DOCUMENT RESUME

ED 113 526 CE 005 051

TITLE Effectiveness of High School Job Training: Assessment of Class of 1972 One and One-Half Years After Graduation.

INSTITUTION National Center for Education Statistics (DHEW), Washington, D.C.

PUB DATE 29 Aug 75

NOTE 9p.

JOURNAL CIT National Center for Education Statistics Bulletin; n22, August 29, 1975

EDRS PRICE MF-$0.76 HC-$1.58 Plus Postage

DESCRIPTORS Career Education; Employment Experience; Employment Statistics; Graduate Surveys; *High School Graduates; Job Training; *Longitudinal Studies; National Surveys; Occupational Surveys; Program Attitudes; *Relevance (Education); Tables (Data); *Vocational Education; *Vocational Followup; Youth Employment

IDENTIFIERS National Longitudinal Survey Hi Sch Class 1972

ABSTRACT

The bulletin presents data taken in the fall of 1973 for the National Center for Educational Statistics' National Longitudinal Study of the High School Class of 1972. The study surveyed approximately 22,000 high school seniors in 1,200 schools in the spring of 1972. Sixty-two percent of vocational-technical, 24 percent of general education, and 12 percent of academic students indicated that they had received specialized training intended to prepare them for immediate employment upon graduation. Of those who had looked for work in areas where they could use their specialized training, about 80 percent of the vocational-technical and academic students and 77 percent of the general students found jobs. Approximately 87 percent of vocational-technical and 80 percent of academic and general students who worked in training related jobs expressed satisfaction with their training. Although a generally high rate of approval was found, especially among business and office occupations students, two aspects of specialized training were criticized fairly often. First, many persons, especially health and home economics students, did not find their high school training useful in their on-the-job training programs. Second, many persons, especially agricultural and trade and industrial students, would have liked more experience in their training area before starting to work. (Author/JR)

national center for education statistics

BULLETIN

Number 22

August 29, 1975

Advance Statistics for Management

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE/ Education Division

EFFECTIVENESS OF HIGH SCHOOL JOB TRAINING: ASSESSMENT OF CLASS OF 1972 ONE AND ONE-HALF YEARS AFTER GRADUATION

In response to educators' concern for the quality and usefulness of high school job training, NCES's National Longitudinal Study (NLS) obtained high school program data from a sample of seniors in spring 1972 and a subsequent evaluation of the immediate job relevance of their high school training in fall 1973, about 1½ years after high school graduation. The results are presented in this Bulletin. A brief background description of the NLS, a statement regarding sampling variability and footnotes pertaining to the relevant survey questions are given on pages 4-6.

DISTRIBUTION OF HIGH SCHOOL SENIORS BY PROGRAM OF STUDY

The percentages of class of 1972 seniors in the various high school programs, based on self-reported responses, are as follows:[1]

High school program	*Percentages*		
	All persons	*Males*	*Females*
Total	100	100	100
Academic or college preparatory (Aca)	47	50	44
General (Gen)	31	32	30
Vocational or technical (Votech)	22	18	26

More males than females were in both academic and general programs; however, 26 percent of the females but only 18 percent of the males were enrolled in vocational or technical programs.

A breakdown of Votech program seniors by specific area of study provides these results:

Votech area	*Percentages*		
	All persons	*Males*	*Females*
Total	[2]100	[2]100	100
Agricultural occupations (Agr)	6	13	2
Business or office occupations (Bus/Off)	52	16	75
Distributive education (D.Ed)	10	13	7
Health occupations (Hlth)	4	2	5
Home economics occupations (Home Ec)	4	1	7
Trade or industrial occupations (Trade/Ind)	25	56	4

- New data of unusual interest
- Special analyses of new developments
- Statistical highlights on educational issues

Over one-half (52 percent) of all Votech students took business or office occupations. This area accounts for the great majority of female Votech students (75 percent), whereas males were primarily in the trade or industrial occupations area (56 percent).

JOB TRAINING RECEIVED IN HIGH SCHOOL (See table 1.)

Sixty-two percent of those who had been in a vocational-technical program in high school indicated 1½ years after graduation that they had received specialized training in high school intended to prepare them for immediate employment upon graduation.[4] The corresponding figures for those who had taken general and academic programs, however, were only 24 and 12 percent, respectively. Among the vocational-technical program areas the percentages varied from a high of 72 percent for business or office occupations, the course of study taken by the majority of Votech students, to a low of 38 percent for distributive education.

Females indicated more frequently than males that they had received specialized training (17 and 8 percent in academic, 31 and 17 percent in general, and 71 and 48 percent in Votech programs). Among the Votech program areas the percentages varied for females from a high of 78 percent for business or office occupations to a low of 44 percent for home economics. For males the percentages ranged from a high of 59 percent for trade or industrial occupations to a low of 29 percent for distributive education.

Table 1.--Percentage of persons indicating they had received specialized training intended to prepare them for immediate employment upon graduation.

High school program	Percent of --		
	All persons	Males	Females
All programs	27	18	35
Academic	12	8	17
General	24	17	31
Vocational-technical	62	48	71
Agricultural	47	48	(3)
Business/office	72	33	78
Distributive	38	29	48
Health	47	(3)	55
Home economics	42	(3)	44
Trade/industrial	59	59	59

EMPLOYMENT IN JOBS WHERE EXPECTED TO USE THIS TRAINING (See tables 2 and A1.)

Of those who had received specialized training, 63 percent of the Votech students had worked in jobs where they expected to use this training.[5] The corresponding figures for those who had been in academic or general programs were 60 and 53 percent, respectively.

Perhaps a better indicator of ability to obtain jobs in areas of specialized training is given by excluding from the analysis persons who never looked for work in the area of their specialized training. When these persons are excluded, the resulting rates of success in obtaining jobs in areas of specialized high school training are about 80 percent for those who had taken Votech or academic programs and 77 percent for those who had taken general programs. Among the Votech areas, the business and office category had the highest success rate (81 percent); the home economics area, the lowest (62 percent).

Using the success rate as an indicator, females in a Votech program had an 80-percent success rate whereas males in a Votech program had a 76-percent success rate. In the category of business and office occupations females had an

83-percent success rate as opposed to the males' 69-percent success rate. The lowest success rate (60 percent for females) was in the home economics occupations area.

Table 2.--Percentage distribution of answers to question "Since leaving high school, have you worked in a job where you expected to use this training?"

Response	Percent in			
	All programs	Aca	Gen	Votech
1. Yes	59	60	53	63
2. No, but looked for work where I could use it	16	14	16	16
3. No, never looked for work where I could use it.	25	26	31	21
Success rate: line 1 divided by sum of lines 1 and 2	.79	.81	.77	.80

SATISFACTION WITH TRAINING OF THOSE WHO WORKED IN TRAINING-RELATED JOBS (See tables 3 and A2.)

Those persons who said they had worked in a job where they expected to use their specialized high school training were asked 12 questions related to satisfaction with this training.[6] Generally, a fairly high degree of satisfaction with the usefulness of this training was revealed. Those who had been in Votech high school programs tended to have slightly more favorable opinions about their training than those who had been in academic or general programs. For example, among the Votech students, 87 percent answered that they considered their training a wise choice, as opposed to about 80 percent of the academic and general students. Only 29 percent of the Votech students replied affirmatively that they could have gotten their job without their training, whereas the percentages were 34 and 37 for academic and general students, respectively.

The most favorable reactions to high school training generally were given by those persons who had classified themselves as having been in the curriculum taken by over one-half of the Votech students--business or office occupations.

Females indicated more favorable reactions than males for all but two of the statements, and in those two cases the percentages were identical. Females who had taken Votech programs responded more favorably than males to every statement.

The Votech area that saw the greatest degree of satisfaction among females was business and office occupations. Overall for males there was very little variation among Votech program areas in degree of training satisfaction.

Although a generally high rate of approval was found, two aspects of specialized high school training were criticized fairly often. First, many persons did *not* find their high school training useful in their on-the-job training programs. This was particularly so for those who had taken health or home economics programs. Second, many persons would have liked more experience in their training area before starting to work. This was especially true for those who had taken agricultural or trade or industrial programs.

Table 3.--Percentage of persons answering "Applies to me" to following statements:

Statement	Percent of all persons in —			
	All programs	Aca	Gen	Votech
A. Statements expressing satisfaction with training				
Consider myself doing as well as others with similar training	85	83	81	87
Been able to apply basic principles of training although some things are different	85	83	84	86
Consider training wise choice	84	81	80	87
Been able to apply almost everything learned in high school training	71	70	67	74
Found high school training useful in on-the-job training program(s)	59	54	57	63
B. Statements expressing dissatisfaction with training				
Took course work associated with training which was not helpful in performing job	18	18	19	18
Was trained with tools or equipment that are not used on job	19	13	20	21
Would have liked other types of experience or information included in training	23	20	24	23
Received training different from way it is done on job	31	28	33	31
Could have gotten job without training	32	34	37	29
Would have liked more information about what was expected in job-beyond skill training	32	31	31	32
Would have liked more experience in training before started working	40	45	43	37

BACKGROUND

These statistics are weighted estimates based on a preliminary investigation of data found on the first-level-of-edit tape. They are subject to modification in future levels of edit. The information is derived from answers to selected questions of the base-year and first-followup surveys for the National Longitudinal Study of the High School Class of 1972. The base-year survey (spring 1972), sponsored by the National Center for Education Statistics with support from elements of the Office of Education, used a stratified, two-stage national probability sample consisting of approximately 22,000 high school seniors in 1,200 schools during spring 1972. The first-followup survey was conducted in fall 1973, with a response rate of 93 percent. Persons were asked how well their plans were realized and what their education, training, and job intentions were then. As the study progresses, reports containing summaries and analyses will be released.

SAMPLING VARIABILITY

Since the statistics presented are based on a sample, they may vary somewhat from the figures that would have been obtained if a complete survey, or census, had been taken using the same forms, procedures, and instructions. The difference between a statistic estimated from a sample and its corresponding census value occurs due to chance. Sampling or chance variation is measured by the standard error. The chances are 2 out of 3 that an estimate from a sample will differ from the census value by less than one standard error. The standard error does not include the effects of any biases due to nonresponse, measurement error, processing error, or other systematic errors that would occur even in a complete survey. The standard error for an estimated percentage is a function of the sample design, the percentage itself, and the sample size.

In this survey, the standard error is very small (less than 0.5 percentage point) for percentages based on the total sample. Sampling variation is larger, however, for estimates that relate to a population subgroup (e.g., males) or are based on questions that only a subset of the sample is requested to answer (i.e., questions within skip patterns). The standard errors of the percentages given in tables 1, 2, and 3 for a key subgroup in this Bulletin—namely, all persons who took a vocational-technical program in high school—are estimated to be less than 1.0, 1.8, and 2.3 percentage points, respectively. Percentages for smaller subgroups (e.g., vocational-technical program persons broken down by sex or program area), of course, have higher standard errors while those for large subgroups (e.g., academic and general program persons) have smaller standard errors.

FOOTNOTES

[1] High School program was coded in response to the students' answers to the following question:
"Which of the following best describes your present school program?"
- General
- Academic or college preparatory
- Vocational or technical:
  - Agricultural occupations
  - Business or office occupations
  - Distributive education
  - Health occupations
  - Home economics occupations
  - Trade or industrial occupations

[2] Details do not add to total because of rounding.

[3] Estimates omitted because of small number of females in agricultural occupations area and small number of males in health and home economic occupation areas.

[4] Figures are based on answers to the following question:
"While you were in high school, did you receive any specialized training intended to prepare you for immediate employment upon leaving school?"
No — 1
Yes

[5] The following question was used to determine if training was used for employment purposes:
"Since leaving high school, have you worked in a job where you expected to use this training?"
No, never looked for work where I could use it.
No, but looked for work where I could use it.
Yes

[6] Satisfaction with job training was derived from responses to the following question (The possible answers were "applies to me" or "does not apply to me"):
"Which of the following apply to your experience while working in this area?"
I have been able to apply almost everything I learned in my high school training.
I have been able to apply the basic principles of my training, although some things are different.
I would have liked more experience in my training before I started working.
I received training different from the way it is done on the job.
I found my high school training useful in on-the-job training program(s).
I was trained with tools or equipment that are not used on my job.
I could have gotten my job without the training.
I took course work associated with my training which was not helpful in performing my job.
I would have liked more information about what was expected in the job beyond skills training.
I would have liked other types of experience or information to be included in my training.
I consider myself doing as well as others with similar training.
I consider the training a wise choice.

For further information, contact Gerald Malitz, telephone (202) 245-3366.

APPENDIX A

Table A1.--Percentage distribution of answers to question "Since leaving high school, have you worked in a job where you expected to use this training?

Response	Sex	All programs	Aca	Gen	Vo-tech	Votech areas					
						Agr	Bus/off	D.Ed	Hlth	Home Ec	Trade/Ind
1. Yes	All persons	59	60	53	63	56	70	52	63	36	52
	Male	52	50	53	53	59	47	59	(3)	(3)	52
	Female	63	65	53	67	(3)	71	48	62	35	55
2. No, but looked for work where I could use it.	All persons	16	14	16	16	15	16	21	17	22	17
	Male	15	14	13	17	12	21	17	(3)	(3)	17
	Female	16	14	18	16	(3)	15	24	17	23	19
3. No, never looked for work where I could use it.	All persons	25	26	31	21	29	14	27	20	42	31
	Male	33	36	34	30	29	32	25	(3)	(3)	31
	Female	20	21	29	16	(3)	13	28	21	43	26
Success rate: line 1 divided by sum of lines 1 and 2.	All persons	.79	81	.77	.80	.79	.81	.71	.79	62	.75
	Male	.78	.78	.80	.76	.83	.69	.78	(3)	(3)	.75
	Female	.80	.82	.75	.80	(3)	.83	.67	.78	.60	.74

Table A2.—Percentage of persons answering "Applies to me" to following statements:

Statement	Sex	All programs	Aca	Gen	Vo-tech	Votech areas					
						Agr	Bus/ofi	D.Ed	Hlth	Home Ec	Trade/Ind
A. Statements expressing satisfaction with training											
Consider myself doing as well as others with similar training	All persons	85	83	81	87	95	90	82	74	67	84
	Male	82	82	77	86	95	91	90	(3)	(3)	84
	Female	86	83	84	88	(3)	90	74	79	69	83
Been able to apply basic principles of training, although some things are different	All persons	85	83	84	86	81	89	73	83	79	82
	Male	85	86	86	83	87	83	79	(3)	(3)	83
	Female	85	82	83	88	(3)	89	68	85	82	73
Consider training wise choice	All persons	84	81	80	87	87	89	85	81	76	84
	Male	82	80	78	86	86	83	92	(3)	(3)	86
	Female	85	81	82	88	(3)	89	78	87	75	69
Been able to apply almost everything learned in high school training	All persons	71	70	67	74	61	76	68	68	68	71
	Male	66	69	61	68	59	67	67	(3)	(3)	71
	Female	73	71	70	76	(3)	76	70	73	67	71
Found high school training useful in on-the-job training program(s)	All persons	59	54	57	63	66	64	63	42	53	63
	Male	59	54	60	61	70	57	61	(3)	(3)	61
	Female	59	54	55	63	(3)	64	65	48	52	79
B. Statement expressing dissatisfaction with training											
Took course work associated with training which was not helpful in performing job	All persons	18	18	19	18	25	16	19	21	20	21
	Male	23	21	24	23	22	32	27	(3)	(3)	23
	Female	16	17	16	16	(3)	15	11	24	20	7
Was trained with tools or equipment that are not used on job	All persons	19	13	20	21	21	20	17	21	10	27
	Male	25	17	29	27	20	21	25	(3)	(3)	30
	Female	16	11	14	19	(3)	20	9	24	10	6
Would have liked other types of experience or information included in training	All persons	23	20	24	23	42	17	21	31	36	36
	Male	33	28	32	35	42	20	31	(3)	(3)	36
	Female	18	17	19	19	(3)	17	11	30	37	40
Received training different from way it is done on job	All persons	31	28	33	31	41	29	28	35	15	38
	Male	39	32	44	38	42	46	24	(3)	(3)	39
	Female	27	26	26	29	(3)	28	31	40	16	29
Could have gotten job without training	All persons	32	34	37	29	44	21	66	24	39	41
	Male	46	44	46	47	47	53	60	(3)	(3)	44
	Female	26	30	31	22	(3)	20	72	23	40	21
Would have liked more information about what was expected in job beyond skill training	All persons	32	31	31	32	34	30	27	40	23	39
	Male	37	35	35	39	31	44	32	(3)	(3)	40
	Female	29	30	29	29	(3)	29	22	36	24	31
Would have liked more experience in training before started working	All persons	40	45	43	37	46	33	31	41	35	47
	Male	49	51	49	47	44	36	41	(3)	(3)	50
	Female	36	42	39	33	(3)	33	22	37	36	29