AN ABSTRACT OF THE THESIS OF

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	(Major Profess	or)	

The purpose of this study of the graduates of San Jose Technical High School at San Jose, California, is to secure some of the facts concerning the employment of the graduates; to discover their reaction to this employment and to the training they received; and to obtain information that would be valuable in the guidance of future graduates. It is hoped that through studies of this type an improvement in school direction may be made.

A questionnaire was sent to as many of the graduates as could be located. The returns from these questionnaires were divided into four groups: (1) classification of returns; (2) type of employment of graduates; (3) personal employment factors; and (4) guidance factors.

The study shows that 64.7 percent of the graduates enter and remain in the occupation studied or in its related occupations. It shows further that 97 percent of the graduates are employed or are in school. It also shows that the school trains workers for home industries because 89.5 percent are employed within the county. This employment for the graduates is stable; that is, the shift from one job to another is very small. The median is 1.74 jobs for each graduate during an average length of time, since graduation, of 5.1 years.

Nearly all of the graduates are satisfied with the type of work they are doing, although 45.9 percent of those not employed in the occupation studied at San Jose Technical High School indicated that they would still like to secure employment in it. Of the remaining group that were not employed in the occupation studied, 45.9 percent have found some other occupation more to their liking and are

no longer interested in the occupation studied. The school helped 37.8 percent of the graduates to secure their first employment. The remainder secured their employment without the direct help of the school.

Only 25.9 percent of the graduates felt that their school teachers and subjects had directly influenced them in their choice of an occupation. The median grade level for the choice of an occupation was in the early part of the ninth grade. Some students transfered to the Technical High School after entering the regular Academic High School. Of the graduates who attended junior high school, 85.1 percent indicated that one or more of the junior high school industrial arts courses definitely helped them in the choice of an occupation.

The study shows that 84.2 percent of the graduates employed in the occupation studied would take the same course if they were to start again in school; 72.7 percent of those employed in related occupations would take the same course; while only 47.9 percent of those employed in unrelated occupations would take the same course. Of the 24.9 percent of the graduates that would take a different course, 52 percent would take another vocational course. Only 25 percent would take an academic course. Only 31.9 percent of the graduates decided to continue their education. Of these, 14.9 percent entered college.

A FOLLOW-UP STUDY OF THE GRADUATES OF SAN JOSE TECHNICAL HIGH SCHOOL

by

CARROLL WINDSOR DE SELLE

A THESIS submitted to the OREGON STATE COLLEGE

in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE
July 1940

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ACKNOWLEDGEMENT

The writer wishes to express his sincere appreciation to Mr. C. K. Lush, Guest Professor of Industrial Arts, for his guidance and very helpful criticism; to Professor George B. Cox, Head of the Industrial Education Department of Oregon State College, for contributing many helpful suggestions; to Mr. A. R. Nichols, Principal of the San Jose Technical High School, and to the San Jose School Department for making this study possible. To all who helped with this study, the writer is duly grateful.

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A FOLLOW-UP STUDY OF THE GRADUATES

OF

SAN JOSE TECHNICAL HIGH SCHOOL

INTRODUCTION

Location of the Problem

San Jose Technical High School is located on the corner of Seventh and San Fernando Streets in San Jose, California. San Jose has a population of about 75,000 if the outlying districts are included and is located in the heart of Santa Clara Valley.

A large part of the population is dependent, in one way or another, on the fruit growing and processing for a living.

The name San Jose Technical High School is misleading. It is not a technical school but a vocational school, coming under the specifications of the Smith-Hughes Law. It gives specific occupational training, a training that will enable a person to enter, follow, or advance in a definite vocation.

The following courses are or have been given during the time this study covers, from 1923 to 1939:

- 1. Auto Mechanics
- 3. Electricity
- 5. Mill Cabinet
- 7. Patternmaking

- 2. Carpentry
- 4. Machine Shop
- 6. Painting
- 8. Plumbing

9. Printing

10. Sheet Metal

11. Welding

12. General Shop

Objectives of San Jose Technical High School

Following are the objectives of trade and industrial education in the San Jose Technical High School, as listed by Nichols.

The trades and industries courses of the San Jose High School have set up the following as worthwhile objectives for this department:

- To train the boys for productive employment in the skilled trades on the various levels
- 2. To offer opportunity for boys in San Jose to receive training in the skilled trades
- 3. To develop boys to become independent workers in the skilled trades
- 4. To instill into the boys' minds habits of good citizenship
- 5. To attempt through the cooperative program to satisfy the demand for skilled workers in the community
- 6. To attempt to place graduates in the trades for which they are trained
- 7. To educate the community to the meaning and value of trade and industrial training

When these objectives are set up, we feel that reasons should be given for these objectives. Therefore, the reasons are given in the order in which the objectives were given.

Nichols, A. R., An Industrial Survey of Certain Trades,
San Jose School Department, p. 5-6

- a. The school is partially supported from Federal funds appropriated through provisions of the Smith-Hughes Vocational Act, so in order to draw this money, boys must be trained for productive employment in the skilled trades.
 - b. In order to justify this department to take the place of the ordinary manual training department it must offer more than the manual training department would so it must make specific training as its objective.
- 2. In every community there are many boys who do not profit by the work given in the regular academic department courses, but who have definitely selected some trade which they wish to follow. This department gives them the opportunity to become more or less proficient in the particular line of work they have selected.
- 3. In all trades, the valuable employee is the one who can think for himself, and does not have to be watched by the employer. The employee who can take a problem and work it out by himself without too much supervision is the one who holds his job. For that reason, boys should be taught to become independent workers.
- 4. Many men may be well skilled in their trade, but if they do not have the basic foundation of good citizenship, honesty, and willingness to be fair in their dealings, they are not sought after by employers, so it is felt that standards of citizenship should be set up to which these boys should be led to understand and to apply in their work.
- 5. In every city of any size there is always a demand for more or less skilled workers. The department does not pretend to turn out skilled mechanics, but it does aim to turn out boys with a start towards apprentice—ship, and as long as there is a demand for boys in these trades the school should attempt to satisfy that demand by turning out the best boys possible.

- 6. Since no vocational school has a right to exist which does not place its trainees when they are prepared for placement, this institution has a definite responsibility in this regard and is making every attempt to place every boy who has made good in his chosen work.
- People in every community are still talking of trade and industrial work as being a form of manual training. Valuable as manual training is in its field, there is quite a distinct difference between manual training and vocational work. Manual training is a form of general education which every boy should have some time during his adolescent period because it gives him fundamental training which is valuable to anyone whether they go into a trade or into the professions. On the other hand. trade and industrial work is training for specific employment. It is taken for granted that a boy has decided definitely that he wants to be a machinist, sheet metal worker, plumber, printer, etc. He has come to the school with the definite idea that he is making this his life work and takes it with entirely a different objective from the other boy. It is that difference that should be understood by the community so they will understand and support vocational education.

The problem of placing the graduates is stated as one of the objectives of the San Jose Technical High School. Other studies have shown this to be one of the important and difficult problems of any school. In addition to placing the graduates, it is important that they be able to hold and to advance in the position. This

is pointed out by Reed2.

Young people need orientation to the problems of securing a job, to employer-employee relationships, and to many other occupational problems which American workers are facing.

There has never been any effort made to follow-up more than a few of the graduates of San Jose Technical High School since its beginning in 1917. The effective-ness of its training has been taken for granted, and it was assumed that when the boys graduated they secured jobs in the occupations they studied. Howard throws more light on this neglect to follow-up pupils from terminal courses or vocational schools.

School administrators have been particularly lax in the follow-up of graduates. No other "big business" would think of putting a product on the market without an extensive servicing program designed to extend over a period of several years. It is through this servicing program that opportunities for replacement become evident. It is by means of research that new products can be made more effective.

Reed, Carroll R., "Following Through in Minneapolis,"
Occupations, Vol. 16:321-5, January 1938

Howard, William L., "What Becomes of High School
Graduates," American School Board Journal, Vol. 95:54,
December 1937

The study made in Philadelphia by Pavan⁴ further emphasizes the need for and value of follow-up studies.

The vocational training offered by the public schools should reflect the needs and resources of the community, and only by continuous study of these needs and resources can educators determine what this training should be. Likewise by a continuous study of the graduates of the different vocational courses we can determine with what degree of success graduates are able to secure positions where they can utilize their training, and can calculate with some approximation the absorptive power of particular groups of occupations.

PURPOSES OF THE STUDY

The purposes of this study are to try to determine the value of the training given at the San Jose Technical High School; to determine whether the graduates enter into and remain in the occupations they have trained themselves for; to try to find out how the graduates secured their first positions and if they are employed in San Jose or vicinity; and to see if the Junior High School Industrial Arts courses assist the students in the choice of occupations and when this choice is made.

⁴Pavan, Ann, "Follow-up Studies of Philadelphia Public School Graduates," Occupations, Vol. 16:252-9,
December 1937

METHOD OF CONDUCTING STUDY

Mr. A. R. Nichols, Principal of San Jose Technical High School, made all of the records in his office
relative to the study available to the writer. From the
various registration and class records the names and
addresses of as many of the graduates as was possible
were secured.

There were 485 graduates from San Jose Technical High School during the period from 1923 to 1939. With this number of graduates and the ease with which workers can move from one center to another to secure employment, the most suitable method of conducting this study seemed to be the questionnaire, supplimented whenever possible by personal interview.

This method probably limits the value of the results of this study; however these limitations will be taken into consideration, whenever possible, in the treatment of the data as it is compiled.

Of the 465 graduates, 430 were mailed letters of transmittal accompanied by the questionnaire or were personally interviewed. (A copy of the letter of transmittal and of the questionnaire are included in the appendix.)

The remaining 35 include those deceased (6) and those whose addresses could not be located (29). Out of the 430,

the writer received 201 usable replies, or 46.7 percent, and 22 letters were returned unclaimed.

VALIDITY OF THIS STUDY

Only a limited reply may be expected in a study of this type, which is further limited by the comparatively small number of graduates in the period covered. The extreme mobility of the American people and the fact that this study covers the period of the depression and recession may account for the limited reply. It also may be possible that those not replying were not working in the occupation studied and were ashamed to admit it.

LIMITATIONS

This study is limited to the graduates of San Jose Technical High School from the years 1923 to 1939 inclusive. During this time there was a total of 465 graduates. Further limitation in number of graduates studied is evidenced by the fact that only 46.7 percent responded to the inquiry.

TREATMENT OF DATA

Response to Questionnaire

The total number of graduates from each shop is shown in the following table.

TABLE I

Graduates From Each Course
(1923 to 1939)

	23	1 24	25	1 26	127	128	1 29	1 30	131
Printing	0	0	3	ı	1	2	7	5	5
Machine Shop	2	5	0	4	3	7	3	1	6
Auto Mechanics	1	3	4	10	3	4	5	11	1
Electricity	0	0	0	0	0	0	0	0	0
Mill Cabinet	0	3	3	1	1	3	2	3	5
Sheet Metal	0	0	1	ı	3	1	5	3	3
Plumbing	0	ı	0	0	0	0	0	1	0
Welding	0	0	0	0	0	ı	0	0	2
Painting	0	0	0	0	0	0	0	0	0
Patternmaking	1	0	0	0	0	3	1	0	0
Carpentry	0	0	0	0	0	0	0	0	0
No Course List- ed in Records	0	2	2	1	0	0	1	3	3
Totals	4	14	13	18	10	21	24	27	25
							10		- 31

(Continued)

TABLE I (Cont.)

Graduates From Each Course
(1923 to 1939)

	132	133	134	1 35	1 36	137	138	1 39	Total
Printing	8	1	8	6	5	6	8	11	71
Machine Shop	1	3	2	8	7	2	9	4	66
Auto Mechanics	3 4	6	8	15	10	6	8	11	110
Electricity	10	2	5	6	7	7	4	4	45
Mill Cabinet	3	4	7	4	4	7	3	4	56
Sheet Metal	4	5	5	3	2	7	4	4	51
Plumbing	2	1	0	4	3	1	ı	6	20
Welding	ı	0	0	0	0	0	0	1	5
Painting	0	0	1	4	0	3	1	0	9
Patternmaking	0	0	0	0	0	0	0	0	5
Carpentry	0	0	0	0	0	0	0	13	13
No Course List ed in Records	- 0	0	0	0	0	0	0	2	14
Totals	26	22	36	50	38	39	38	60	465

It is apparent from the foregoing table that when there is demand in the community for workers in a particular occupation, a shop course in that particular line is added and others no longer demanded, dropped. The last student to be graduated from the patternmaking course was in 1929, while from the newly added carpentry course the first students were graduated in 1939.

Figure 1

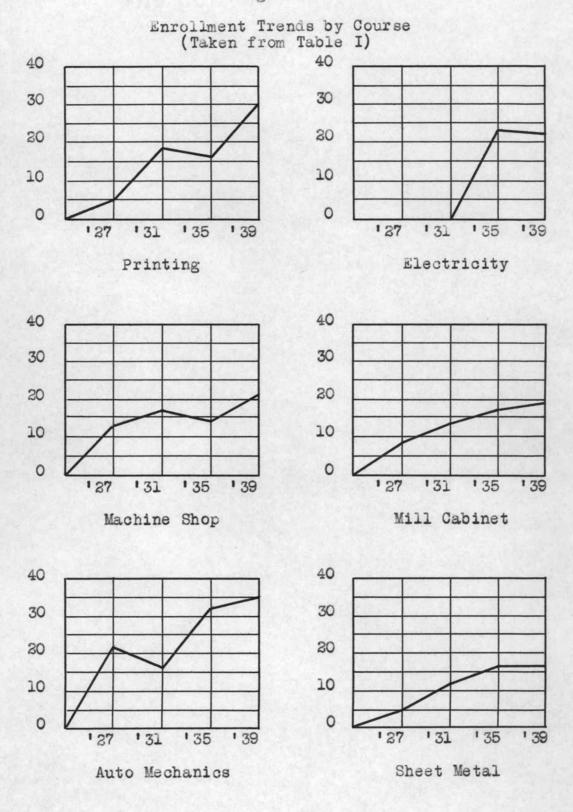
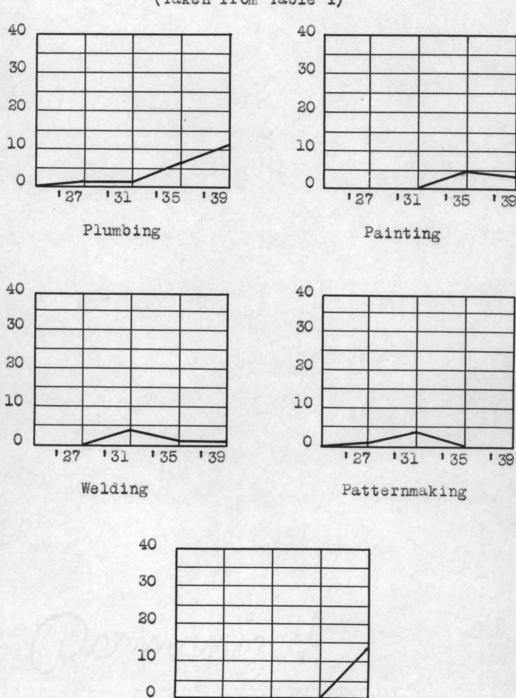


Figure 1 (Cont.)

Enrollment Trends by Course (Taken from Table I)



Carpentry

1 35

1 39

131

127

Figure 1 shows that there has been a steady increase in enrollment in all of the courses at San Jose Technical High School. Machine shop and printing show a decline in the period from 1931 to 1935. Auto mechanics showed a decline in the period from 1927 to 1931. All courses, except those discontinued, increased in enrollment from that time until 1939. The average number of graduates per year during the last six years was 43.5 pupils while during the previous six year period the average was 24.1 pupils, an increase of 80.5 percent.

Table II shows the total response of the graduates from each course and the number following the occupation studied, related occupations, and unrelated occupations. Whether an occupation was related or not had to be set arbitrarily. The writer considered any occupation involving some of the same skills, knowledges, or techniques commonly used in the occupation studied by the student to be a related occupation. The unrelated occupations were considered to include those that involve none, or very few, of the special skills, knowledges, or techniques acquired by the student at San Jose Technical High School.

Returns Classified as to Course, Occupation Studied, Related Occupation,

Unrelated Occupation, and Unemployed or in School

TABLE II

Number Number Number Number Following Following Following in School To-Occupation Related Unrelated or tal Studied Occupation Occupation Unemployed Machine Shop Auto Mechanics Mill Cabinet Sheet Metal Plumbing Welding Electricity Painting Patternmaking Carpentry Printing No Course Listed in Records

Total

Figure 2

Relationship Between Employment and Course Studied (Taken from Table II)

			3	3.1%	6.2%
Machine Shop		50%		40	.7%
	Base:	32 Gr	aduates*		
Auto Mechanics		38.6%	//22	.8%	38.6%
	Base:	44			
Mill Cabinet		39.3%	11.8%		42.9%
	Base:	28		4.8	% 4.8%
Sheet Metal		6	36.7%		24.7%
	Base:	21			
Plumbing			75%	1	12.5% 12.5%
	Base:	8			
Welding		50%	9	50)%
	Base:	2			5%
Electricity		659	%	/30	%// 10%
	Base:	20			
Painting		50%		50	0%
	Base:	2	//////	,,,,,,,	777777
Patternmaking			1,00	096/////	
	Base:	1			
Carpentry			80%		20%
	Base:	5		Long	8.3%
Printing		68	9.5%		22.2%
	Base:	36			
Occup	ation St	udied	1///	Related	Occupation
WYKA Unrel	ated Occ	upation	n	Unemploy	red
*Read: Of the 3 or 50 per studied.	2 gradua rcent, w	tes from	om machin	ne shop co	ourse 16, cupation

Figure 2 shows auto mechanics with 22.8 percent and electricity with 20 percent placement of the graduates in related occupations, probably because of the greater number of occupations related to these two courses than to the remaining courses. Patternmaking, painting and welding do not have enough cases to show their employment trends.

The following table summarizes the data taken from table II.

TABLE III

Number Working in Occupation Studied,
Related Occupation,
Unrelated Occupation, and Unemployed

	Number	Percent	_
Working in an occupation studied	108	53.8	
Working in a related occupation	22	10.9	
Working in an unrelated occupation	61	30.3	
Unemployed or in school	10	5	
	201	100	

The above table shows that 64.7 percent of the graduates are employed in the occupation studied, or in a related occupation, and thus are making use of the training they received. The remaining 35.3 percent employed in an unrelated occupation, or unemployed had, at the time

Figure 3

Relationship Between Occupation Studied and Related and Unrelated Occupations Entered (Taken from Table III)

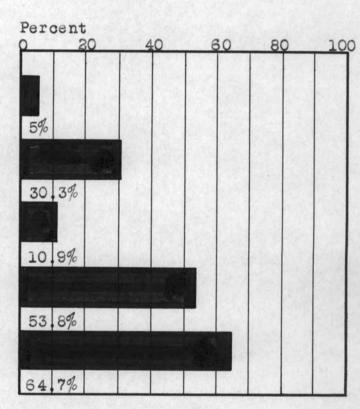
Unemployed and in school

Unrelated occupation

Related occupation

Occupation studied

Total placement



Base: 201 Graduates

of this study, made no vocational use of the occupational training they received. Thus the school had a placement of 64.7 percent.

Tables I and II combined show the total number of graduates from each course and the total return from each.

TABLE IV

Returns of the Questionnaire (By Courses)

Total G	raduates	Returns	Percent
Machine Shop	66	32	48.5
Printing	71	36	50.7
Auto Mechanics	110	44	40
Mill Cabinet	56	28	50
Sheet Metal	51	21	41.2
Plumbing	20	8	40
Welding	5	2	40
Electricity	45	20	44.4
Painting	9	8	22.2
Patternmaking	5	1	20
Carpentry	13	5	38.5
No Course Listed in Record	s 14	2	14.2
Totals	465	201	

The printing course had the best percentage of returns, 50.7 percent, although the auto mechanics returned 44 questionnaires for the largest total.

The following table gives the number of graduates and the response to the questionnaire by years.

TABLE V

Return of Questionnaire
(By Years)

	Graduates pe	r year	Replies	Percent
1923		4	8	50
1924		14	6	42.8
1925		13	5	38.4
19 26		18	3	16.7
1927		10	3	30
1928		21	9	42.9
1929		24	10	41.7
1930		27	13	48.1
1931		25	5	20
1932		26	5	19.2
1933		22	12	54.5
1934		36	12	33.3
1935		50	20	40
1936		38	17	44.6
1937		39	26	64.1
1938		38	27	71.1
1939		60	26	43.3

The year 1938, with 38 graduates and a response of 27, or 71.1 percent, to the questionnaire was the best return. The year 1926, with 18 graduates and 3 responses, or 19.2 percent, was the lowest.

Employment of San Jose Technical High School Graduates

Employment of San Jose Technical High School Graduates at the time of this study is shown in table VI and figure 4, which classifies the graduates according to course and as to whether they are employed or not. This includes all of the graduates studied regardless of what type of work they are doing.

Figure 4 shows carpentry and painting at a disadvantage. As these are new courses, and there have been few graduates, their response to the questionnaire was so limited that the comparison is hardly a fair one.

TABLE VI
Employment of Graduates
(By Course)

	Employed	Unemployed	Total	
Machine Shop	30	2	32	
Printing	33	3	36	
Auto Mechanics	44	0	44	
Mill Cabinet	28	0	28	
Sheet Metal	20	1	21	
Plumbing	7	. 1	8	
Welding	2	0	2	
Painting	1	1	2	
Patternmaking	1	0	1	
Carpentry	4	1	5	
Electricity	19	1	20	
Not Listed in Records	3	0	2	
Totals	191	10	201	

Figure 4

Total Employment of Graduates
Percent by Courses
(Taken from Table VI)

	0		25		50	75	100
Machine Shop						93.8%	6.27.
		Base:	32*	Mantesas			
Printing						91.7%	8.3%
		Base:	36				WE KIND
Auto Mechanics					1	100%	
		Base:	44				N. C. B. C. C.
Mill Cabinet						100%	
		Base:	28				4.8%
Sheet Metal						95.2%	ME W
		Base:	21				
Plumbing						87.5%	12.5%
		Base:	8				
Welding						100%	
		Base:	2			2,31	
Painting				50%			50%
	10	Base:	2	12/9/10/19			
Patternmaking						100%	
		Base:	1			0.632	
Carpentry		AFE			ASS	80%	20%
		Base:	5				
Electricity						95%	5%
		Base:	20		1		

*Read: Of 32 graduates from machine shop 30, or 93.8 percent, are employed in some occupation

TABLE VII

Number Employed and Unemployed

	Number	Percent	
Number employed	191	95	
Number unemployed	10	5	
	201	100	

Of the 10 unemployed, 2 were not working because of illness, 4 were in school, and the remaining 4 gave no reason for being unemployed. If the 4 graduates in school were considered as not desiring employment, then the percent employed would be 97 percent rather than 95 as shown above.

Figure 6 shows where the graduates have found employment. Of the 191 working, only 20, or 10.5 percent have left Santa Clara County to secure employment.

TABLE VIII

Location of Employment of Graduates

	Yes	Percent	No	Percent
Work in San Jose	148	76	48	24
Work in Santa Clara County	171	89.5	20	10.5

Only one of the 20 not employed in Santa Clara County is employed out of the State. The rest are scattered throughout the State. San Francisco attracted 8,

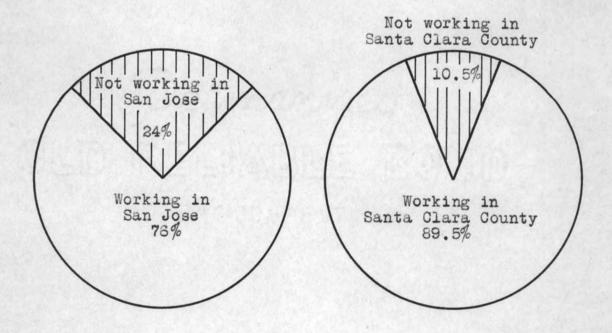
Figure 5

Proportion of Graduates Employed (Taken from Table VII)

Percent employed 95% 5%
Base: 201 Graduates

Figure 6

Location of Employment (Taken from Table VIII)



the largest group in any city outside the county.

The relative stability of the employment of the graduates is shown in Table IX. It shows the number of jobs that have been held by each graduate. The median is 1.74 jobs per graduate.

TABLE IX

Number of Jobs Held by Graduates

Jobs		ber of		
One		62	30.8	
Two		51	25.4	
Three		39	19.4	
Four		31	15.4	
Five		7	3.5	
Six or more		5	2.5	
Number that have not been employed		6	3	
Totals	2	801	100	

Personal Employment Factors

Table X gives the graduate's reaction to the work he was doing at the time of this study.

TABLE X
Graduate's Liking for His Work

			Yes	Percent	No	Percent
Type o	f work	satisfactory	192	95.5	9	4.5

All graduates answering "no" on this question are not working in the occupation studied at San Jose Technical High School. Six of these indicate that they desire to secure employment in the occupation for which they studied. Table X would indicate that the graduates were able to adapt themselves to the type of work they were able to secure. Many of them prefer to continue along in some occupation other than the one studied.

Table XI shows that 45.9 percent of those not employed in the occupation studied indicated that they are still interested in it, while 45.9 percent have entered some other field of work and have found it more to their liking. The other 8.2 percent did not answer this question.

TABLE XI

Interest in the Occupation Studied by those in Related and Unrelated Occupations

	till nterested	Not Interested	No Answer
Employed in related occupation	7	5	10
Employed in unrelated occupation and unemploy	ed 32	34	5
Total	39	39	15

Those employed in the occupation for which they studied at San Jose Technical High School were disregarded in the above table.

The school has no special placement agency, but during the period from 1923 to 1939 it was able to place 37.8 percent of the graduates in jobs of one sort or another. These students are placed for the most part through the efforts of the various instructors in the individual courses, and through the cooperation of people in the local industries. Some of the common methods of securing employment are given in Table XII.

TABLE XII

Method of Securing Employment

	Number	Percent	
Employment agency	1	.5	
Through a relative	13	6.5	
Through a friend	24	11.9	
Through parent	18	9	
Through the school	76	37.8	
No help	44	21.8	
Newspaper ad	2	1	
Other method	18	9	
No answer	5	2.5	
Total	201	100	

There were 62.2 percent of the graduates that had no direct help from the school in securing their first employment. Out of these, 21.8 percent secured their employment without help. The remaining 40.4 percent had help in some form.

Figure 7
Methods of Securing Employment (Taken from Table XII)

Through a relative *****

Through a friend ******

Through parent *****

Through the school *************

No help *********

Newspaper ad *

Other method *****

No answer **

Each asterisk (*) represents 3 cases or the fraction of 3

Guidance Factor

The writer realizes that the question of what or who influenced the student's choice of occupation is very subjective. The results should be of value in the guidance of individual students. A good example of unwise guidance is the statement on one of the returned questionnaires.

The following table shows what influences some of the students in their choice of occupation.

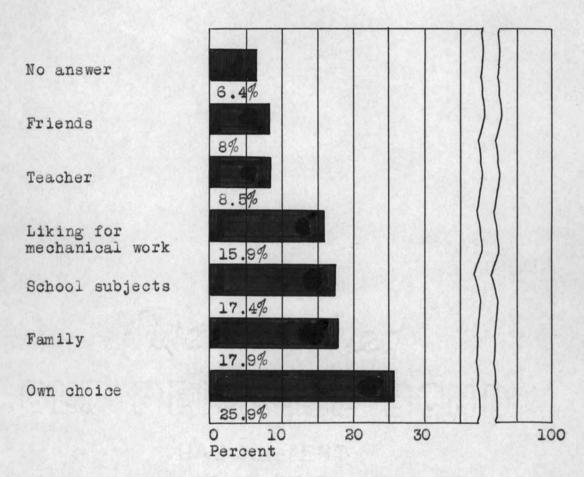
TABLE XIII

Influence on Graduate's Choice of Occupation

	Number	Percent
Family	36	17.9
Friends	16	8
School subjects	35	17.4
Teacher	17	8.5
Own choice	52	25.9
Liking for Mechanical work	32	15.9
No answer	13	6.4
Total	201	100

Figure 8

Influence on Choice of Occupation (Taken from Table XIII)



Base: 201 Graduates

One boy stated that his hobby had influenced his choice of occupation, while others filled in such state-ments as, "myself", "no influence", "in my own mind", "liked the work", etc.

There were 11.4 percent of the graduates who chose their occupation when they entered San Jose Technical High School. Any of those having difficulty in making their choice were placed in the general shop.

A statement on this point by one of the graduates cannot be overlooked.

I believe that the technical course is a very good one, but students should not be permitted to take these courses under the age of eighteen years. Students under that age are not capable of applying themselves to a degree where they will fully benefit from this training - and often graduate with a very meager knowledge of the work they have chosen, thereby making it necessary for them to start at the bottom in some shop or plant, which defeats the real purpose of the school.

The table below is designed to show the grade level of the student when the choice of occupation was made. It may be seen that the median level for the choice was made during the early part of the ninth grade.

TABLE XIV

Grade Level of Graduates When Their Choice of Occupation was Made

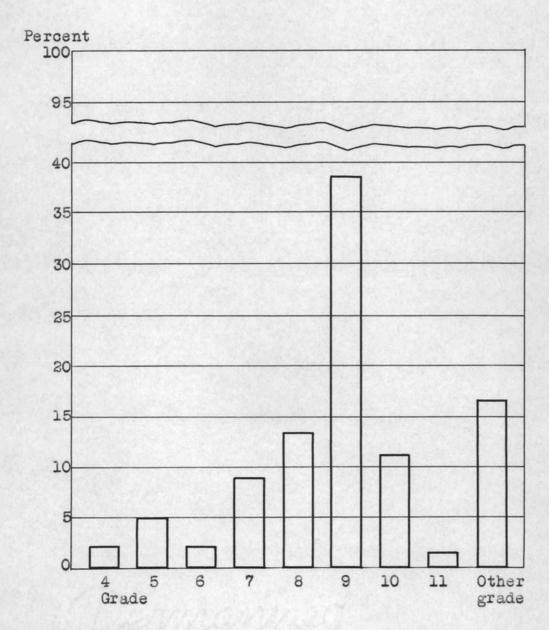
Grade	Number	Percent
Fourth	4	2
Fifth	10	5
Sixth	4	2
Seventh	18	9
Eighth	27	13.4
Ninth	78	38.8
Tenth	23	11.4
Eleventh	3	1.5
Returns not usable	34	16.9
Total	201	100

In the space left on the questionnaire for the graduates to fill in if their choice of occupation was made when they were in a grade not listed, 6 filled in "Senior High."

The nine week exploratory courses in industrial arts given in the Junior High Schools, have as one of

Figure 9

Grade Level When Graduates Chose Occupation (Taken from Table XIV)



Base: 201 Graduates

their main objectives guidance of the students in choosing the vocation best suited to them.

Number Indicating Junior High Industrial Arts Courses Helpful in Choice of Occupation

Course	Number
Mechanical Drawing	41
Sheet Metal	28
Electricity	30
Woodwork	27
Printing	19
No answer*	98

Some graduates checked two or more industrial arts courses as being helpful in choosing their occupation. Of the 121 who attended junior high school, 85.1 percent definitely indicated that one or more of the industrial arts courses helped them in their choice of an occupation.

Table XVI is divided into the three groups: those that are employed in the occupation studied, those employed in a related occupation, and those employed in an unrelated occupation. This is done to show just which group

^{*}Of the 98 questionnaires returned with no answer on this question, 80 did not attend junior high school.

is most dissatisfied with the training received and how many are satisfied and would take the same course again.

TABLE XVI

Number of Graduates That Would
Take the Same Course Again

		Would Take Dif. Course		To- tal
Employed in Occupation Studied	91	12	5	108
Employed in Related Occupation	16	6	0	22
Employed in un- related Occupation	34	32	5	71
Totals	141	50	10	201

Of the total number of graduates employed in the occupation studied at San Jose Technical High School, 11 percent would take a different course if they could start over again. Of those employed in related occupations 27.3 percent would take a different course. The graduates working in the unrelated occupations showed the greatest dissatisfaction, as 45.1 percent would take a different course.

Table XVII shows the courses those graduates who have shown a desire to change (Table XVI) would take.

Figure 10

Percent of Graduates That Would Take the Same Course Again (Taken from Table XVI)

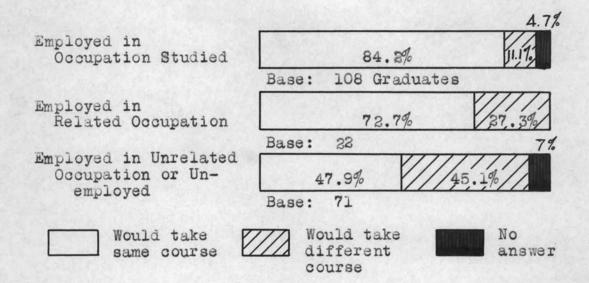


Figure 11
Courses Graduates Answering "No"
on Table XVI Would Take

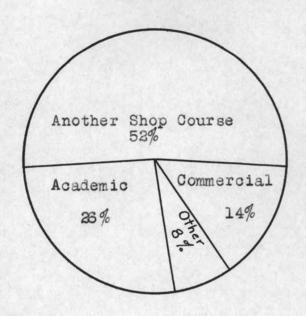


TABLE XVII
Courses Graduates Would Take

	Number	Percent	
Academic Course	13	26	
Other Vocational Course	26	52	
Commercial Course	7	14	
Other Course	4	8	
Total	50	100	

Over one-half, or 52 percent, of those who would take a different course indicated that they would take another vocational course. Some of them gave as reasons for taking a different vocational course statements such as: "better chance of employment", "like the work better", "fits my line of work better."

San Jose Technical High School is not a college preparatory school; however out of the 31.9 percent of the graduates seeking more education, 14.9 percent have gone or are going to college. Night school had the next largest total of 8 percent. Most of these students are studying for a different occupation.

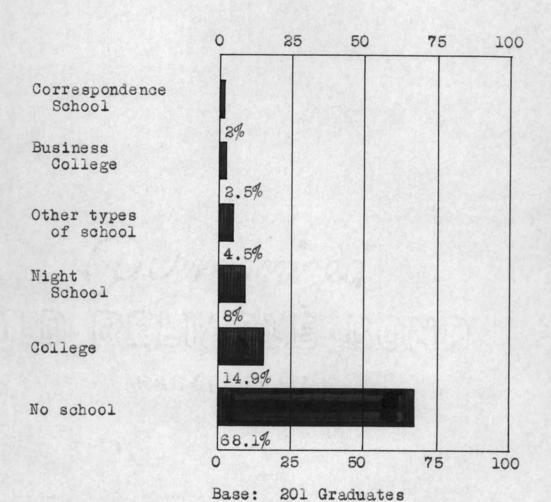
The following table lists the type of school and the number of graduates that attended each after they left San Jose Technical High School.

TABLE XVIII
Further Education After Graduation

	Number	Percent
College	30	14.9
Business College	5	2.5
Correspondence School	4	2
Night School	16	8
Other Types of School	9	4.5
No Further Schooling	137	68.1
Total	201	100

Other types of schools listed by the graduates on the questionnaire were: Diesel Power Engineering College, Carter Carburetor School, California State Polytechnic School, Cogswell Polytechnical College, Apex Refrigeration School.

Further Education Taken by Graduates (From Table XVIII)



Comments by Graduates

These statements, written on the bottom or back of some of the questionnaires, give the graduates' unrestrained views on some of the points in the questionnaire and some ideas that were not covered by the specific questions.

Schools should provide a means of expression for those students who feel they have some creative ability. Of course, competent criticism would have to be had to keep this kind of course in bounds.

My vocational work at San Jose Technical High School in machine shop, auto repairs, and other mechanical subjects has helped me in many ways in my present position.

I would like to see the Technical High School offer a more extensive course in Architectural drawing and design.

Perhaps you are wondering what type of business we are in, as the above questions do not seem in reason. We manufacture berry baskets and it requires a variety of skills -- from a manual laborer to a bill collector.

I am re-entering San Jose State in the Spring quarter. In March 1939, I flunked out because of too many outside activities — a failure on my part to apply myself to the work, and an inability to study properly. For the first of these shortcomings, I am to blame. The other two, I feel, are the result of my attendance at Tech.

When attending college, a student

must be able to read, thoroughly and understandingly, on a number of subjects at the same time, all written in a some-what advanced manner. When attending Tech., the student can get by every class, doing comparatively no reading. He thereby loses, in part or in whole, any ability he might have possessed to read comprehendingly.

Your answer for this may be - "Tech. is not a college-preparatory school."
Then I say, establish a testing system, such as a test at the end of the first year at Tech., to determine those qualified for college. For those who wish to go on to college, require intensified academic training along with the mechanical work, or, let them transfer to the

academic high school.

My three years at Tech. were altogether too easy on me. I don't mean
Tech. is any "cinch" for the fellow really
interested in mechanics, but you should
develop some method of weeding out the
more academically inclined. Make Tech.
a hard school to get into, and a harder
one to stay in.

SUMMARY AND IMPLICATIONS

Summary

San Jose Technical High School, located in the heart of Santa Clara Valley, is in the center of a large fruit growing district. The name "Technical" is misleading as it is not a technical school but a vocational school, coming under the provisions and specifications of the Smith-Hughes law.

The need for a follow-up study is evident. No other "big business" would think of putting its products on the market without adequate servicing facilities. The purpose of this study is to furnish some facts on the employment of San Jose Technical High School graduates, their reaction to and interest in the work they perform, all of which may be useful in the guidance of future graduates.

The assembled data shows that when there is a demand in the community for workers in a particular occupation, provision is made for it at San Jose Technical High School; likewise, by lack of demand, a course in a particular occupation may be dropped.

There has been a steady increase in enrollment at San Jose Technical High School from 1923 to 1939.

More than half of the graduates enter and remain in the occupation they studied.

Some occupations offer opportunity for employment in a greater number of related occupations than others. It might be well to point this out to students who have not as yet chosen an occupation.

San Jose Technical High School trains workers for home industries. Most of the graduates are employed within the county.

The employment for the graduates is stable. The data shows that 30.8 percent have held only one job and 25.4 percent, two jobs. Contrasted to this, only 2.5 percent have held six or more jobs. The median is 1.74 jobs held by each graduate.

One-half of those not employed in the occupation studied still desire to enter it.

The school has placed slightly more than a third of its graduates. The remainder had to secure employment by some other means. The school has probably helped many more indirectly by letters of recommendation and references.

Only about one-fourth of the graduates were influenced in their choice of an occupation by their school subjects and teachers. This must be qualified, as later in the study 85.1 percent of those attending junior high school indicated that the junior high school industrial arts courses helped them in their choice of occupation.

The junior high school industrial arts courses definitely helped those graduates who had the opportunity to attend in making their choice of an occupation.

About three-fourths of the graduates would take the same course again. Of those who would not take the same course again, over one-half would take another vocational course.

One-third of the graduates continue their education in some type of school. San Jose Technical High School is not a college preparatory school; however, 14.9 percent of the graduates go on to college.

Implications

If the facts found in this study are reliable, then the following statements are of value.

Placement, and co-ordination of placement, and continuous follow-up service might be added as a regular part of the school functions under the direction of one person. The methods to be used would have to be determined by a study of the local situation and a survey of the systems used in other cities.

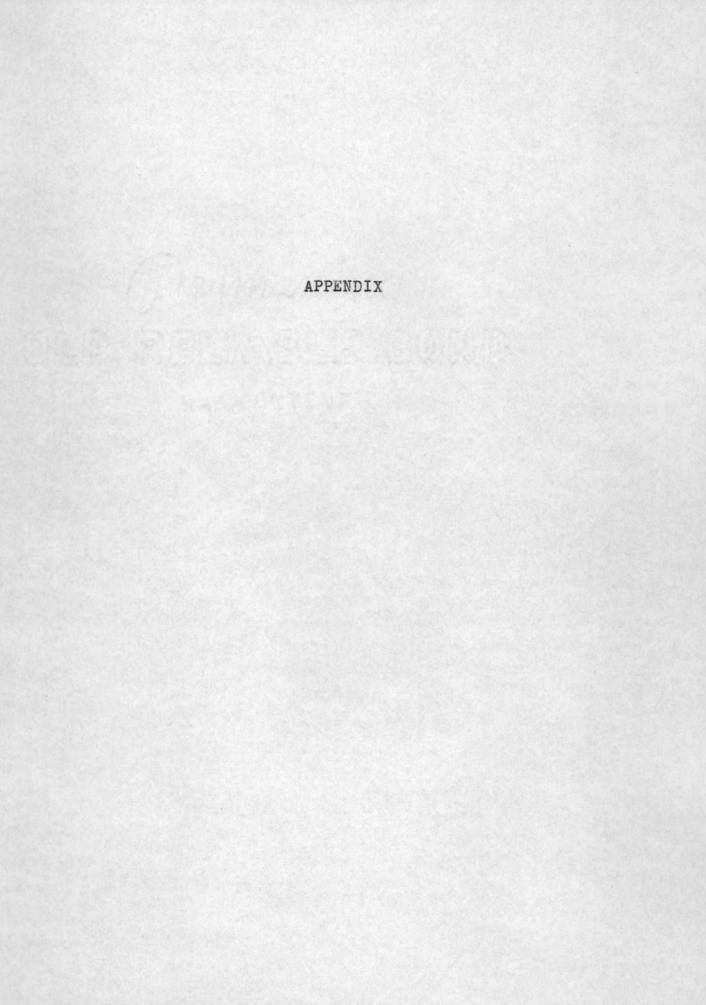
There is no way to show how much of the training received at San Jose Technical High School is used by those in unrelated occupations. The Japanese graduate from the auto mechanics course who is now a farmer

certainly would use his training in repairing the farm tractor and truck or the family car.

Many students transfer from the academic high school to the technical high school. Possibly more students who have not chosen their occupation and are not certain whether they want vocational training would enter the regular academic high school if they could get industrial arts work there. This would give them more time to decide on an occupation, and they would be more mature when they entered the technical high school.

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SAN JOSE PUBLIC SCHOOLS

Department of Vocational Education Seventh and San Fernando Streets

San Jose, California

Letter of Transmittal

In order to make the work in the San Jose Technical High School more efficient and useful to those who attend, and in order to find out what the former students thought of the work while attending here, we are sending out these questionnaire blanks for you to fill out.

Material on these blanks will be used as guidance work for new students, so by filling out these forms as completely as possible, you will aid greatly in helping to make improvements in the work carried on here.

We ask your cooperation in filling out these blanks as soon as it is convenient and returning them to us in the envelope provided for that purpose. All information will be kept strictly confidential.

Very truly yours,

A. R. Nichols, Director Vocational Education

ARN L Incl-1

Name	No
	A Follow-up Study of the Graduates of San Jose Technical High School
1.	For what firm did you work and what type of work did you do the first year after graduation?
	(For example: Franco's store - driving truck)
2.	Are you working now? For whom?
	Where? Doing what?
3.	Is your work in San Jose? Please check (/) YesNo
4.	Is your work in Santa Clara County? Please check (>)
	Yes No
5.	Do you like your work? Please check () Yes No
6.	If you are not following the occupation for which you studied, are you still interested in securing employment in it? Please check () Yes No
7.	How did you secure your first position?
	Please check 1. Employment agency 2. Through a relative 3. Through a friend 4. Through your father 5. Through school 6. No help 7. Newspaper adv. 8. Other method
8.	What influenced you in choosing your occupation?
	Please check 1. Your family
	(Continued on next page)

Ques	tionnaire continued 50
	2. Your friends 3. School subjects 4. One of your teachers 5.
9.	In which grade were you when you chose your occupation:
	Write choice or choices in the blanks:
	4th grade 5th grade 6th grade 7th grade 8th grade 9th grade Other grade
10.	Did any of these industrial arts courses in the junior high school help you to decide which occupation you liked best?
	Please check: 1. Mechanical drawing 2. Sheet Metal 3. Electricity 4. Woodwork 5. Printing
11.	Would you take the same course at San Jose Technical High School if you were able to start over again?
	Please check (>) Yes No
12.	If the above question was answered "no", what course would you take?
13.	Have you attended any school since graduation from San Jose Technical High School?
	Name of school
	Course taken

Diplomas, certificates or degrees obtained _____

(Continued on next page)

for,		firms that you have worked of time and the type of work
Firm		How long
What	work did you do? _	
Firm		How long
What	work did you do? _	
Firm		How long
What	work did you do? _	
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What	work did you do? _	