.4	42	28.2	57	38.3	39	26.2
		120	8.0	372	24.7	640	42.5	375	24.9
Clerical skills		55	37.4	64	43.5	20	13.6	8	5.4
		493	33.1	585	39.3	285	19.2	125	8.4
Personal relations skills		46	30.9	61	40.9	34	22.8	8	5.4
		388	26.0	550	36.8	444	29.7	112	7.5
Supervisory skills		62	42.8	58	40.0	21	14.5	4	2.8
		593	40.4	531	36.1	271	18.4	71	5.1

OF THE VOCATIONAL GRADUATES WHO ARE IN THE FIELD FOR WHICH TRAINED, HOW DO THOSE FROM VOCATIONAL SCHOOLS COMPARE WITH THOSE FROM COMPREHENSIVE SCHOOLS IN TERMS OF AMOUNT OF SKILL LEARNING ATTRIBUTED TO THEIR FORMER SCHOOLS?

- FINDINGS: Table 64 shows the means for amounts of skill attributed to former schools. The mean values are based upon ratings of 4-almost all, 3-large amount, 2-some, but not much, and 1-almost nothing. A comparison of the mean values obtained for the graduates from the two types of schools reveals no substantial differences in favor of either type of school.

- COMMENT: As reflected by what graduates say about how much they learned in high school, there is no basis for saying one or the other type of school does a better job of skill development.

TABLE 64. AMOUNT OF SKILL LEARNED IN HIGH SCHOOL: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF MEANS FOR EACH OF THE SKILL AREAS, BASED ON GRADUATES WHO ARE EMPLOYED IN THE SAME OR A HIGHLY RELATED OCCUPATION

Trade Knowledge or Skill Rated as to Amount Learned in High School		TYPE OF SCHOOL					
		Vocational			Comprehensive		
		N	M	S.D.	N	M	S.D.
Manual job skills	NY	109	2.7	0.71	50	3.0	0.72
	US	1033	2.9	0.75	544	2.8	0.74
Practical job knowledge		105	2.5	0.81	49	2.8	0.77
		1005	2.7	0.76	530	2.7	0.75
Theoretical job knowledge		102	2.9	0.80	47	3.0	0.78
		978	3.0	0.80	511	2.8	0.79
Mathematical skills		103	3.0	0.82	47	2.9	0.82
		986	3.1	0.86	520	3.1	0.87
Communication skills		102	2.8	0.76	46	2.7	0.91
		984	2.8	0.85	515	2.8	0.88
Reading and interpretive skills		102	2.8	0.90	47	2.9	0.90
		988	2.9	0.90	519	2.8	0.87
Clerical skills		102	1.9	0.88	45	1.7	0.74
		979	2.0	0.93	509	2.0	0.92
Personal relations skills		101	2.0	0.86	48	2.0	0.88
		976	2.2	0.89	518	2.2	0.94
Supervisory skills		100	1.8	0.76	45	1.8	0.87
		960	1.8	0.86	510	2.0	0.91

WHERE DO NEW YORK VOCATIONAL GRADUATES FEEL THEY LEARNED MOST OF EACH BASIC JOB KNOWLEDGE OR SKILL - IN SCHOOL OR ON THE JOB? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH UNITED STATES DATA?

- FINDINGS: Table 65 indicates that some skills are predominantly learned in school, e.g., mathematical skills and communication skills. Others are predominantly learned on the job, e.g., supervisory skills and personal relations skills. Of the other skills, there is a considerable split in the opinion of graduates as to where most was learned of the skill. For example, 47.5 percent claimed they learned most of their manual job skills in school, whereas 36.7 percent claimed they learned most on the job. Such differences of opinion probably reflect differences in occupations studied as well as schools attended.

  A greater percentage of the United States graduates claim they learned most of their manual job skills in school than do New York graduates. Excluding that difference, the New York and United States percentages are very similar.

- COMMENT: The analysis would be more diagnostic if it were done for specific occupations. Unfortunately, there was insufficient New York data for that type of analysis.

  It is interesting that while 73.3 percent claim they learned most of their mathematics skills in school, 58.3 percent (See Table 66) claim they need additional mathematics training. Apparently, some skills, like mathematics, if not properly learned in school are very unlikely to be learned on the job. This would suggest that schools make a special effort to develop such skills to a level adequate for the occupation being trained. When so many who are in the same or highly related occupation for which trained claim they need additional mathematics training, one can be concerned about the adequacy of mathematics skills development in school.

TABLE 65. WHERE MOST WAS LEARNED ABOUT SKILL: ANALYSIS IN TERMS OF NUMBER AND PERCENTAGE IN EACH RESPONSE CATEGORY, BASED ON GRADUATES WHO ARE EMPLOYED IN THE SAME OR A HIGHLY RELATED OCCUPATION

Knowledge or Skill Rated by Graduates in Same or Highly Related Trade		WHERE MOST WAS LEARNED ABOUT SKILL					
		H. S. Shop or Class		On Regular Job		Elsewhere	
		N	%	N	%	N	%
Manual job skills	NY	67	47.5	52	36.9	22	15.6
	US	659	54.3	514	35.3	282	10.4
Practical job knowledge		48	33.3	78	54.2	18	12.5
		449	31.1	737	51.1	256	17.8
Theoretical job knowledge		69	50.0	45	32.6	24	17.4
		732	52.0	431	30.6	245	17.4
Mathematical skills		99	73.3	10	7.4	26	19.3
		992	69.4	157	11.0	281	19.6
Communication skills		81	59.6	32	23.5	23	16.9
		811	57.5	324	23.0	275	19.5
Reading and interpretive skills		68	51.1	41	30.8	24	18.1
		748	53.6	393	28.2	254	18.2
Clerical skills		49	38.0	56	43.4	24	18.6
		517	37.3	575	41.5	295	21.2
Personal relations skills		26	19.8	79	60.3	26	19.9
		302	21.8	771	55.7	312	22.5
Supervisory skills		32	24.1	82	61.7	19	14.2
		306	22.5	768	56.3	289	21.2

WHAT PERCENTAGE OF NEW YORK VOCATIONAL GRADUATES WHO ARE IN THE FIELD FOR WHICH TRAINED REPORT A NEED FOR ADDITIONAL TRAINING? HOW DOES THE NEW YORK DATA COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 66 shows, as expected, that the percentage of graduates who express the need for additional training will depend upon (1) how long they have been out of school and (2) the particular skill area in question. The New York percentages by year of graduation are based upon a small number of cases, should not be taken as precise estimates of the true percentages and may account for some of the substantial disagreement with United States data that occurs in some year of graduation cells.

  Two things stand out: (1) A large percentage of graduates report need for additional training in all skill areas. (2) For each class year, a smaller percentage of New York than United States graduates report a need for additional training in mathematics and communication skills.

- COMMENT: The high percentage of graduates in the field for which trained who report additional training needs does not necessarily reflect poorly on the schools. The objective of high school level vocational training is to develop occupation entry-level knowledges and skills. It is to be expected that with increased experience and responsibilities the graduates will develop additional training needs.

The data is a challenge to New York schools. Clearly, there is a high potential demand for some types of post-high school, vocationally-related education. This is particularly the case for such core skill areas as personal relations, communications, reading and interpretive skills and supervisory skills. Should the public sector of adult education make a greater effort to accommodate such training needs?

TABLE 66. NEED FOR ADDITIONAL BASIC SKILL TRAINING: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE THAT REPORTED A NEED FOR MORE TRAINING IN EACH OF THE SKILL AREAS, BASED ON GRADUATES WHO ARE EMPLOYED IN THE SAME OR A HIGHLY RELATED OCCUPATION

Skill and Knowledge Areas For Which Graduates Reported Need For Additional Training		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Manual job skills	NY	26	68.4	26	55.3	41	61.2	93	61.2
	US	205	58.7	282	55.5	429	63.4	920	59.8
Practical job knowledge	NY	22	68.8	27	58.7	40	67.8	89	65.0
	US	205	61.2	284	57.7	411	64.0	903	61.3
Theoretical job knowledge	NY	24	64.9	19	44.2	37	62.7	80	57.6
	US	202	60.7	261	55.5	370	59.7	836	58.6
Mathematical skills	NY	20	57.1	27	60.0	34	57.6	81	58.3
	US	222	65.5	313	64.7	405	63.5	941	64.2
Communication skills	NY	18	50.0	20	48.8	33	55.0	71	51.8
	US	227	67.6	285	60.2	368	58.1	881	61.0
Reading and interpretive skills	NY	24	70.6	26	56.5	37	63.8	87	63.0
	US	210	63.1	301	62.7	412	65.1	926	63.9
Clerical skills	NY	17	51.5	22	50.0	24	43.6	63	47.7
	US	176	53.2	244	50.7	277	45.0	699	48.9
Personal relations skills	NY	20	66.7	22	50.0	29	49.2	71	53.4
	US	210	64.4	279	58.7	341	54.3	834	58.2
Supervisory skills	NY	24	72.7	24	55.8	36	63.2	84	63.2
	US	236	72.6	298	64.8	389	64.1	936	66.6

WHAT PERCENTAGE OF NEW YORK VOCATIONAL GRADUATES WHO ARE NOT IN THE FIELD FOR WHICH TRAINED REPORT NEEDS FOR ADDITIONAL TRAINING? ARE THEIR TRAINING NEEDS DIFFERENT FROM THOSE WHO ARE IN THE FIELDS FOR WHICH TRAINED?

- FINDINGS: Table 67 shows again that the percentage who report training needs is related to years out of school and the skill area in question. As with the graduates in the field for which trained (Table 66), a high percentage of those in unrelated fields report training needs in all basic skill areas. However, a greater percentage of those in unrelated fields (Table 67) report need for additional training.

Training Needs	In Unrelated Field	In Related Field
	%	%
Supervisory skills	72	63
Personal relations skills	67	53
Clerical skills	54	47
Communication skills	71	52

Also notice how the percentage reporting a training need in the above skill areas measures with increased years out of school. Almost 80 percent of the 1953 vocational graduates not in the fields for which trained report a need for training in communication skills.

- COMMENT: The above percentages must never be interpreted as an actual demand for training. Even where training opportunities are readily available, not all who admit a training need will necessarily avail themselves of the opportunity.

The comparison of Table 66 and Table 67 data indicates that training needs vary considerably with graduates in the field for which trained as opposed to graduates in unrelated fields.

TABLE 67. NEED FOR ADDITIONAL BASIC SKILL TRAINING: ANALYSIS BY CLASS YEAR IN TERMS OF NUMBER AND PERCENTAGE THAT REPORTED A NEED FOR MORE TRAINING IN EACH OF THE SKILL AREAS, BASED ON GRADUATES WHO ARE EMPLOYED IN UNRELATED OR ONLY SLIGHTLY RELATED OCCUPATIONS

Skill and Knowledge Areas For Which Graduates Reported Need for Additional Training		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Manual job skills	NY	31	47.0	41	50.0	39	52.0	112	49.6
	US	247	45.7	344	48.4	437	55.0	1029	50.2
Practical job knowledge	NY	36	57.1	41	51.9	42	60.9	120	56.1
	US	279	54.4	366	54.2	435	59.4	1081	56.2
Theoretical job knowledge	NY	37	59.7	44	58.7	35	57.4	116	57.7
	US	268	54.3	348	53.9	399	57.1	1016	55.1
Mathematical skills	NY	40	63.5	44	56.4	41	64.1	126	60.6
	US	340	65.6	453	67.4	475	65.9	1269	66.3
Communication skills	NY	46	79.3	57	70.4	41	64.1	147	71.4
	US	373	72.1	470	69.5	472	65.3	1317	68.6
Reading and interpretive skills	NY	42	65.6	50	63.3	41	65.1	136	65.1
	US	344	65.9	437	64.9	479	66.8	1263	65.9
Clerical skills	NY	39	62.9	41	51.9	30	47.6	112	54.1
	US	283	54.0	379	55.7	393	54.6	1058	54.9
Personal relations skills	NY	45	71.4	53	68.8	38	59.4	139	67.1
	US	356	68.5	436	64.4	478	65.7	1273	66.0
Supervisory skills	NY	46	76.7	57	74.0	43	66.2	148	72.2
	US	393	76.2	474	71.6	393	69.2	1362	71.9

OF THE VOCATIONAL GRADUATES WHO ARE IN THE FIELD FOR WHICH TRAINED, HOW DO THOSE FROM COMPREHENSIVE SCHOOLS COMPARE WITH THOSE FROM VOCATIONAL SCHOOLS IN TERMS OF ADDITIONAL SKILL TRAINING NEEDS?

- FINDINGS: Table 68 shows the training need percentages for graduates from the two types of schools. The small number of cases makes generalizations highly tentative.

  A greater percentage of comprehensive school graduates report training needs in manual job skills and practical job knowledge. On the other hand, a greater percentage of vocational school graduates report additional skill training needs in all other categories. The lack of correspondence of the New York data with the United States data suggests, however, that the New York data suffers from too few cases and/or a nonrepresentative school sample. For several categories, the New York and United States data are in the opposite direction, e.g., personal relation skills, clerical skills, reading skills and mathematics skills.

- COMMENT: The lack of agreement with United States data makes it prudent not to generalize to the two types of schools involved. Even if one would have more confidence in the New York data for this analysis, generalizations about the adequacy of training in the two types of schools as reflected by reported training needs are not necessarily warranted. For example, if a higher percentage of the graduates from one type of school attained supervisory positions, the need for additional training in some of the listed skill areas would be greater. That would not necessarily reflect poorly on the school. The point is made to show that an unequivocal conclusion could not be drawn even if sample size were not a problem.

TABLE 68. NEED FOR ADDITIONAL BASIC SKILL TRAINING: ANALYSIS BY TYPE OF SCHOOL IN TERMS OF NUMBER AND PERCENTAGE THAT REPORTED A NEED FOR MORE TRAINING IN EACH OF THE SKILL AREAS, BASED ON GRADUATES WHO ARE EMPLOYED IN THE SAME OR A HIGHLY RELATED OCCUPATION

Skill and Knowledge Areas For Which Graduates Reported Need For Additional Training		TYPE OF SCHOOL			
		Vocational		Comprehensive	
		N	%	N	%
Manual job skills	NY	61	59.8	32	64.0
	US	600	59.4	320	60.7
Practical job knowledge		59	63.4	30	68.2
		592	61.2	311	61.7
Theoretical job knowledge		55	59.8	25	53.2
		544	58.1	291	59.5
Mathematical skills		56	60.9	25	53.2
		609	63.4	331	65.9
Communication skills		53	57.6	18	40.0
		584	61.7	296	59.7
Reading and interpretive skills		63	68.5	24	52.2
		598	62.6	328	66.5
Clerical skills		41	61.4	22	51.2
		437	46.6	261	53.0
Personal relations skills		51	57.3	20	45.5
		538	57.5	296	59.8
Supervisory skills		59	67.0	25	55.6
		613	66.6	322	66.5

HOW DO NEW YORK VOCATIONAL GRADUATES RATE TEN SELECTED CHARACTERISTICS OF THEIR FORMER SCHOOLS? HOW DO THE NEW YORK SCHOOL RATINGS COMPARE WITH THE UNITED STATES SCHOOL RATINGS?

- FINDINGS: Table 69 provides the rating results. For each of the ten factors rated, the majority of graduates gave a rating of good or excellent. Clearly, most graduates look back on their former schools with favor. One never knows with this type of rating how such ratings are influenced by the rose-colored effect of years gone by.

  What is impressive about the data is the rating differences between factors. These differences point to problem areas. For example, 27.8 percent of New York graduates rated their schools "poor" in help given to students to find jobs, 24.1 percent rated their schools "poor" in vocational counseling, 21.1 percent rated their schools "poor" on the general physical condition of the school plant. Yet only 2 percent rated the quality of shop instruction as "poor"; only 2.9 percent rated the quality of academic instruction as "poor".

  A comparison of New York ratings with United States ratings indicates that New York cases offer the worse in (1) condition of shop facilities and equipment, (2) general physical condition of the school, (3) vocational counseling given to students, (4) help given to students to find jobs, (5) teacher interest in student problems, (6) school's reputation in community and (7) school strictness in maintaining discipline.

- COMMENT: School administrators everywhere lack the courage to develop and apply systematic tools for obtaining evaluative opinions from their graduates (and students). This is regrettable. One could learn much from those who are on the receiving end of the system. Properly approached, young people are eminently fair about making evaluation. Witness the results in Table 69.

TABLE 69. ATTITUDES TOWARD FORMER HIGH SCHOOL: ANALYSIS IN TERMS OF NUMBER AND PERCENTAGE FOR EACH FACTOR, BASED ON ALL VOCATIONAL GRADUATES

Factors of Former High Schools Rated By Graduates		RATING GIVEN TO ITEM							
		Poor		Satis-factory		Good		Excellent	
		N	%	N	%	N	%	N	%
Quality of instruction from shop instructors	NY	11	2.0	69	12.7	197	36.3	266	49.0
	US	160	3.1	604	11.5	1910	36.5	2559	48.9
Quality of instruction from academic teachers		16	2.9	100	18.4	304	56.0	123	22.7
		188	3.7	985	19.3	2749	53.8	1189	23.3
Condition of shop facilities and equipment		61	11.2	128	23.5	190	34.9	165	30.3
		379	7.3	987	18.9	2065	39.6	1784	34.2
General physical condition of school		114	21.1	121	22.4	181	33.5	124	23.0
		409	7.9	995	19.1	2302	44.2	1502	28.8
Vocational counseling given to students		130	24.1	146	27.1	180	33.4	83	15.4
		876	17.0	1270	24.6	1820	35.3	1195	23.2
Help given students to find jobs		144	27.8	120	23.2	133	25.7	121	23.4
		1124	22.7	1201	24.3	1385	28.0	1238	25.0
Opportunity for extra-curricular activities		49	9.1	123	22.8	214	39.6	154	28.5
		462	9.1	1207	23.7	2152	42.2	1277	25.0
Teacher's interest in student problems		65	12.1	152	28.3	219	40.7	102	19.0
		430	8.5	1317	26.1	2007	39.7	1296	25.7
School's reputation in the community		62	11.5	104	19.3	184	34.1	190	35.2
		286	5.6	763	15.0	1996	39.3	2035	40.1
School's strictness in maintaining discipline		54	9.9	125	23.0	241	44.4	123	22.7
		296	5.8	978	19.2	2334	45.7	1495	29.3

WHAT KINDS OF POST-HIGH SCHOOL EDUCATION DO NEW YORK VOCATIONAL GRADUATES REPORT AFTER TWO, SIX AND ELEVEN YEARS FROM GRADUATION? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH UNITED STATES DATA?

- FINDINGS: Table 70 provides the number and percentages of 1953, 1958 and 1962 graduates who reported attending, not necessarily completing, the sources of post-high school education indicated at the left of the table. Ranked in order of frequency of attendance by vocational graduates, we have:

New York	%	United States	%
Military specialist school	24.1	Military specialist school	21.7
Four year college	16.9	Four year college	11.3
Two year college	16.0	Correspondence course	9.6
Company course	10.2	Two year college	8.9
Correspondence course	10.2	Company course	8.2

The percentage of vocationals who attend college is understandably much smaller than the percentage of academics who attend college. Even so, the percentage of New York vocationals who attend college is greater than the United States vocationals. In all other categories, the New York and United States data is essentially the same.

Relatively few graduates continue with some type of private or public vocational school education. This may be a lack of opportunity rather than a lack of interest. One would have to study the communities involved. Also, the relatively high percentage that have attended a military specialist school raises the question of whether such training is related to past vocational training. The study has no data on this question.

- COMMENT: It is clear that there is no high percentage of attendance by vocationals in any post-high school education source. For the majority, high school is the last sustained formal education effort. (The percentages in Table 70 are not mutually exclusive.) A further study of why would be useful.

TABLE 70. KINDS OF POST-HIGH SCHOOL EDUCATION: ANALYSIS BY GRADUATION YEAR IN TERMS OF NUMBER AND PERCENTAGE IN EACH RESPONSE CATEGORY, BASED ON ALL VOCATIONAL COURSE GRADUATES THAT ATTENDED

Sources of Post-High School Education		YEAR OF GRADUATION							
		1953		1958		1962		Combined	
		N	%	N	%	N	%	N	%
Two-year college	NY	19	17.3	18	12.0	39	18.5	76	16.0
	US	117	10.1	145	8.7	211	8.5	474	8.9
Four-year college		18	16.2	29	20.9	33	15.2	80	16.9
		186	16.0	199	12.0	214	8.6	600	11.3
Post-college graduate school		3	2.4	2	1.2	-	-	6	1.1
		41	3.5	22	1.3	-	-	63	1.2
Private trade/technical school		13	11.2	9	5.7	8	3.3	30	5.8 ↘
		96	8.3	84	5.1	94	3.8	276	5.2
Public trade/technical school		9	7.5	10	6.3	16	6.8	35	6.8
		92	7.9	123	7.4	163	6.6	380	7.1
Business-commercial school		4	3.2	2	1.2	3	1.2	9	1.7
		44	3.8	40	2.4	40	1.6	124	2.3
Adult continuation school		6	4.9	13	8.4	11	4.6	30	5.8
		76	6.5	97	5.8	78	3.1	252	4.7
Military specialist school		35	7.2	44	35.5	28	12.6	107	24.1
		358	30.8	421	25.4	376	15.1	1157	21.7
Company course or school		25	24.0	18	12.0	7	2.9	51	10.2 ↘
		185	15.9	157	9.5	93	3.7	436	8.2
Correspondence courses		22	20.6	18	12.0	11	4.6	51	10.2 ↘
		171	14.7	185	11.2	156	6.3	512	9.6
Other than above		20	18.3	17	11.2	7	2.9	44	8.7
		133	11.4	140	8.4	127	5.1	402	7.5

↘ Consistent decrease ▼ N.Y. > U.S. by ≥5% ▲ U.S. > N.Y. by ≥5%

HOW DO NEW YORK VOCATIONAL AND ACADEMIC GRADUATES COMPARE IN TERMS OF KINDS OF POST-HIGH SCHOOL EDUCATION SOURCES ATTENDED? HOW DOES THE NEW YORK DATA ON THIS QUESTION COMPARE WITH THE UNITED STATES DATA?

- FINDINGS: Table 71 provides the number and percentage of New York and United States vocational and academic graduates who reported attending the listed sources of education. The New York academic graduates reported more, but not impressively more, college attendance. (The disparity between New York and United States academic graduate four year college attendance makes one question the representativeness of the New York academic sample.) New York academics also attend business-commercial schools and military-specialist schools more than do the vocationals. Vocationals, on the other hand, show greater attendance of company schools, greater use of correspondence courses and more adult continuation school attendance.

- COMMENT: The small sample of New York academic graduates represented in Table 71 (N=145) makes the comparison highly tentative at the best. A larger sample is needed before confidence can be placed in the comparative data. Unlike some of the other vocational-academic graduate comparisons, this comparison taps only a minority percentage of the total sample of each type of graduate, thereby reducing the effective sample size.

TABLE 71. KINDS OF POST-HIGH SCHOOL EDUCATION: ANALYSIS BY TYPE OF GRADUATE IN TERMS OF NUMBER AND PERCENTAGE IN EACH RESPONSE CATEGORY, BASED ON ALL GRADUATES THAT ATTENDED

Sources of Post-High School Education		TYPE OF GRADUATE			
		Vocational		Academic	
		N	%	N	%
Two-year college	NY	76	16.0 ▽	23	18.8
	US	474	8.9	282	15.8
Four-year college		80	16.9 ▽	25	20.8 △
		600	11.3	841	47.2
Post-college graduate school		6	1.1	5	3.6
		69	1.3	150	8.4
Private trade/technical school		30	5.8	10	7.4
		276	5.2	75	4.2
Public trade/technical school		35	6.8	7	5.1
		380	7.1	68	3.8
Business-commercial school		9	1.7	11	8.2
		124	2.3	69	3.9
Adult continuation school		30	5.8	3	2.1
		252	4.7	37	2.1
Military specialist school		107	24.1 ←	37	34.2 ▽
		1152	21.7	385	21.6
Company course or school		51	10.2 →	4	2.8
		436	8.2	109	6.1
Correspondence courses		51	10.2	8	5.8
		512	9.6	137	7.7
Other than above		44	8.7	9	6.6
		402	7.5	103	5.8

→ Vocational > Academic ≧5%
← Academic > Vocational ≧5%

▽ N.Y. > U.S. by ≧5%
△ U.S. > N.Y. by ≧5%

SECTION 8 APPENDIX

A CHAPTER SUMMARIES CONTINUED

B TABLES ORGANIZED BY TYPE OF ANALYSIS

C SAMPLE QUESTIONNAIRES

CHAPTER SUMMARIES (continued)

SECTION 3 SUMMARY

7. Comparability of equipment, methods and materials. Only 11 percent of the graduates who entered the fields for which trained felt there was a substantial difference between tools and equipment used on their first job and those used in school. Most learned to make-up the difference in less than two months. ❍In principle, the same finding was established with respect to work methods and materials.

8. Starting hourly earnings. The graduates of 1953, 1958 and 1962 received $1.36, 1.44 and 1.60 per hour respectively to start. ❍ Vocational school graduates have slightly higher starting rates than comprehensive school graduates. ❍Academic graduates have higher starting rates than vocational graduates. ❍ Those who enter the field for which trained have impressively lower starting rates than those who enter completely unrelated or only slightly related occupations.

9. Job satisfaction. Vocational graduates report a high degree of job satisfaction with their first full-time job. ❍ Academic graduates report significantly less job satisfaction than vocational graduates. ❍Those in the field for which trained report greater satisfaction than those in unrelated fields.

ANALYSIS BY YEAR OF GRADUATION

ANALYSIS BY TYPE OF SCHOOL

MISCELLANEOUS TABLES

VOCATIONAL EDUCATION IN UNITED STATES

An AMERICAN INSTITUTE FOR RESEARCH Survey

APPENDIX C

INSTRUCTIONS

Most items on this questionnaire require only a check mark (√) to give your answer. Please answer all items ACCURATELY. The information will be STRICTLY CONFIDENTIAL.

Please return the questionnaire in the postage-paid, pre-addressed envelope provided.

THANKS FOR YOUR HELP ON THIS IMPORTANT STUDY

1. Your Name _____ 2. Your High School's Name _____

3. Year Graduated from High School: Mo _____ Yr _____ 4. High School Course Studied _____

5. Below are ways students are influenced to select a vocational course. Mark those that influenced you to choose the course you took in high school. CIRCLE THE NUMBER OF THE MOST IMPORTANT INFLUENCE

- ☐ 1. Books and magazines
- ☐ 2. Parents
- ☐ 3. Brother or sister
- ☐ 4. Relative
- ☐ 5. Neighbor (adult)
- ☐ 6. Friend your age
- ☐ 7. Job opportunities
- ☐ 8. Part-time job
- ☐ 9. School teacher
- ☐ 10. School counselor
- ☐ 11. School principal
- ☐ 12. Course graduate
- ☐ 13. Other, specify below.

_____

_____

_____

6. Did your school offer the vocational course you really wanted to take?

- ☐ 1. Yes → If Yes, did you get to take it? →
  - ☐ 6-1.1 Yes, I took the course I wanted.
  - ☐ 6-1.2 No, I could not take the course I wanted
    → because _____
- ☐ 2. No → If No, what course did you want to take that was not offered? _____

How long after leaving high school did it take you to get your first full-time job? _____ months

8. How did you get your first full-time job after leaving high school? (Mark all that apply.)

- ☐ 1. By answering a want-ad
- ☐ 2. Private employment agency
- ☐ 3. State employment agency
- ☐ 4. Help of school teacher
- ☐ 5. Help of school counselor
- ☐ 6. Help of school principal
- ☐ 7. Help of school placement service
- ☐ 8. Help of friend or relative
- ☐ 9. Through school coop program
- ☐ 10. Other than above

If you never had a full-time job, mark here – ☐ SKIP TO ITEM 12

9. Was your first full-time job in the trade or field for which you were trained in high school?

If Yes: Indicate how well your vocational course prepared you for your first full-time job.

- ☐ 1. Exceptionally well-prepared; training covered all essentials required by first job
- ☐ 2. Well-prepared on the whole; but there were some important gaps in training
- ☐ 3. Poorly prepared; much that I needed to know was not covered in vocational course

If No: Mark reason below.

- ☐ 1. No job available in area of training
- ☐ 2. Learned new job by continuing school
- ☐ 3. Learned new job in military service
- ☐ 4. Decided I liked other work better
- ☐ 5. Not accepted as apprentice in trade
- ☐ 6. Other (specify) _____

10. How did the: (1) tools and equipment, (2) work methods, and (3) work materials used on your first full-time job compare with those used in your vocational shop courses? If a sub-item is not applicable, mark the box NA to the right. Otherwise, mark your answer.

TOOLS & EQUIPMENT ☐ NA	WORK METHODS ☐ NA	WORK MATERIALS ☐ NA
☐ 1. Identical or almost so	☐ 1. Identical or almost so	☐ 1. Identical or almost so
☐ 2. Little real difference	☐ 2. Little real difference	☐ 2. Little real difference
☐ 3. Very much different	☐ 3. Very much different	☐ 3. Very much different
If you marked 3 above (Very much different), did it take long to learn what was new?		
☐ 1. Only about a few weeks	☐ 1. Only about a few weeks	☐ 1. Only about a few weeks
☐ 2. Less than three months	☐ 2. Less than three months	☐ 2. Less than three months
☐ 3. About three-six months	☐ 3. About three-six months	☐ 3. About three-six months
☐ 4. About six months-a year	☐ 4. About six months-a year	☐ 4. About six months-a year
☐ 5. More than a year	☐ 5. More than a year	☐ 5. More than a year

11.

For each of the skill areas listed below, answer the four questions at the right. Indicate your answers by marking appropriate boxes.	1 How important is this skill for your present job?				2 How much of this skill was learned in high school?				3 Where did you learn the most about this skill?					4 Do you feel the need for more instruction or training in this area? (Mark either Yes or No)
	1 Of No Real Importance	2 Slightly Important	3 Considerably Important	4 Of Critical Importance	1 Almost Nothing	2 Some, But Not Much	3 Large Amount	4 Almost All	1 High School Coop Program	2 High School Shop or Class	3 Apprentice Program	4 On Regular Job	5 Elsewhere	
1 MANUAL JOB SKILLS. Refers to skill at using or operating tools, equipment, materials, machines, etc., in your work.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
2 JOB PRACTICAL KNOWLEDGE. Refers to practical everyday knowledge of work processes, methods, procedures, etc.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
3 JOB THEORETICAL KNOWLEDGE. Refers to knowledge of basic principles and concepts underlying the practical trade work.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
4 MATHEMATICAL SKILLS. Refers to ability to use arithmetic or higher mathematics to solve work problems.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
5 COMMUNICATION SKILLS. Refers to skill at speaking, writing, drafting, sketching, etc., to communicate ideas.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
6 READING AND INTERPRETIVE SKILLS. Refers to skill at reading printed matter, blueprints, tables, diagrams, etc.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
7 CLERICAL SKILLS. Refers to skill at keeping records, making out reports, and other types of routine paper work.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
8 PERSONAL RELATIONS SKILLS. Refers to skill at dealing with people, such as customers, co-workers, other trades, etc.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
9 SUPERVISORY SKILLS. Refers to skill at supervising others, e.g., instructing, directing, evaluating, planning, organizing, etc.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No
10 OTHER SKILLS. Add what you feel applies to your job and is not covered by the above. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1. Yes 2. No

12. Please give your frank opinion about the following items concerning your high school education. (Mark one answer for each item.)

	ON THE WHOLE: 1. Poor	2. Satisfactory	3. Good	4. Excellent
1. Quality of instruction from shop instructors	☐	☐	☐	☐
2. Quality of instruction from academic teachers	☐	☐	☐	☐
3. Condition of shop facilities and equipment	☐	☐	☐	☐
4. General physical condition of school	☐	☐	☐	☐
5. Vocational counseling given to students	☐	☐	☐	☐
6. Help given students to find jobs	☐	☐	☐	☐
7. Opportunity for extra-curricular activities	☐	☐	☐	☐
8. Interest shown by teachers in student problems	☐	☐	☐	☐
9. Reputation of the school in community	☐	☐	☐	☐
10. Strictness of school in maintaining discipline	☐	☐	☐	☐

13. Please mark all kinds of education obtained since leaving high school, and provide the information requested about each. Put an asterisk (*) behind those you are presently attending. If you have not had any additional education since high school, mark here → ☐
Estimate your average hours per week over the total period attended. →

Mark Here	Type of Education	Major Subject or Course(s)	Dates Attended (Give Month & Year)	Leave Blank	Avg. Hrs. Per Wk. in School	Leave Blank
☐ 0	Two-year or junior college		Fr: To:			
☐ 1	Four-year college/university		Fr: To:			
☐ 2	Post-college graduate school		Fr: To:			
☐ 3	Private trade/technical school		Fr: To:			
☐ 4	Public trade/technical school		Fr: To:			
☐ 5	Business-commercial school		Fr: To:			
☐ 6	Adult continuation school		Fr: To:			
☐ 7	Military specialist school		Fr: To:			
☐ 8	Company course or school		Fr: To:			
☐ 9	Correspondence courses		Fr: To:			
☐ 10	Other (specify)		Fr: To:			

14. JOB HISTOR[illegible]NCE HIGH SCHOOL. Start with your FIRST job after leaving high schoo[illegible]ist ALL full-time jobs. List ONLY part-time jobs held six months or m[illegible]except if your present job is a part-time job. List the jobs in the order that you held them, up to and including your PRESENT JOB. (If self-employed, give NET EARNINGS, not GROSS INCOME of your business.)

	1	2	3	4	5	6	7	8	9	10
EXAMPLE	Starting Date Mo. 7 Yr. 53 Leaving Date Mo. 10 Yr. 54	What type of work did you do? MACHINIST APPRENTICE	Did job require move to new city? 1. ☐ No 2. ☒ Yes How many miles? 20	Full Time 1. ☐ Yes 2. ☒ No If part-time, how many hours per week, on average? 15	Self Employed 1. ☐ Yes 2. ☒ No	Was the work related to vocational course you took? 1. ☒ Same trade studied. 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☒ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $ 1.25 per HR Earnings at Leaving Give $ per hr., wk., or mo. $ 1.50 per HR	Reason For Leaving Job NO WORK	Were you unemployed after leaving job? 1. ☒ Yes 2. ☐ No If Yes, how long? 5 MONTHS
1st JOB	Starting Date Mo.___ Yr.___ Leaving Date Mo.___ Yr.___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $___ per___ Earnings at Leaving Give $ per hr., wk., or mo. $___ per___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
2nd JOB	Starting Date Mo.___ Yr.___ Leaving Date Mo.___ Yr.___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very Dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $___ per___ Earnings at Leaving Give $ per hr., wk., or mo. $___ per___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
3rd JOB	Starting Date Mo.___ Yr.___ Leaving Date Mo.___ Yr.___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly reloted 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $___ per___ Earnings at Leoving Give $ per hr., wk., or mo. $___ per___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
4th JOB	Starting Date Mo.___ Yr.___ Leaving Date Mo.___ Yr.___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $___ per___ Earnings at Leaving Give $ per hr., wk., or mo. $___ per___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
5th JOB	Starting Date Mo.___ Yr.___ Leaving Date Mo.___ Yr.___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $___ per___ Earnings at Leaving Give $ per hr., wk., or mo. $___ per___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
6th JOB	Starting Date Mo.___ Yr.___ Leaving Date Mo.___ Yr.___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly unrelated 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $___ per___ Earnings at Leaving Give $ per hr., wk., or mo. $___ per___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?

ATTENTION: If you held more than six full and part-time jobs, please continue on the page enclosed. Be sure to include your present full-time and/or part-time job. Thank you.

15. YOUR PRESENT JOB. (Please give this additional information.)

1. Present Earnings? Give $ per hour, week, or month. $_____ per _____
2. Your Employer: _____
   Street Address: _____
   City-State: _____

16. Did you have any military service? ☐ 1. No ☐ 2. Yes ⟶ How many months?_____ Nature of work?_____

17. Were you unemployed for reason of health or hospitalization? ☐ 1. No ☐ 2. Yes ⟶ How many months? _____

Part of our study concerns the interests, activities, and associations of high school graduates. We hope you will not regard this information too personal to give us. All is confidential. Please weigh your answers carefully.

18. How frequently do you talk about the following topics when you get together socially with others?

	ALMOST NEVER 1	INFREQUENTLY 2	FREQUENTLY 3	ALMOST ALWAYS 4
1. Your work	☐	☐	☐	☐
2. Religion	☐	☐	☐	☐
3. Politics	☐	☐	☐	☐
4. Business conditions	☐	☐	☐	☐
5. World affairs	☐	☐	☐	☐
6. National affairs	☐	☐	☐	☐
7. State affairs	☐	☐	☐	☐
8. Community problems	☐	☐	☐	☐
9. Your hobbies	☐	☐	☐	☐
10. Sports and athletics	☐	☐	☐	☐
11. Music, art, literature, etc.	☐	☐	☐	☐
12. Government matters	☐	☐	☐	☐
13. Labor union matters	☐	☐	☐	☐
14. Your family	☐	☐	☐	☐
15. Other (specify) _____	☐	☐	☐	☐

19. How frequently do you engage in the following types of leisure-time activities?

	ALMOST NEVER 1	INFREQUENTLY 2	FREQUENTLY 3	ALMOST DAILY 4
1. Reading newspapers	☐	☐	☐	☐
2. Engaging in craft hobbies (model building, jewelry making, etc.)	☐	☐	☐	☐
3. Reading professional or trade books and periodicals	☐	☐	☐	☐
4. Attending athletic events as a spectator	☐	☐	☐	☐
5. Attending plays, concerts, ballets, etc.	☐	☐	☐	☐
6. Watching television programs	☐	☐	☐	☐
7. Gardening (raising flowers, fruit trees, vegetables, etc.)	☐	☐	☐	☐
8. Reading general magazines (LIFE, LOOK, READERS' DIGEST, etc.)	☐	☐	☐	☐
9. Working at home shop activities (woodworking, metalworking, etc.)	☐	☐	☐	☐
10. Attending educational courses for self-improvement	☐	☐	☐	☐
11. Engaging in team sports (softball, football, etc.)	☐	☐	☐	☐
12. Engaging in performing arts (acting, singing, instruments, etc.)	☐	☐	☐	☐
13. Visiting or entertaining friends	☐	☐	☐	☐
14. Reading non-fiction books (biography, history, travel, etc.)	☐	☐	☐	☐
15. Collecting stamps, coins, rocks, or other items	☐	☐	☐	☐
16. Attending educational lectures and discussion groups	☐	☐	☐	☐
17. Engaging in individual sports (swimming, hunting, fishing, etc.)	☐	☐	☐	☐
18. Listening to music at home for pleasure	☐	☐	☐	☐
19. Going to the movies	☐	☐	☐	☐
20. Other (please write in) _____	☐	☐	☐	☐

20. Below is a list of different type organizations and associations. Mark the space which best describes your membership status in each type of organization, association, or club.

	NOT A MEMBER 1	INACTIVE MEMBER 2	ACTIVE MEMBER 3	PRESENTLY AN OFFICER 4
1. A church or a religious organization	☐	☐	☐	☐
2. Political organization	☐	☐	☐	☐
3. Service organization (Rotary, Lions, Kiwanis, etc.)	☐	☐	☐	☐
4. Sports club or athletic organization	☐	☐	☐	☐
5. Labor union	☐	☐	☐	☐
6. Fraternal organization (Elks, Masons, K. of C., etc.)	☐	☐	☐	☐
7. Veterans' organization	☐	☐	☐	☐
8. Business or trade association	☐	☐	☐	☐
9. Music or other cultural association	☐	☐	☐	☐
10. Local civic association	☐	☐	☐	☐
11. Youth organization (Scouts, Y.M.C.A., etc.)	☐	☐	☐	☐
12. Professional association	☐	☐	☐	☐
13. Other (specify) _____	☐	☐	☐	☐

Marital Status
- ☐ 1. Single
- ☐ 2. Married
- ☐ 3. Other

22. Race
- ☐ 1. White
- ☐ 2. Negro
- ☐ 3. Other

23. Religion
- ☐ 1. Protestant
- ☐ 2. Catholic
- ☐ 3. Jewish
- ☐ 4. Other
- ☐ 5. None

24. Do you have any disability or health condition that limits your employability?
- ☐ 1. Yes
- ☐ 2. No

THANK YOU FOR YOUR TIME AND EFFORT

VOCATIONAL EDUCATION IN UNITED STATES

An AMERICAN INSTITUTE FOR RESEARCH Survey

(G)

INSTRUCTIONS

Most items on this questionnaire require only a check mark (√) to give your answer. Please answer all items ACCURATELY. The information will be STRICTLY CONFIDENTIAL.

Please return the questionnaire in the postage-paid, pre-addressed envelope provided.

THANKS FOR YOUR HELP ON THIS IMPORTANT STUDY

1. Your Name _____ 2. Your High School's Name _____

Your Address _____ City _____ State _____

3. Year Graduated from High School: Mo _____ Yr _____ 4. High School Course Studied _____

5. Below are ways students are influenced to select a high school course. Mark those that influenced you to choose the course you took in high school. CIRCLE THE NUMBER OF THE MOST IMPORTANT INFLUENCE.

- ☐ 1. Books and magazines
- ☐ 2. Parents
- ☐ 3. Brother or sister
- ☐ 4. Relative
- ☐ 5. Neighbor (adult)
- ☐ 6. Friend your age
- ☐ 7. Job opportunities
- ☐ 8. Part-time job
- ☐ 9. School teacher
- ☐ 10. School counselor
- ☐ 11. School principal
- ☐ 12. Course graduate
- ☐ 13. Other, specify below _____ _____ _____

6. Did your school offer the course of studies you really wanted to take?

- ☐ 1. Yes → If Yes, did you get to take it? → ☐ 6-1.1 Yes, I took the course I wanted.
- ☐ 2. No → If No, what course did you want to take that was not offered? _____
  - ☐ 6-1.2 No, I could not take the course I wanted
    - → because _____

7. What did you do after high school graduation?

- ☐ 1. Looked for a full-time job
- ☐ 2. Looked for a part-time job
- ☐ 3. Went to a college or university
- ☐ 4. Went to a public vocational-technical school
- ☐ 5. Went to a private trade-technical school
- ☐ 6. Went into military service
- ☐ 7. Other (please specify) _____

8. If you looked for a full-time job after graduating, did you find one?

- ☐ 1. Yes → If Yes, how many months did it take you to find the job? _____ months
  - → If Yes, what type of job was it? _____
  - → If Yes, how did you get the job?
    - ☐ 1. By answering a want-ad
    - ☐ 2. Private employment agency
    - ☐ 3. State employment agency
    - ☐ 4. Help of school teacher
    - ☐ 5. Help of school counselor
    - ☐ 6. Help of school principal
    - ☐ 7. Help of school placement service
    - ☐ 8. Help of friend or relative
    - ☐ 9. Through school coop program
    - ☐ 10. Other than above
- ☐ 2. No

9. What are you doing now? (Mark all that apply.)

- ☐ 1. Employed full-time
- ☐ 2. Employed part-time
- ☐ 3. Attending college
- ☐ 4. Attending public trade/technical school
- ☐ 5. Attending private trade/technical school
- ☐ 6. Attending business-commercial school
- ☐ 7. In military service
- ☐ 8. Unemployed
- ☐ 9. Other (please specify) _____

10. Do you think you would have done better if you had taken vocational or technical training in high school?

☐ 1. Yes ☐ 2. No ☐ 3. Don't know

1.

ANSWER ONLY IF YOU HAVE A FULL-TIME JOB For each of the skill areas listed below, answer the four questions at the right. Indicate your answers by marking appropriate boxes.	1 How important is this skill for your present job?				2 How much of this skill was learned in high school?				3 Where did you learn the most about this skill?					4 Do you feel the need for more instruction or training in this area? (Mark either Yes or No)
	1 Of No Real Importance	2 Slightly Important	3 Considerably Important	4 Of Critical Importance	1 Almost Nothing	2 Some, But Not Much	3 Large Amount	4 Almost All	1 High School Coop Program	2 High School Shop or Class	3 Apprentice Program	4 On Regular Job	5 Elsewhere	
1 MANUAL JOB SKILLS. Refers to skill at using or operating tools, equipment, materials, machines, etc., in your work.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
2 JOB PRACTICAL KNOWLEDGE. Refers to practical everyday knowledge of work processes, methods, procedures, etc.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
3 JOB THEORETICAL KNOWLEDGE. Refers to knowledge of basic principles and concepts underlying the practical trade work.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
4 MATHEMATICAL SKILLS. Refers to ability to use arithmetic or higher mathematics to solve work problems.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
5 COMMUNICATION SKILLS. Refers to skill at speaking, writing, drafting, sketching, etc., to communicate ideas.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
6 READING AND INTERPRETIVE SKILLS. Refers to skill at reading printed matter, blueprints, tables, diagrams, etc.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
7 CLERICAL SKILLS. Refers to skill at keeping records, making out reports, and other types of routine paper work.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
8 PERSONAL RELATIONS SKILLS. Refers to skill at dealing with people, such as customers, co-workers, other trades, etc.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
9 SUPERVISORY SKILLS. Refers to skill at supervising others, e.g., instructing, directing, evaluating, planning, organizing, etc.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No
10 OTHER SKILLS. Add what you feel applies to your job and is not covered by the above. _____ _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐ 1. Yes ☐ 2. No

12. Please give your frank opinion about the following items concerning your high school education. (Mark).

	ON THE WHOLE: 1. Poor	2. Satisfactory	3. Good	4. Excellent
1. Quality of school library facilities	☐	☐	☐	☐
2. Quality of instruction from academic teachers	☐	☐	☐	☐
3. Condition of shop furnishings and equipment	☐	☐	☐	☐
4. General physical condition of school	☐	☐	☐	☐
5. Guidance and counseling given to students	☐	☐	☐	☐
6. Help given students to find jobs	☐	☐	☐	☐
7. Opportunity for extra-curricular activities	☐	☐	☐	☐
8. Interest shown by teachers in student problems	☐	☐	☐	☐
9. Reputotion of the school in community	☐	☐	☐	☐
10. Strictness of school in maintaining discipline	☐	☐	☐	☐

13. Please mark all kinds of education obtained since leaving high school, and provide the information requested abaut each. Put an asterisk (*) behind those you are presently attending. If you have not had any additional education since high schaal, mark here ☐
Estimate your average hours per week over the total period attended.

Mark Here	Type of Education	Major Subject or Course(s)	Dates Attended (Give Month & Year)	Leave Blank	Avg. Hrs. Per Wk. in School	Leave Blank
☐ 0	Two-year or junior college		Fr: To:			
☐ 1	Four-year college/university		Fr: To:			
☐ 2	Post-college graduate school		Fr: To:			
☐ 3	Private trade/technical school		Fr: To:			
☐ 4	Public trade/technical school		Fr: To:			
☐ 5	Business-commercial school		Fr: To:			
☐ 6	Adult continuation school		Fr: To:			
☐ 7	Military specialist school		Fr: To:			
☐ 8	Company course or school		Fr: To:			
☐ 9	Correspondence courses		Fr: To:			
☐ 10	Other (specify)		Fr: To:			

14. JOB HISTORY SINCE HIGH SCHOOL. Start with your FIRST job after leaving high school. List ALL full-time jobs. List ONLY part-time jobs held six months or more. Include your PRESENT JOB. (If self-employed, give NET EARNINGS not GROSS INCOME of your business.)

	1	2	3	4	5	6	7	8	9	10
EXAMPLE	Starting Date Mo. 7 Yr. 53 Leaving Date Mo. 10 Yr. 54	What type of work did you do? MACHINIST APPRENTICE	Did job require move to new city? 1. ☐ No 2. ☒ Yes How many miles? 20	Full Time 1. ☐ Yes 2. ☒ No If part-time, how many hours per week, on average? 15	Self Employed 1. ☐ Yes 2. ☒ No	Was the work related to vocational course you took? 1. ☒ Some trade studied. 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☒ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $ 1.25 per HR Earnings at Leaving Give $ per hr., wk., or mo. $ 1.50 per HR	Reason For Leaving Job NO WORK	Were you unemployed after leaving job? 1. ☒ Yes 2. ☐ No If Yes, how long? 5 MONTHS
1st JOB	Starting Date Mo. ___ Yr. ___ Leaving Date Mo. ___ Yr. ___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Some trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $ ___ per ___ Earnings at Leaving Give $ per hr., wk., or mo. $ ___ per ___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
2nd JOB	Starting Date Mo. ___ Yr. ___ Leaving Date Mo. ___ Yr. ___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very Dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $ ___ per ___ Earnings at Leaving Give $ per hr., wk., or mo. $ ___ per ___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
3rd JOB	Starting Date Mo. ___ Yr. ___ Leaving Date Mo. ___ Yr. ___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Some trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $ ___ per ___ Earnings at Leaving Give $ per hr., wk., or mo. $ ___ per ___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
4th JOB	Starting Date Mo. ___ Yr. ___ Leaving Date Mo. ___ Yr. ___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $ ___ per ___ Earnings at Leaving Give $ per hr., wk., or mo. $ ___ per ___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
5th JOB	Starting Date Mo. ___ Yr. ___ Leaving Date Mo. ___ Yr. ___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average?	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $ ___ per ___ Earnings at Leaving Give $ per hr., wk., or mo. $ ___ per ___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?
6th JOB	Starting Date Mo. ___ Yr. ___ Leaving Date Mo. ___ Yr. ___	What type of work did you do?	Did job require move to new city? 1. ☐ No 2. ☐ Yes How many miles?	Full Time 1. ☐ Yes 2. ☐ No If part-time, how many hours per week, on average	Self Employed 1. ☐ Yes 2. ☐ No	Was the work related to vocational course you took? 1. ☐ Same trade studied 2. ☐ Highly related 3. ☐ Slightly related 4. ☐ Completely unrelated	On the whole, were you satisfied with the work? 1. ☐ Very satisfied 2. ☐ Satisfied 3. ☐ Dissatisfied 4. ☐ Very dissatisfied	Earnings at Starting Give $ per hr., wk., or mo. $ ___ per ___ Earnings at Leaving Give $ per hr., wk., or mo. $ ___ per ___	Reason For Leaving Job	Were you unemployed after leaving job? 1. ☐ Yes 2. ☐ No If Yes, how long?

ATTENTION: If you held more than six full and part-time jobs, please continue on the page enclosed. Be sure to include your present full-time and/or part-time job. Thank you.

15. YOUR PRESENT JOB. (Please give this additional information.)

1. Present Earnings? Give $ per hour, week, or month. $ _____ per _____
2. Your Employer: _____
   Street Address: _____
   City-State: _____

. Did you have any military service? ☐ 1. No ☐ 2. Yes ⟶ How many months? _____ Nature of work? _____

. Were you unemployed for reason of health or hospitalization? ☐ 1. No ☐ 2. Yes ⟶ How many months? _____

Part of our study concerns the interests, activities, and associations of high school graduates. We hope you will not regard this information too personal to give us. All is confidential. Please weigh your answers carefully.

How frequently do you talk about the following topics when you get together socially with others?

	ALMOST NEVER 1	INFREQUENTLY 2	FREQUENTLY 3	ALMOST ALWAYS 4
1. Your work	☐	☐	☐	☐
2. Religion	☐	☐	☐	☐
3. Politics	☐	☐	☐	☐
4. Business conditions	☐	☐	☐	☐
5. World affairs	☐	☐	☐	☐
6. National affairs	☐	☐	☐	☐
7. State affairs	☐	☐	☐	☐
8. Community problems	☐	☐	☐	☐
9. Your hobbies	☐	☐	☐	☐
10. Sports and athletics	☐	☐	☐	☐
11. Music, art, literature, etc.	☐	☐	☐	☐
12. Government matters	☐	☐	☐	☐
13. Labor union matters	☐	☐	☐	☐
14. Your family	☐	☐	☐	☐
15. Other (specify) _____	☐	☐	☐	☐

19. How frequently do you engage in the following types of leisure-time activities?

	ALMOST NEVER 1	INFREQUENTLY 2	FREQUENTLY 3	ALMOST DAILY 4
1. Reading newspapers	☐	☐	☐	☐
2. Engaging in craft hobbies (model building, jewelry making, etc.)	☐	☐	☐	☐
3. Reading professional or trade books and periodicals	☐	☐	☐	☐
4. Attending athletic events as a spectator	☐	☐	☐	☐
5. Attending plays, concerts, ballets, etc.	☐	☐	☐	☐
6. Watching television programs	☐	☐	☐	☐
7. Gardening (raising flowers, fruit trees, vegetables, etc.)	☐	☐	☐	☐
8. Reading general magazines (LIFE, LOOK, READERS' DIGEST, etc.)	☐	☐	☐	☐
9. Working at home shop activities (woodworking, metalworking, etc.)	☐	☐	☐	☐
10. Attending educational courses for self-improvement	☐	☐	☐	☐
11. Engaging in team sports (softball, football, etc.)	☐	☐	☐	☐
12. Engaging in performing arts (acting, singing, instruments, etc.)	☐	☐	☐	☐
13. Visiting or entertaining friends	☐	☐	☐	☐
14. Reading non-fiction books (biography, history, travel, etc.)	☐	☐	☐	☐
15. Collecting stamps, coins, rocks, or other items	☐	☐	☐	☐
16. Attending educational lectures and discussion groups	☐	☐	☐	☐
17. Engaging in individual sports (swimming, hunting, fishing, etc.)	☐	☐	☐	☐
18. Listening to music at home for pleasure	☐	☐	☐	☐
19. Going to the movies	☐	☐	☐	☐
20. Other (please write in) _____	☐	☐	☐	☐

20. Below is a list of different type organizations and associations. Mark the space which best describes your membership status in each type of organization, association, or club.

	NOT A MEMBER 1	INACTIVE MEMBER 2	ACTIVE MEMBER 3	PRESENTLY AN OFFICER 4
1. A church or a religious organization	☐	☐	☐	☐
2. Political organization	☐	☐	☐	☐
3. Service organization (Rotary, Lions, Kiwanis, etc.)	☐	☐	☐	☐
4. Sports club or athletic organization	☐	☐	☐	☐
5. Labor union	☐	☐	☐	☐
6. Fraternal organization (Elks, Masons, K. of C., etc.)	☐	☐	☐	☐
7. Veterans' organization	☐	☐	☐	☐
8. Business or trade association	☐	☐	☐	☐
9. Music or other cultural association	☐	☐	☐	☐
10. Local civic association	☐	☐	☐	☐
11. Youth organization (Scouts, Y.M.C.A., etc.)	☐	☐	☐	☐
12. Professional association	☐	☐	☐	☐
13. Other (specify) _____	☐	☐	☐	☐

Marital Status
- ☐ 1. Single
- ☐ 2. Married
- ☐ 3. Other

22. Race
- ☐ 1. White
- ☐ 2. Negro
- ☐ 3. Other

23. Religion
- ☐ 1. Protestant
- ☐ 2. Catholic
- ☐ 3. Jewish
- ☐ 4. Other
- ☐ 5. None

24. Do you have any disability or health condition that limits your employability?
☐ 1. Yes ☐ 2. No

THANK YOU FOR YOUR TIME AND EFFORT