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ABSTRACT

Compared is the post high school adjustment of graduates of two types of special education programs for the educable mentally handicapped: a self-contained, vocationally oriented program separate from general education (School A) and a program integrated into the general high school, where job experience is concurrent with general education and courses are not specifically vocationally oriented (School B). Graduates of School B who have been out of school for varying lengths of time were also compared with each other. Interviewed were 41 School A and 41 School B graduates from the years 1964 and 1965, and 114 School B students who graduated between 1952 and 1963. Students were compared on social, vocational, and economic measures, such as job placement, tenure, income, community participation, and other factors. It was found that graduates of School B had a better school attendance record, held more full-time jobs, had higher occupational levels and salaries, were more likely to seek further education, were more prudent in money management, married later or remained single more often, had better homes, and participated more actively in community activities. (KW)

FINAL REPORT

PROJECT No. 6-8680

Grant No. OEG 3-7-068680-0106

A FOLLOW-UP AND COMPARISON OF GRADUATES FROM TWO TYPES OF HIGH SCHOOL PROGRAMS FOR THE MENTALLY HANDICAPPED

OCTOBER 1970

U. S. Department of

Health, Education and Welfare

Office of Education

Bureau of Research

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Marie Skodak
Project Director

TABLE OF

CONTENTS

LIST OF TABLES

A Follow-up and Comparison of Graduates From Two Types of High School Programs For the Mentally Handicapped

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The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

Dearborn Public Schools

Dearborn, Michigan

Introduction:

Problem:

Special education for the mentally handicapped, like all special programs, is undergoing review and evaluation to determine whether the stated objectives are being met, and in what ways the programs can be improved.

One of the major issues at the present time, concerns the degree of separateness which is desirable for the optimum teaching of students with limited academic aptitude. Since the ultimate goal is the preparation of these students for adjustment in the community and for employability, it will be useful to know whether a greater or a lesser degree of separation from the normal stream of school life is preferable.

This study presents a comparison between the post high school adjustment of graduates of two types of special education programs. In addition, graduates of a program which had been in operation for many years, are compared with each other in three year groupings.

Specific Questions:

The research problem was formulated in a series of questions rather than hypotheses. Basically these were:

1. How do the graduates of the two programs compare on certain social, vocational, economic measures, when they have been out of school the same length of time?

2. How do graduates of one of the schools compare with each other, when they have been out of school for different periods of time.

The areas to be explored included job placement, tenure, income and community participation, with subheadings under each.

General Background:

When special classes for mentally and academically handicapped students were initiated some 75 years ago, the focus was on the elementary or early adolescent years. It was accepted as a matter of course that these students dropped out of school early and as prospective "hewers of wood and drawers of water" no great amount of further training was felt to be necessary.

Within recent decades, and particularly since about 1950, it was increasingly recognized that some kind of program into the late 'teens, comparable to the normal high school years, was advisable. Increasing demands from employers, the recognition that slower students needed longer rather than shorter training

periods, the concept of the comprehensive high school and public support of special education for the total age range, all had some influence on the extension of programs to older ages. The availability of funds has dramatically increased the number of special classes, and particularly those in high schools.

When special classes at any level were first begun, they were located in 'normal' buildings, primarily for administrative economy and convenience. As they increased in number and specialization a change in philosophy occurred. During the period roughly from 1920 to 1940 there was considerable sentiment for the maximum possible separation of special students from the regular students and considerable effort was made to provide separate buildings and facilities as well as staffs. Following World War II a distinctly opposite trend developed which has resulted in planned decentralization of special classes, and, in some instances such a degree of 'integration' with the regular program that special classes as a separated entity virtually disappeared. These trends were based not on research supporting one position or another, but grew out of the applications of philosophical concepts. Since there is the well known gap between practise and theory, neither the 'separate' nor the 'integrated' plan had whole hearted support from teachers and administrators at any one time. Consequently both plans are to be found simultaneously in a variety of places.

Specific Background:

Both of the school systems whose graduates are to be compared are in Michigan and operate under similar general rules for the evaluation and assignment of students to special classes, the training and certification of the teachers, the financing and the general administrative procedures. Both programs are designed for the "educable" mentally handicapped student, who has ultimate potential for employment and some degree of independence in the community. The majority of students in both groups are identified in the regular grades through persistent failure in the academic subjects. Individual psychological evaluations are mandatory, but there is not an arbitrary cut off score in either system. Decisions for admission to the special class are made by committees which include the examining psychologist, school administrators and information from teachers, social workers, and others who can contribute. The decision to assign to a special class is based on as many pertinent factors as are available.

The differences between the two programs resulted from combinations of philosophy and chance. Neither represents the extremes of programs which might occur, but are probably typical for their kind.

Kent County Intermediate School System (School A)

Under the Intermediate (County) School District a high school special education program was begun in 1961 to serve the predominantly rural areas which did not belong within the Grand Rapids City schools. The program is housed in a separate building which had originally been a small factory-office combination. The three year program combines the usual academic special education instruction with prevocational training facilities which resemble employment rather than school situations. Social, athletic and other functions are self contained and there is little or no opportunity for self-comparison with "normal" students. Work experiences, planned and guided by the special education teachers, occur within the school situation. When in the judgment of the teachers, a sufficient degree of skill has been attained the students are placed in competitive employment in the community. This usually occurs in the last year of school. Supervision comes from work counselors who maintain contact with the classroom teacher to whom the student continues to report. The program can be described as self-contained, separated from general education, and vocationally oriented.

Dearborn (School B)

In the Dearborn Public Schools, the program took its present form in 1952.

The high school program is part of a sequence which can begin with kindergarten. Students may be transferred into the program at any point including high school, but about two-thirds of the high school group have had most of their education in special classes. Special classes are in the regular elementary, Junior and Senior high school buildings, with 2-5 special classes in a building. There are groups in each of the resident high schools. Officially classified as 10 - 11 - or 12th graders the students are in one or two homerooms and follow a special education program in the academic subjects. The special education teachers are also the counselors for their students. All students are integrated into the regular program to some degree and are assigned to classes in which they have some possibility for success. These are most frequently shop, crafts, home making, music, art, and occasionally typing and other courses. The students participate in athletics and in extra curricular activities, as well as formal graduation. By tradition certain school activities (in one school running the popcorn machine) are the prerogatives of the special classes. Part time job placements are made generally after the first semester, and job changes are made as the student matures. By the end of 12th grade placement in a full time job is achieved. For the subjects in this study, these jobs were secured and the students' adjustment and progress supervised by the special education

teachers. Teachers were granted time during the day for this purpose. Following this study a change in procedures was made in which the Office of Vocational Rehabilitation was involved to a greater degree. The courses are not specifically oriented to vocations although in some instances related academic skills may be emphasized to improve job success. The program may be described as integrated into the general high school, with job experience concurrent with general education.

In addition to the differences in the programs there were differences in the communities. Dearborn is a completely urbanized area, with over 95% of available building sites occupied. The city's main industry is the Ford Motor Company and other automotive and related industries. The city is completely surrounded by other similar urban communities. Kent County still has large rural areas where farming and fruit raising predominate. Furniture and wood working industries are still important although automobile and other manufacturing, is increasing.

Both communities are predominantly white. Kent County is heavily north European, particularly Holland, in population. In Dearborn there are many more southern white, and south European and Middle East immigrants with related language and cultural differences which often are associated with adjustment problems.

Procedure:

It was decided to limit the study to those subjects who had completed the three-year programs. The number of drop-outs from either program was small and it was difficult to classify them into any meaningful category. By far the largest number left because of family moves to other communities.

The school records were reviewed and a list of all graduates was made. A total pool of 216 cases was found, 42 from School A (separate program) and 174 from School B (integrated program). Last known addresses were secured from the school records. The subjects for follow-up interviews were assigned to high school and junior high school special education teachers currently in the system. Not all teachers knew their interviewees, but many did, particularly those who were recent graduates. Individual interviews were arranged with the graduates. In three cases the graduate was in military service and interviews were held with a parent.

In view of the reading and writing difficulties characteristic of these subjects, no attempt was made to use self-completion questionnaires or the mails.

The material to be covered had been cast into a questionnaire form (see appendix). It was filled out by the interviewer, generally at the time of the interview, or immediately afterward. The interview and the form were described by the interviewer to the graduate as part of an effort to improve the school program from which he had graduated. Confidentiality was assured and every attempt was made to put the respondents at ease.

The fact that opinion polls are well known, as well as the general familiarity of the teachers with the interviewees and their friends may have contributed to the ease with which the interviews proceeded. Cooperation was excellent. The respondents often volunteered additional explanatory information, gave addresses of former classmates, sent greetings to teachers and in various ways showed good rapport with the interviewers and a friendly and cooperative attitude toward their schools.

Description of Comparison Groups

It was decided that students graduating in 1966 had such brief work and post school experience when the interviews were conducted in the late summer and fall of 1966, that they would not be included.

This left School A with two graduating groups (1964 and 1965). Graduates from School B for 1964 and 1965 were selected as the direct comparison group. Previous classes were grouped as shown in Table 1, to provide for comparisons over time. These groupings: 1960 through 1963, 1956 through 1959, and 1952 through 1955 are carried through this report.

Table 1 shows the general characteristics of the sample with regard to graduation year, sex, age and cases omitted.

Table 1

Of the total 216 graduates it was possible to interview 196, or 91%. Among the 20 not interviewed 1 had died, 18 could not be located and 1 refused to be interviewed.

Recent (1964-65) graduates are relatively easy to locate, but even among these, one could not be interviewed because he had disappeared from the community. The number of interviews which could not be held rose to 5, or 7%, of the total graduates for the 1960-63 group, to 10 or 28% of the graduates for 1956-59 and 4 or 18% of the graduates for 1952-56. Of the 20 not interviewed, (9% of the total pool of cases) 12 were males and 8 were females, including the one who had died. These were 8% and 12% of the male and female populations respectively.

Table 1

General Characteristics of Interviewed Sample

	Number of Subjects Male	Female	Total	Mean Age Male	Female	Cases Not Interviewed	%
School A (64-65)	27	14	41	20-10	20-9	1	2
School B (64-65)	26	15	41	21-3	21-3	0	0
School B (60-63)	50	20	70	24-2	24-2	5	7
School B (56-59)	20	6	26	27-6	28-0	10	28
School B (52-55)	16	2	18	32-0	30-9	4	18
Total	139	57	196	24-4	23-2	20	9%

Since the difference is not statistically significant, it would appear that male and female graduates are equally available for follow-up interviews.

Inspection of the available background data showed no systematic difference, between those interviewed and those not interviewed. Since 91% of the total pool was included, those interviewed can be considered representative of those who graduated from special education programs in the two communities.

The data to be reported are based on 44 graduates of School A (27 males, 14 females) who had been out of school 2-3 years and on 155 graduates of School B (112 males, 43 females) who had been out of school 2-15 years.

Ages of Interviewees:

Comparison of ages shown in Table 1 suggests that the graduates in School B are slightly older than from School A, a difference equivalent to about one semester. There has been no special change in average age at graduation from School B during the 13 years between 1952-1965 as the progression shows. The oldest group (1952-55) showed the influence of the program which preceded the current one, with relative acceleration for girls and retention in grade for the boys.

Statistical Treatment of Data:

Since the program in School A did not have graduates prior to 1964, the only meaningful comparisons between an integrated program and a self-contained program are those comparing the Kent (School A) (1964-65) graduates with the Dearborn (School B) (1964-65) graduates. In analyzing the data, tests of statistical significance were applied only to data involving these two groups. Data from the other three Dearborn groups are reported, but no tests of statistical significance were conducted in comparing these groups with each other.

Since most of the data collected were at a nominal or ordinal scale level of measurement, chi-square analyses were used in most of the tests of statistical significance. The necessary modifications were made in using chi-square where sample sizes were small. (Siegel, S., 1956) In several instances, when permissible, the t-test was used in tests of statistical significance. The .05 level of significance was used throughout the study.

School Attendance:

As an indirect measure of attitude toward school, attendance was evaluated when the cumulative records were reviewed.

A student was classified as "Rarely absent" if absences were very infrequent. He was classified as "Regular in Attendance" if absent less than 10 half days per semester and "Fair in Attendance" if absent 10-20 half days. He was rated as "Poor" in attendance if there were more than 20 half days and/or the services of the attendance officer were involved. No data were recorded for two students.

Table 2

Table 2 shows the tabulation of attendance ratings by sex and by year of graduation. It is noteworthy that both schools have little difficulty with poor attendance among those who eventually graduate. Eighty-two percent of the 196 for whom information is given are rated as either regular or superior in attendance. Less than 2% of graduates are rated as poor in attendance.

Undoubtedly those who were poor in attendance were among those who dropped out of school either by their own volition or by request. This, however, is not different in the regular grades. Comparable data for regular students would be of interest. There is some indication from counselor impressions that the proportion of fair and poor attendance is higher in the regular grades than in Special classes. This may suggest that the attendance of academically handicapped students who are in special classes is possibly somewhat better than the average of the school as a whole.

Comparison of the attendance pattern of the 1964-65 groups in Schools A and B, shows that males in School B had better attendance ($X^2 = 11.08$, $X^2.05 = 5.99$ - 2 degrees of freedom, data were grouped into 3 categories to meet necessary requirements for X^2). While 16% of the boys are rated as superior in attendance in School A, in School B 62% are so rated for 1964-65. Where all 13 years are included, 57% of the boys in School B have superior attendance. Conversely about 30% in School A have 'Fair' attendance while 13-16% in School B are 'Fair'. When males and females are combined, School B graduates show a better attendance record. ($X^2 = 9.78$)

Inspection of the attendance pattern of the girls shows no meaningful differences between schools, or between year-groups in the same school. It appears that girls are not better in attendance records than boys, in fact there may be proportionately more girls in the "Poor" attendance category.

While it would be tempting to attribute the differences in male attendance to the programs themselves (and this may be the

Table 2

ATTENDANCE WHILE IN SCHOOL
MALE

	Rare Absence		Reg. Attend.		Fair Attend.		Poor		DK	Total
	No.	%	No.	%	No.	%	No.	%		
Kent 64-65	4	16	13	52	8	32	-		2	27
Dbn. 64-65	16	62	6	23	4	15	-		-	26
60-63	26	52	18	36	5	10	1	2		50
56-59	10	50	7	35	3	15	-			20
52-55	12	75	2	12	2	12	-			16
Total	68	49%	46	33%	22	16%	1	1%	2	139

FEMALE

Kent 64-65	3	21	6	43	5	36	-			14
Dbn. 64-65	5	33	6	40	3	20	1	7		15
60-63	9	47	7	37	2	10	1	5	1	20
56-59	3	50	3	50	---		-			6
52-55	0		2	100	-		-			2
Total	20	35%	24	42%	10	18%	2	4%	1	57

MALE

Kent 64-65	4	16%	13	52%	8	32%	-		2	27
Dbn. 52-65	64	57%	33	29%	14	13%	1	1%	-	112

real basis for the difference), there may also be out-of-school factors which are as influential. It is speculative whether the urban opportunities for school avoidance, such as recreation centers, out of school friends, etc., are more or less effective deterrents to school attendance than the rural problems of family demands, transportation, or weather interference.

Mental Level of Special Class Graduates:

The process of becoming a member of a special class for the education of mentally handicapped students is not a simple one. The popular impression that "IQ tests" more or less automatically assign students to this role is far from correct. For the "educable mentally retarded", the initial screen is the classroom process itself. Teachers are accustomed to a wide range of talent in any "regular" classroom, and according to their own skills and diagnostic perceptions, use various means of reaching and teaching the child who does not progress at the expected rate. These may range from the assignment of meaningless busywork to highly skilled individualized instruction. Among the teachers a child encountered in the elementary school, there would eventually be one who concluded that the child was enmeshed in a hopeless struggle in the normal stream of education. At this point an individual psychological evaluation was requested to supplement the available group test results. Low scores on the latter frequently reflect reading problems, not necessarily intellectual deficit. The more deviant children tend to be referred and accepted in special programs earlier. Children in the 80-90 IQ range are both referred later, (teachers hope they will "outgrow the slow start") and are accepted for placement only after further trials and failures in the regular grades. For the student frequently described as "a very slow learner who may be retarded", the crucial barriers generally occur at the entrance to either junior high school (7th grade) or to senior high school (10th grade). At these points the sending and receiving schools, recognizing the increasing formalization of instruction would evaluate the situation, request the re-examination of the child, and a review of the record. This would frequently be followed by an agreement in the placement committee, that the child's education was best insured in the special class. In B high school, the special education programs, with their opportunities for job placement, and for highly individualized instruction, were particularly appealing to counselors who were concerned about students who needed an academically less demanding program. Since the special classes were substantially integrated into the total curriculum, it was not difficult to assign students from regular classes into "English" in the special classes. Some of these students eventually drifted into the total special class program and their membership as special education students was made official after the fact.

Under this process it was evident that certain students who would be more accurately diagnosed as having specific learning disabilities, generally in reading and abstract symbolization, became

members of classes for mentally retarded. There was no other way to provide the special program which quite clearly met their needs. This usage of the program played havoc with any description of the classes in terms of intelligence test results. The special class teachers were generally not impressed in the usefulness of IQ figures since both the academic levels and the social functioning of the students as they saw them in the school and on the job, seemed unrelated to the differences indicated on the tests. Factors described as motivation, work habits, cooperative attitudes, diligence and emotional stability were regarded as more significant for success, and for these no tests were available.

A further complication in the use of test results in describing the special class population, was the variable number of tests available for each student. Some had several pre-admission tests, given during the period of "trying him again in the regular grades". Some had several re-tests during the elementary years, then none after age 12 or 13. Some had a first individual test at 13 to 15 years of age on the eve of assignment to a special class in Junior or Senior high school. Others had a last examination just before graduation, as part of the process of referral to the Division of Vocational Rehabilitation. The comparability of these test results is thus open to serious question.

In the interest of sharing information, which will far from clarify anything in the controversial issue of the use of test scores in assigning students to special education classes, the distribution of test results is presented. It is to be noted that this study is concerned with "graduates of programs in special education", without labeling the students as mentally retarded.

The last available full scale IQ on WISC or WAIS for graduates of special classes in this study is summarized as follows:

	School A (1965 only)		School B 1964-65		1963-60		1959-56		1955-52	
	M	F	M	F	M	F	M	F	M	F
110+					1		1			
100-109					5		2			
90-99			3		11	5	1		1	
80-89	4	4	10	3	16	3	7	5	2	
70-79	4	2	11	7	9	7	6		8	2
60-69	3	1	2	5	7	1	3	1	2	
less than 59	2				1	4			2	
Unknown	1								1	
N	14	7	26	15	50	20	20	6	16	2
Median	76	81	80	71	83	77	80	84	78	
Mean	72	78.4	80	73	83.6	76.8	81.5	82	73	

The range of full scale IQ's as high as 112 may be shocking to those unfamiliar with changes which are to be found on re-examinations. These tests are the last recorded for these students.

Of the 158 for whom data are available, 24 had last known IQ's of 90 or higher. Twelve of these are retests with 2-10 years between examinations. The mean initial IQ of this group was 82, with a final mean of 99.5. All showed gains from 4 to 42 IQ points. Six had made gains of 20 points or more, essentially moving from "borderline" to "normal" in classification.

Of the 12 for whom only a single intelligence test was available, nearly all were referred because of serious inability to read. Most of these had managed to reach high school. The only group where their 2-4th grade reading level was acceptable was in the special classes for the mentally handicapped. Their mean IQ was 97. In this group there was a pair of twins (IQ 101-102), one student had a visual peculiarity which did not qualify him for special class for the visually handicapped, but who was unable to read (IQ 112), one had multiple handicaps (IQ 91), one had severe language and cultural handicaps (IQ 94) and several had known histories of neurological defect (IQ 98, 93, 91, 99) which interfered with retention of academic learning.

The subjects of this study can be described as below the average of their schools in general intelligence, with 71% having IQ's less than 85 on the last available examination. Gains of 4-40 points had occurred in a substantial number during their special class placement, so that by graduation about 6% had IQ's of 100 or more. Students who had entered special education programs with IQ's of 85 or more generally did so at the high school level, were severely educationally handicapped, specifically in reading and mathematics, and had demonstrated their inability to maintain the expected pace in the regular classes. It is possible that there were similar students who persisted im the regular grades, possibly dropping out before graduation. Comparison of the post-school adjustment of those who remained in the regular grades with those in special classes, would be enlightening but it is not in the scope of this study.

Interview Findings:

One of the major objectives of a special education program, is the preparation of graduates for employment in the community, hopefully in normal, competitive jobs. A review of employment status includes the fact of employment, the level of employment, income, job stability and source of employment. Facts with regard to these are particularly important in the vocational counseling of special class students, for whom job placement is presumably more difficult than for most youths.

Employment Status:

Table 3

Table 3

Employment Status of Special Education Graduates

		Male					Female				
		Full Time	Part Time	Un-employed	Military Service	Other	Full Time	Part Time	Un-employed	House wife	Other
School A 1964-65	No.	23	2	2	-	-	7	-	1	6	-
	%	85	7	7			50	-	7	43	
School B 1964-65	No.	24	-	-	2	-	13	-	-	1	1
	%	92	-	-	8	-	87	-	-	7	7
1963-60	No.	45	-	1	4	-	8	4	-	8	-
	%	90	-	2	8	-	40	20	-	40	-
1959-56	No.	19	-	-	-	1	-	1	1	4	-
	%	95	-	-	-	5	-	17	17	67	-
1955-52	No.	16	-	-	-	-	-	-	-	2	-
	%	100	-	-	-	-	-	-	-	100	-
Total School B	No.	104	-	1	6	1	21	5	1	15	1
	%	93	-	1	5	1	49	12	2	35	2
Totals		127	2	3	6	1(139)	28	5	2	21	1(57)
	%	91	1	2	4	1	49	9	4	37	2

Table 3A

Employment Classification of Male

Special Education Graduates

	School A	School B			
		1964-65	1963-60	1959-56	1955-52
I. Professional & Managerial (MD's, Lawyers, Grad. Engineers, Bank Presidents, etc.)	-	-	-	-	-
II. Minor professional & managerial (Teachers, retail store owner - Managers, industrial supt., etc.	-	1	-	-	-
III. Clerical, skilled trades, small retail businesses (Gas station owner-manager, electrician, shop supervisor, welder)	-	2	6	6	3
IV. Farm owners & operators	-	-	-	-	-
V. Semi-skilled, minor clerical (truck driver, lathe and milling machine operator)	4	7	16	4	7
VI. Slightly skilled workman (assembly line operator, school janitor, postal mail handler, etc.)	9	8	14	4	5
VII. Unskilled labor (Clean-up man, helper)	12	6	11	5	1
Unemployed	2	-	1	-	-
Military Service only	-	2	2	-	-
In-training	-	-	-	1	-
N	27	26	50	20	16

Comparison between Schools A and B shows that 100% of the males graduating from School B in 1964 and 1965 were employed full time. Twenty-four (92%) were in competitive employment and 2 (8%) were in Military Service. In School A 23 (85%) were employed full time, 2 (7%) were employed part time and 2 (7%) were unemployed. This represents a meaningful difference between the two groups, if a measure such as income tax payment is used as the criterion. However, the difference was not statistically significant.

The favorable work history of male graduates is true for all the 1952-65 groups from School B. Of the 112 males from School B only 1 is unemployed and 1 is in training as a cabinet maker. Six (5%) are currently in military service, and the remaining 104 (93%) are fully employed. In fact, besides a full time job, at least one has a regular part time job and others "moonlight" on occasion.

According to a study by the Bureau of the Census (AIR 1970) in 1966 the unemployment rate for men age 20 and over was 5.6% and in 1969 it was 2.4%. For suburban males the rates were 3.7 and 1.8, and for non-metropolitan groups 4.9 and 2.6. It is evident that graduates of special education classes are at least as fully employed as their "normal" class mates, and perhaps have a slight advantage.

There is an interesting, and unanticipated difference between the girls graduating from Schools A and B. Presumably of the same age and general social-cultural level, girls from School A marry earlier and leave the labor market. Six of the 14 (43%) are married, one is unemployed and the remaining 7 (50%) are in full time employment. Of the 15 girls from School B, only one is married, one is attending a modeling school and 13 (87%) are in full time employment. As the female graduates become older, an increasing number are married and become full time housewives. Only one is unemployed of the entire group of 43 women graduates from School B. Five work part time and 8 from the 1960-63 classes are still employed full time. Simultaneously employment and marriage was found among 3 of those interviewed.

While these differences are not statistically significant, the difference between the two groups is observable. School A has a higher proportion of part-time and unemployed among its recent graduates than School B. Its girls marry earlier and leave the labor market. School B has no part-time male workers, and less than 1% unemployed males. While the girls eventually marry, they do so at a later age than anticipated. When marriage occurs they leave the labor market. Part time work is more frequent with women graduates, although full time work is the rule among recent graduates.

Job Classification:

While it is important that such a high percent of graduates are gainfully employed, it is also important to know the level at which they are working. The kind of job, its income and general prestige level determines the individual's social class and the concomitant status and opportunities in the community.

The various classification scales are similar in ranking occupations on a combination of educational requirements, job complexity, prestige and income. Because of the ease of classification a 7 point Minnesota Scale of Parental occupations was selected based on the census classification of employed males. (Goodenough)

The classifications, with sample occupations and the distributions of members of this study are presented in Table 3A.

There are no special education graduates in the professions or in farming. One man is in Category II. He manages his own gas station and earned $12,000.00 in the year preceding the interview in 1967. He had previously owned a milk route, and had gas station and milk delivery experience both while in high school and in the three years after graduation. This young man had an IQ of 81 at age 7, 83 at age 8, 85 at age 16. He married at age 18. He had been regarded as a reliable worker, ambitious, but not strikingly promising while in school

Seventeen, or 12% of the 139 males in the study, all from School B, were in Category III. These included a hair stylist (IQ 67), a truck repair specialist (IQ 98), auto mechanic (IQ 99), 2 pipefitters (IQs 101, 72), an inspection supervisor (IQ 98) stand test operator (IQ 80), an electrician (IQ 106, $12,000.00 income in 1966), refrigeration repair specialist (IQ 91), tool crib lead man (IQ 107, $11,000.00 income), supermarket grocery manager (IQ 87), machine repairman (IQ 76), printer (+own shop) (IQ 101), 3 welders (IQs 108, 75, 88), and a gas station manager (IQ 83)

Of these 17 nine had IQ's of 90 or more while 8 had IQ's from 67 to 88. Since there were 25 men in the ertire study with 90+ IQ, this 9 in Category III represents 36% of the group. The median IQ of all men in Category III is 91, or 10 points above the median IQ of 81 of all male graduates in School B. It is evident that being brighter as measured by test, is advantageous in achieving higher socio-economic status, but is by no means a critical factor. Two-thirds of special education graduates, whose IQs were 90+, including the two with IQs of 112, are in the lowest three occupational classifications.

There is substantial overlap between Category V and VI and to some extent between VI and VII. The classification of jobs was made by the interviewers who knew both jobs and workers and were able to make discriminations on more than job titles. Of the 139 men in the study, 38 or 27% were doing semi-skilled work such

as manufacturing inspector, die cast operator, barber, automatic grinder, punch press operator, sales-stock clerk, or truck driver. Forty, or 29% were in Category VI, or slightly skilled labor such as manufacturing machine operator, janitor-custodian, assembly line worker, etc. Thirty-five or 25% were in unskilled labor such as theater clean-up man, warehouse loader, dishwasher, gas station attendant, etc.

Comparison between School A and the 1964-65 graduates of School B shows that while 2 (7%) of School A graduates are unemployed, all the remainders, or 25 (93%) are in semi-skilled or less skilled occupations, with the median between Category VII and VI. Men of the same age from School B, include 2 (8%) in military service only, 21 (81%) in semi-to unskilled labor, and 3 (11%) in skilled or owner-operator levels. Median occupation for School B increases with length of employment. For recent graduates the median is in the upper quarter of Category VI, those with 3-6 years of experience are between VI and V. The median for those with 7-10 years of experience is in the lower quarter of Category V while the median for those with more than 11 years experience is in Category V, with only one man of the 16 still an unskilled laborer.

There are differences in work opportunity between the two communities, but the indications are that graduates from the integrated program had a slight advantage in work readiness and were able to move up the occupational scale more quickly.

An observation which is of more than passing interest is that graduates of special classes are by no means limited to completely labor type jobs. In fact they are present in the working class categories in approximately the same proportions as the general population.

Opportunities for women were much more limited. Only half, or 28, were employed full time. Jobs included short order cook, elevator operator, retail counter sales, salad girl, laundry worker, etc. One was employed as clerical worker in a government agency with an excellent reputation for efficiency and reliability.

Income:

An easily interpreted measure of job success is dollar income. Two approaches were used, which are slightly different, and tend to corroborate each other while permitting greater flexibility in observation. These are the examination of current weekly income, and the annual income for the previous year. All those who were employed full time at the time of the interview were included in the weekly income tabulation. Only those who were employed full time during the preceding year are included in

the annual income tabulation. Cases in which unusual circumstances (military service, prolonged illness, absence on a training program, etc.) interrupted the income, are not included in the data.

Table 4

Table 4 summarizes the weekly income of male and female graduates for Schools A and B.

Comparison of 1964-65 graduates for Schools A and B shows that while the lowest salaries are similar, graduates of School B may attain a maximum salary double that of School A graduates. The difference of $40-43 in median and mean incomes, favoring School B, is significant in purchasing power. The difference is also statistically significant for both the median ($X^2 = 4.22$, $X^2_{.05} = 3.84$) and the mean ($t = 3.75$, $t_{.02} = 2.02$).

School B graduates of the 1960-65 period have essentially similar ranges, means and medians of income. Male graduates of the preceding years (1952-59) tend to have higher minimum wages (possibly the result of automatic longevity increases) but their maximum is lower. Median income was approximately $118-124 weekly.

The results for female graduates are substantially less optimistic. Initial wages are substantially lower than they are for men, maximum salaries attained are below the median salaries for men and opportunity for advancement, as reflected in salary, is substantially less. While the number is small, -28-, it is evident that there is no real or statistically significant difference either between the graduates of the two kinds of schools, or between recent and earlier graduates of the same school.

Table 5

Table 5 summarizes the annual incomes of those who were employed full time during the year preceding the interview.

The difference between annual income of the 1964-65 male graduates of Schools A and B is statistically significant. School A graduates earned between $2000 and $5300 annually with a median of $3650 and a mean of $3785. Their age-mates from School B earned between $1250 and $12,000 annually. The median of $6250 was $2600 more than the graduates of the separated school and this was statistically ($X^2 = 9.83$, $X^2_{.05} = 3.84$) as well as socially significant. The mean income for School B was $5917 or $2132 more and this difference was also statistically significant ($t = 4.24$, $t_{.05} = 2.02$).

Table 4

Weekly Income (Dollars) of Full-Time Employed Subjects

	Male				Female			
Group	N	Range	Median	Mean	N	Range	Median	Mean
School A Kent (64&65)	23	50-150	94	91.83	7	19.50-72	50	45.14
School B Dbn. (64&65)	24	50-300	134	135.29	13	23-120	50	56.77
School B Dbn. (60-63)	45	20-278	130	129.29	8	40-90	62.50	64.38
School B Dbn. (56-59)	19	75-210	115	118.53	0	-	-	-
School B Dbn. (52-55)	16	60-210	122.50	123.56	0	--	-	-
Total	127	20-300	117	121.31	28	19.50-120	50	56.04

Table 5

Annual Income (dollars) of Full-Time Employed Subjects

Group	Male N	Male Range	Male Median	Male Mean	Female N	Female Range	Female Median	Female Mean
School A (64&65)	24	2000-5300	3650	3785.83	7	780-3200	1400	1875.71
School B (64&65)	23	1250-12000	6250	5917.39	13	1000-5500	2500	2457.69
School B (60-63)	43	800-12000	6240	6144.51	6	2400-4500	4000	3580.00
School B (56-59)	20	3000-9200	5000	5460.00	0	-	-	-
School B (52-55)	16	3380-9000	6350	6208.13	0	-	-	-
Total	126	800-12000	5300	5553.21	26	780-5500	2500	2560.00

Comparison of recent (1964-65) with earlier graduates (1952-63) of School B shows that although medians and means fluctuate they remain above $5000. This is comparable to the median earning of $6267 for the area of School B, reported by the U. S. Census Bureau for 1960.

During the 1960's when this study was initiated and completed, a rapid increase in income occurred; which must be considered when the wages earned by these graduates are evaluated. Comparison of Bureau of the Census (4) figures is useful.

	Median Income 1960	Median Income 1966-67	Median Income 1968
Families in Metropolitan Areas	7,530		9,410
Families in non Metropolitan Areas	5,290		7,340
Median for U.S. families (U.S.Census Bur. 1969)		8,400	
School A males		3,650	
School B males		6,250	
Median income in area of School B	6,267		

Inspection of these figures indicates that School A graduates, who should be compared with non-metropolitan groups are earning substantially less than the median for such groups. Graduates of School B are nearer the median for their area, but allowing for the rapid increase in wages between 1960 and 1966-67, are still below the median for their area.

Perhaps the most striking feature is the presence of annual incomes of $12,000, and many incomes of over $9000. These were primarily the result of overtime earnings. At 1½ times base pay, this accelerates rapidly. Some samples of the kinds of jobs at the different income levels are illustrative:

> "On the job training" began as a junior in high school, where she attended school four hours per day and worked three hours per day as a dishwasher in one of the larger inns. After six months she was moved into housekeeping work at a local hospital and stayed in this for over a year. For the past two years she has worked as an elevator operator at a large bank building in downtown Detroit. Her present income is $3000 per year.

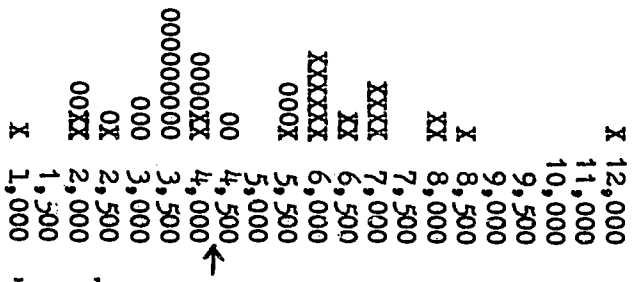
He did his job training as a stock boy for a candy and tobacco company while in school. He worked full time during the summers and after graduation. Two years ago he took a job as a stockman in the parts room of a large automobile plant. He is now a parts inspector for the same company. Present income $6750 per year.

Started as a stock and carry-out boy at a supermarket while in the 10th grade. He was moved to a gas station as a service man for more job training at age 18. After graduation he became a delivery man for a milk company. He bought his own milk route and was successful for two years. An allergy to milk developed, which forced him to sell the route. He invested his money in a gas station. He manages his own station and puts in long hours. His annual income has been over $12,000.

Another approach to the differences between annual or weekly incomes consists of ordering both distributions into one continuous series, computing the median for this combined distribution, then observing the degree of overlap between the two distributions. This is shown in Figure 1 for the 1964-65 graduates.

Figure 1

Distribution of Median Annual Incomes of Male 1964-65 Graduates of Schools A & B



Legend
0 - School A
X - School B
→ - Combined median

Among the recent graduates, 3 from School A and 4 from School B had an annual income of less than $3,000 during 1965-66. However, 16 from School B and none from School A had an annual income of $6,000 or over, during that year.

Because of the small number of cases, evaluation of the data for female graduates did not show a statistically significant difference. However, the 7 full time employed female graduates from School A earned between $780 and $3200, with a median of $1400 and mean of $1875. Their 13 age-mates from School B earned between $1000 and $5500, with median of $2500 and mean of $2457. The 6 graduates from 1960-63 from School B earned between $2400 and $4500, with median of $4000 and mean of $3580. The difference between graduates of the two schools are observable and are significantly disparate in purchasing power. It is also apparent that earning opportunities for females are substantially lower than for males at these age and ability levels.

Job Stability:

One of the allegations frequently made about low ability workers, is that they do not remain in one job. To check this, jobs held since graduation were listed in the interview including dates employed, employer and reason for leaving. In the discussion there was considerable opportunity to cross check this information. While it is possible that certain job changes were not reported or were forgotten, the interviewers felt that the listing was as reliable and accurate as any interview material is likely to be. It was felt that no serious or excessive omissions occurred. Table 6 shows the results of the listings.

Table 6

The difference between Schools A and B, and between different year levels for School B are not statistically significant for either males or females.

It is of interest to note, however, that of the 27 male School A graduates 9 remained on the same job since graduation while 2 changed jobs as many as 4 times. Of the 26 School B graduates, 16 remained on the same job since graduation and 2 changed jobs as many as 3 times.

In general it would appear that the job stability of mentally retarded graduates is satisfactory, with a relatively small proportion changing jobs more than 2 or 3 times in a two year span.

Even during a 10-12 year span, the average graduate changes jobs 2-3 times, with many remaining on the same job in which they were placed on school leaving.

Table 6

Number of Jobs left since High School Graduation

	Male			Female		
	N	Range	Mean	N	Range	Mean
School A (64-65)	27	0-4	1.30	14	0-1	.36
School B (64-65)	26	0-3	.73	15	0-2	.80
School B (60-63)	50	0-5	1.96	20	0-4	1.45
School B (56-59)	20	0-4	1.90	6	0-5	1.67
School B (52-55)	16	0-6	2.13	2	1	1.00
Total	130		1.61	57		1.02

Source of Employment:

In view of the fact that initial placements in both programs were, with rare exceptions, effected through the teachers and counselors, it was of interest to know the sources which were used by the graduates to locate their present (last) jobs.

Table 7

Table 7 shows the distribution of sources of employment according to school and grouping. None of the differences are statistically significant. Some trends and observations are of interest however. Direct application, at least as seen by the respondents, was the most frequently used channel for employment. Forty-one and 42% of recent graduates from both schools reported this as the job source. Earlier graduates increasingly relied on this method of getting jobs. No information was secured regarding the initial source of a suggestion that the graduate might apply at the XYZ Company. In some instances it was known that the way had been prepared for the applicant, though the applicant may well have been unaware of this.

The second largest source was "Other" which included a variety of miscellaneous sources. Among these the state and private employment services played a large part. Three were placed through the state vocational rehabilitation program. Others were referred to jobs by various training programs they had completed, such as barber schools, etc.

A placement source which proved to be more frequently used than was anticipated was described as "relatives." This was consistently true for School B, where 15-20% of present jobs had been secured through the intercession of parents, siblings, uncles, etc. This was a channel used by only 1 graduate of School A. Whether the industrialized milieu of School B made this more important is uncertain. In any event the fact that about 1 in 5 or 6 respondents secured a current job in this way suggests that parents and relatives could be more frequently involved and could be recognized as a placement source. There is, too often, a tendency to ignore this possibility in the belief that the student might resent, or be made dependent by, the assistance of relatives.

The relatively low (3% for males and 7% for females) use or success of want ads as a job source suggests that either the reading skills or interests of these respondents are insufficient for proper use of this channel, or that suitable jobs are less often offered through ads, or that the process of repeated interviews and rejections makes this a difficult way to get a job. It also raises a question as to whether a large amount of time spent on reading and understanding want ads, as preparation for employment, is justified.

Table 7

Sources of Job Placement Contacts for Present Job

Males

	Direct Application		School Placement		Relatives		Want Ads		Other		Unemployed or Unknown	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
School A 64-65	11	41	10	37	1	4	0	0	3	11	2	7
School B 64-65	11	42	6	23	5	19	0	0	4	15	0	
School B 63-60	27	54	2	4	7	14	3	6	10	20	1	2
School B 59-56	7	35	2	10	4	20	0	0	7	35	0	
School B 55-52	8	50	2	13	3	19	0	0	3	19	0	
Total of School B	53	48	12	10	19	17	3	3	24	21	1	1
Grand Total	64	46	22	16	20	14	3	2	27	19	3	3

Females

	Direct Application		School Placement		Relatives		Want Ads		Other		Housewife		Unemployed	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
School A 64-65	2	14	4	29	0	0	1	7	0	0	6	43	1	7
School B 64-65	6	40	3	20	2	13	0	0	3	20	1	7	0	
School B 63-60	4	20	1	5	3	15	0	0	4	20	8	40	0	
School B 59-56	0	0	0	0	0	0	1	17	0		4	67	1	17
School B 55-52	0	0	0	0	0	0	0	0	0		2	100	-	
Grand Total	12	21	8	14	5	9	2	4	7	12	21	37	2	3
% exclusive of housewives		35		24		15		6		20				

There were no statistically significant differences between School A and School B in the manner in which jobs were secured.

Education beyond High School:

When an individual undertakes education beyond high school his choice suggests not only that he has a positive attitude toward schooling, but that he recognizes its importance, feels he can complete it successfully, and has the opportunity to undertake further training. Much of the facilitation toward such a program comes from the attitudes and pressures in the community, though a person can always avoid further education if he wishes. Table 8 shows the number and percentage of the

Table 8

groups who undertook further education.

The students from School B continue training beyond high school substantially more often than do students from School A. The difference is statistically significant for males ($X^2 = 6.38$, $X^2_{.05} = 3.84$) but not for females in spite of the fact that none of the females from School A, and 27% (4 cases) from School B continued some form of education.

The pattern of continued schooling, particularly for the boys, was shown for all groups in School B. Approximately half of the graduates since 1952 have taken further training, many of them over periods of several years.

Specifically, of the 3 persons from School A, two had taken welding courses at Junior College and one took a correspondence course in phonics and reading. For School B 5 took trade training courses in night school, 2 took correspondence courses, 2 took beauty and hair styling courses, 1 became a rigger's apprentice, 1 had mechanics courses in service and 1 took flying lessons. Of the 29 in the 1960-63 group, who took further training, the programs included such fields as general math in night school, generator repair, taxidermy, cabinet making, barber college, business college, art school and a wide variety of trade and craft classes.

It will be increasingly important to encourage graduates of special classes to utilize further training opportunities in the future. There have been many suggestions and considerable empirical evidence that graduates of such classes continue to show intellectual gains and ability to benefit from training substantially beyond the conventional public school years. The

Table 8

Further Education Since High School

Group	Male				Female			
	Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%
School A 64-65	3	11	24	89	0	0	14	100
School B 64-65	12	46	14	54	4	27	11	73
School B 60-63	29	58	21	42	9	45	11	55
School B 55-59	9	45	11	55	2	33	4	66
School B 52-55	8	50	8	50	2	100	0	0
Total B.	58	52	54	48	17	40	26	60

difference between the two groups is socially important. The relatively good income of graduates of School B is substantial evidence of the investment value of further training.

Bank Accounts and Government Bonds:

Among the various indicators of socio-economic stability, such things as planning for the future and the possession of savings or checking accounts and government bonds, can be ranked high. Reference is made to these financial activities in the courses in applied mathematics and to some extent there is opportunity to practise their use while in school. Table 9 shows the extent of the use of these means of handling money by the graduates interviewed.

Table 9

There is a statistically significant difference ($X^2 = 8.20$, sign at .05 level) between the male graduates of Schools A and B in the possession of savings accounts. While 67% of School A males have bank savings, 100% of their age mates from School B do. Previous years graduates also had high proportions of such accounts ranging from 88 to 94% of each group. Female graduates from School B also had proportionally higher numbers of savings accounts of the order of 70% vs. 57%, but this was not statistically significant because of the small number of cases.

Differences between the two groups with regard to checking accounts were not statistically significant. Although about twice as many School B graduates use checking accounts as School A, this form of banking is not particularly popular. Approximately 30% of the total group have checking accounts, although 92% have savings accounts. Even fewer of the female graduates (24%) possess checking accounts.

Government bonds form another kind of regular savings plan and the difference between the graduates of School A and B is statistically significant ($X^2 = 6.93$, signif. at .05 level). Forty-two percent of male 1964-65 graduates of School B hold such bonds, while only 7% of School A. Thirty-seven to 44% of male graduates of School B of previous years also hold bonds indicating this is a fairly popular savings technique. As with checking accounts, about one-third of female graduates purchase bonds. Consistently School B female graduates use more checking accounts and buy bonds, even when the differences do not reach statistical significance.

Table 9

Ownership of Savings Accounts, Checking Accounts, and Government Bonds

	SAVINGS ACCOUNTS								CHECKING ACCOUNTS								GOVERNMENT BONDS							
	MALE				FEMALE				MALE				FEMALE				MALE				FEMALE			
	Yes		No		Yes		No		Yes		No		Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
School A Kent (64&65)	18	67	9	33	8	57	6	43	5	19	22	81	0	0	14	100	2	7	25	93	2	14	12	86
School B Dbn. (64&65)	26	100	0	0	12	80	3	20	8	31	18	69	4	27	11	73	11	42	15	58	1	7	14	93
School B Dbn. (60-63)	44	88	6	12	14	70	6	30	19	38	31	62	10	50	10	50	22	44	28	56	8	40	12	60
School B Dbn. (56-59)	17	90	2	10	3	50	3	50	8	42	11	58	2	33	4	67	7	37	12	63	2	33	4	67
School B Dbn. (52-55)	15	94	1	6	1	50	1	50	9	56	7	44	2	100	0	0	6	37	10	63	1	50	1	50
Total School B	*102	92	9	8	30	70	13	30	44	30	67	60	18	43	24	57	46	41	65	59	12	28	31	72
Total	120		18		38		19		49		89		18		39		48		90		14		43	

* Data missing for 1 School B male

Marital Status:

The marital status of graduates of special classes has been a matter for conjecture and social concern. Data from this study do not support the popular belief that special education students marry early, divorce early, have large families, and furnish pupils for succeeding special classes. Table 10 shows the marital status of the subjects of this study.

Table 10

The immediately evident finding is that, at least in School B, a very high proportion of the male graduates do not marry, even by their mid-thirties. Only 15% of the recent (1964-65) graduates had married by 1966, while half (42-50%) of the men in classes which graduated in previous years had married. Girls from School B, married at average ages of 18.5 - 21.5 years and the percent of the class married, increased with succeeding years. It can be concluded that although the girls eventually marry, they do not tend to marry earlier than the general population. Approximately half of the males from School B are not married by the age of about 35 and the typical age of marriage for the men is in the 22-24 year range. For the general population during this same period, the median age of first marriage was 23 years for males and 20 years for females. (U. S. Bureau of Census)

Comparison between Schools A and B shows a distinctly higher per cent of both males and females from School A have married within two years after graduation (30% of males and 50% of females in School A, vs. 15% of males and 13% of females in School B). Although approaching statistical significance, when considered separately, the number of cases is insufficient for a statistical difference. However, when the sexes are combined for the respective schools, there is a distinct numerical difference (School A 15 married, 25 single, School B 6 married, 34 single) and this is statistically significant ($X^2 = 4.13$, $X^2_{.05} = 3.84$)

While both schools included some elements of family economics (purchasing, budgeting, etc.) and some discussion of interpersonal relationships (dating, getting along in the family, etc.) in their curricula, neither had a specific program oriented to marriage and family life. This distinct difference in marital propensity could perhaps be explained by differences in social opportunity, or by social-cultural pressures. If prior speculation would have occurred, the guess would have been that there was either no difference or that urban graduates would marry earlier and in larger numbers.

Similarly the divorce rate is not high, and is probably no different, if as high, as the general population average. One recent graduate of School A and one from School B had been divorced. One older female graduate and one older male graduate

Table 10

MARITAL STATUS OF SPECIAL CLASS GRADUATES

	MALE							FEMALE						
	MARRIED		AVE. AGE	SINGLE		DIVORCED		MARRIED		AVE. AGE	SINGLE		DIVORCED	
	No.	%		No.	%	No.	%	No.	%		No.	%	No.	%
School A Kent (64-65)	8	30	N.A.	18	67	1	4	7	50	N.A.	7	50	0	
School B Dbn. (64-65)	4	15	20.25	22	85	0	0	2	13	19.0	12	80	1	7
School B Dbn. (60-63)	21	42	21.95	29	58	0	0	11	52	20.36	9	43	1[a]	5
School B Dbn. (56-59)	10	50	22.10	10	50	1[a]		4	67	18.50	2	33	0	
School B Dbn. (52-55)	8	50	24.33	8	50	0		2	100	21.50	0		0	
Total School B	43	38		69	62	1[a]		19	45		23	55		
Total A+B	51	37		87	63	2[b]		26	46		30	54	2[b]	

NA = Not Available
a = 1 divorced & remarried
b = (1 divorced & remarried
(1 divorced & single

of School B had been divorced and both had remarried. Thus of a total of 81 marriages there had been 4 divorces or 5%, with 95% legally intact. The eventual rate will no doubt be higher, as it is with all groups of this age, but up to this point there is no evidence that divorce rates in this group should be a cause for community concern.

Family Size:

The subjects of this study are in the 20-35 year age range, the period of highest family increase. However, children are generally born in the earlier years of marriage and if large families are to occur there should be evidence of this during this period. Table 11 shows the present distribution of family size.

Table 11

From the total of 196 subjects in the study, there are 77 marriages. Of these, 30 had no children at the time of the survey. Forty-seven of the couples had a total of 82 children, or an average of less than two per family. The range was from one to five children. The families are obviously not completed, since all mothers are still well within the child-bearing age. However, inspection of Table 12 suggests that large families are not likely to occur in any great numbers in this group.

Table 12

The recent graduates of both schools are clearly at the beginning of family establishment. In this group one family has two children under 2 years of age, which suggests that this may become a large family. One divorced female has a 6 year old child, but she has not had others. Two families graduating in 1960-63 have more than two children, but the ages of their children suggest that these may be completed families. In the 1956-59 group, five of the 10 families exceed two children and all of these include some children under two years, suggesting that these may be incomplete families. Five of the 8 families from the 1952-55 years exceed two children, and 4 families appear to be incomplete, since there are 4 children under the age of two. At any event, the possibilities for very large families, which theoretically exist for the older graduates, are not being realized. The typical family size is not larger than that found in the general population at these ages, and may possibly be smaller.

Table 11

Distribution of Families having Children, and Number of Children

	MALE GRADUATES		FEMALE GRADUATES	
	Families with children	No. of Children	Families With Children	No. of Children
School A Kent (64-65)	3	3	4	5
School B Dbn. (64&65)	1	1	1	1
School B Dbn. (60-63)	13	13	7	13
School B Dbn. (56-59)	6	13	4	12
School B Dbn. (52-55)	6	18	2	3
Total	29	48	18	34

Table 12

Family size and age distribution

of Children of Special Education Graduates

	Families with Children Number in Family					Ages of Children Years									
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	10
School A Kent (64-65)	6	1				8									
School B Dbn. (64-65)	2					1					1(a)				
School B Dbn. (60-63)	17	1	1	1		14	6	3	3						
School B Dbn. (56-59)	4	1	2	2	1	7	1	2	4	3	4	1	2	1	
School B Dbn. (52-55)	1	2	4	1		3	1	2	4	2		2	4	1	2
Totals	30	5	7	4	1	33	8	7	11	5	5	3	6	2	2

(a) This student had dropped out of school at 18 to be married. She had a child, was later divorced and returned to school at age 24 to be graduated with the class of 1964.

School Progress of Offspring:

Of the 20 children of school age, 18 are in grades appropriate for their ages (5 year olds in K, 6 in 1st grade, etc.) Two are in special classes for the mentally handicapped, constituting 10% of the school age offspring. This figure is substantially higher than the figure for the total population of Community B, which is about 1.5% and suggests that families of special education graduates do indeed contribute a higher ratio to special classes. However, the total number is small, 2 of 20 school age offspring, and further data on the rest of the preschool age children would be needed before this statement can be made with confidence.

Illnesses and Accidents:

One indication of general adjustment, which is frequently included in personality and adjustment surveys, is the frequency and/or severity of complaints of illness or accidents. The question regarding incidence of "serious illnesses or accidents", proved to be variously phrased by the different interviewers. It also appeared that different interviewers were able to elicit greater, or lesser, details regarding these episodes. Review of the data suggested that the results were of dubious reliability, and that statistical analysis of the results was of questionable value. However, recent graduates of both schools make few complaints of ill health, the graduates of School A reporting substantially fewer illnesses and accidents than graduates of School B. When males and females of both schools are combined, there is a statistically significant difference ($X^2 = 4.78$, sign. at .05 level) in favor of School A. The 20-35 year age range generally enjoys good health, and this group appears to be no exception.

It will be of interest to note however, that auto accidents were the leading cause of poor health, with 8 reporting major injuries. Four reported some type of industrial accident, 4 reported broken bones from various causes. Only one had been a patient in a mental hospital. The frequency of appendectomies, allergies, infections, etc. (less than 3 each reported) does not appear to be significant or unusual.

It would appear that the general health of these subjects is normal with a high incidence of major automobile accidents.

Living Facilities:

"How do graduates of Special Classes live in the community?", is a frequent question. Presumably the answer would give some evaluation of the success of special classes in aligning the aspirations of the graduates with what may be regarded as conventional middle class standards. Unfortunately the objective cri-

teria of living standards (e.g. presence or absence of telephone, TV set, etc.) seldom reflect the more subtle aspects of home and environmental quality. Attempts to set guide lines for the interviewers who rated the homes on the basis of their own observations, probably improved the objectivity but did not eliminate personal biases.

It was evident that there were no differences in living arrangements between Schools A and B in the early years after graduation. Approximately 12% were buying their own homes, at an average cost of about $8500. About two-thirds (43-80% of the various categories) were living with their parents or close relatives, the remainder were renting apartments or single rooms. The number and per cent of those who owned their own homes increased with age. Those who remained single tended to be the ones who remained with their parents or rented single rooms.

Table 13

It is also evident that the cost of housing, whether by purchase or rental, increases with the age of the subjects. This suggests both an increase in aspirations and possibly a need for larger quarters as the average size of the families increased.

Ratings of Neighborhood, furnishings and dwelling:

In an attempt to quantify ratings of the general neighborhood and the quality of the interior and exterior of the residence, the following instructions were given the interviewers:

"This is an attempt to quantify the ratings of the socio-economic level of the neighborhood and house. Circle the number which seems most appropriate."

A. General Appearance of Neighborhood

5	4	3	2	1
"Deluxe" area.	Better than average. Homes well kept, lawns, flowers, neat, etc.	Clean, reasonably tidy, "average neighborhood." Minor repairs and improvements might be needed.	Neglected grounds, shabby and un-- attractive. Evidence of need ed repairs	Badly run down neighborhood, "slummy."

B. Interior and Furnishings

5	4	3	2	1
Deluxe, "decorator furnished."	Good taste, clean, orderly, above average quality and amount.	Average, sufficient for needs, not "apple-pie" in order or cleanliness, but average.	Furnishings meager, or untidy, neglected.	Filthy, barren, disorderly, neglected.

Table 13

LIVING FACILITIES

MALE

	OWNS HOME			With Parents or Rel.		RENT HOUSE			RENT APARTMENT			RENT ROOM			OTHER OR NOT REC.	
	No.	%	Ave. Cost	No.	%	No.	%	Per Mo.	No.	%	Ave. Rent mo.	No.	%	Ave. per Mo.	No.	%
School A Kent (64-65)	3	11	8,050	14	52	2	7	NR	3	11	65	3	11	51	2	7
School B Dbn. (64-65)	3	12	11,500	20	77	0	0		1	4	95	2	8	48	0	0
School B Dbn. (60-63)	12	24	13,880	27	54	0	0		6	12	105	2	4	54	3	6
School B Dbn. (56-59)	9	45	14,690	8	40	1	5	60	1	5	90	1	5	60	0	0
School B Dbn. (52-55)	5	31	14,200	7	44	3	19	83	1	6	80	0	0		0	0
Total	32	23		76	55	6	4		12	9		8	6		5	4

FEMALE

	OWNS HOME			WITH PARENTS OR REL.		RENT HOUSE			RENT APARTMENT			RENT ROOM			OTHER OR NOT REC.	
	No.	%	Ave. Cost	No.	%	No.	%	Per Mo.	No.	%	Ave. Rent Mo.	No.	%	Ave. per Mo.	No.	%
School A Kent (64-65)	2	14	8,400	6	43	0	0		5	36	67	0	0		1	7
School B Dbn. (64-65)	1	7	18,500	12	80	0	0		1	7	75	1	7	60	0	0
School B Dbn. (60-63)	7	35	13,790	7	35	0	0		5	25	77	1	5	80	0	0
School B Dbn. (56-59)	2	33	13,000	2	33	1	17	60	1	17	125	0	0		0	0
School B Dbn. (52-55)	2	100	15,000	0	0	0	0		0	0		0	0		0	0
Total	14	25		27	47	1	2		12	21		2	4		1	2

C. Dwelling

5	4	3	2	1
Single family large, and/or large lot.	Single family, or good sized apt., well kept.	Small house, or duplex or apt. with separate entrance and facilities. Good trailer, etc.	Small trailer, small apt. with shared entrance.	Multiple dwelling single room, shared facilities, plumbing, etc.

Ratings of 1 (extremely poor) or 5 (optimum) were rarely given and these were combined with the adjacent categories (2 and 4 respectively) for statistical purposes. In view of the small numbers of females, and the lack of evidence that differences between living arrangements might be sex linked, only the data for males, and for the combined groups is given in Table 14.

Table 14

The data consistently show a statistically significant difference, with poorer home and social milieu of recent graduates characteristic of School A as compared with School B. Besides the high probability that a difference exists in favor of the more urban, higher income graduates who are less often handicapped by early marriage and family responsibilities, other factors should also be considered. These include the possibility that the total standards of Community A are lower as well as the possibility that the interviewers did not use precisely identical criteria for rating, in spite of the scale cues. There was no opportunity for joint training in rating, or comparison of rating standards as was the case for the interviewers from School B. It should also be noted that housing in the general area of school B is substantially more expensive, and there is more community emphasis on attractive maintenance than is the case for most of area A and suburbs adjacent to area B.

Inspection of the original data showed that the homes of older graduates of School B were consistently rated as average or slightly above average. Of the 112 subjects only 3 persons were rated as "5" or very poor in neighborhood and dwelling, and even these were regarded as well furnished and fairly well kept inside the home. Only 9 individuals received ratings of "distinctly below average" (a rating of 2) while twenty were rated as distinctly superior in dwellings. The interviewers were consistently impressed with the evidences of good taste, comfortable living, and general material success which was encountered. The evidences of life success surpassed the expectations of the teachers who had known the students at various stages of their school progress.

Table 14

Ratings of Living Facilities

Appearance of Neighborhood

	MALE			COMBINED MALE & FEMALE		
	Above Ave. (5&4)	Ave. (3&2)	Below Ave. (1)	Above Ave. (5&4)	Ave. (3&2)	Below Ave. (1)
School A 64-65	2	13	12	2	22	17
School B 64-65	9	16	0	14	24	2
			X^2=14.50 sign.at .05 level			X^2=20.97 sign.at .05 level

Interior & Furnishings

School A 64-65	5	11	11	11	17	13
School B 64-65	14	10	1	19	18	3
			X^2=12.76 sign. at .05 level			X^2=8.41 sign. at .05 level

Dwelling

School A 64-65	6	21	x	7	34	x
School B 64-65	14	11	x	24	16	x
			X^2=4.90 sign at X.05-1d.F=3.84			X^2=14.02 sign. at .05 level

(Too few cases with '2' ratings, so they were grouped with "3")

Ownership of Automobile:

In an automobile oriented society such as Michigan, driving and owning a car is both a symbol of adulthood and a practical transportation necessity. Both schools have systematic driver training programs which combine didactic work and practice in handling a car. The same requirements for licensing have to be met as for all citizens, but the cooperation of licensing authorities is available for students with severe reading difficulties. Table 15 shows the number and percent of graduates possessing valid drivers licenses and owning automobiles.

Table 15

It is apparent that driving and owning a car is more important for males than for females and more than three quarters of the male graduates achieve this goal within two years after graduation. The percentage of ownership increases with age. Among the non-drivers are primarily those disqualified by physical conditions such as seizures, severe visual defects, etc. There were no differences in car ownership between School A and School B, though School B had a slightly higher per cent of licensed drivers.

The subjects in this study reported their driving to begin about their senior year in school, or about the time they received their drivers' license. There was no difference in this between the two schools, or between succeeding year groups in School B. Because special education students in School B were often substantially employed by their senior year, they had the means to purchase cars. This opportunity to attain prestige and recognition was seldom lost.

Violations and Accidents:

Among the concerns about the post-school adjustment of special class graduates, is the area of driving safety. Accordingly the subjects were queried regarding tickets for moving violations and involvement in accidents in which the subject was driving a vehicle. Citations for over-parking and similar offenses were excluded. While it is possible that some tickets or accidents were unreported, it was the impression of the interviewers that there was a high degree of candor and that omissions, if any, were likely to involve rather minor episodes. Table 16 shows the number and per cent of driving violations.

Table 16

Table 15

Licensed Drivers and Car Owners

Group	MAIE Licensed Driver Yes No.	%	No No.	%	Own Car No.	%	FEMAIE Licensed Driver Yes No.	%	No No.	%	Own Car No.	%
School A Kent(64-65)	22	81	5	19	21	78	7	50	7	50	6	43
School B Dbn. (64-65)	24	92	2	8	20	77	9	60	6	40	5	33
School B Dbn. (60-63)	46	92	4	8	42	84	12	60	8	40	11	55
School B Dbn. (56-59)	19	95	1	5	18	90	2	33	4	67	2	33
School B Dbn. (52-55)	13	81	3	19	11	69	2	100	0	0	2	100
Total	124	89	15	11	112	81	32	56	25	44	26	46

Table 16

Serious Traffic Tickets and Auto Accidents

	Moving Violations								Auto Accidents							
	MALE				FEMALE				MALE				FEMALE			
	Yes		No		Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
School A Kent (64-65)	16	59	11	41	1	7	13	93	11	41	16	59	51	7	13	93
School B Dbn. (64-65)	9	35	17	65	1	7	14	93	5	19	21	81	0	0	15	100
School B Dbn. (60-63)	22	44	28	56	1	5	19	95	23	46	27	54	4	20	16	80
School B Dbn. (56-59)	7	35	13	65	0	0	6	100	8	40	12	60	1	17	5	83
School B Dbn. (52-55)	2	13	14	88	0	0	2	100	2	13	14	82	0	0	2	100
Total B	40	36	72	64	2	5	41	95	38	34	74	66	5	10	38	90
Grand Total	56	40	83	60	3	5	54	95	49	35	90	65	6	11	51	89

There were no statistically significant differences between either School A or School B, or successive groups in School B. The better driving record of females is true for this group as it is for groups in general as shown by insurance records. Even though not statistically significant there is a trend toward a higher incidence of violations and accidents among males in School A in the two years following graduation. The peak of reported violations and accidents appears to be at the 23-25 year age range, again consistent with insurance experience. It would appear that about one-third of young adult male graduates receive one to 10 or more tickets, and about one-third are involved in fairly major auto accidents.

Among those who did receive tickets, by far the most frequent offense was speeding, followed by tickets for faulty cars, running caution or red lights and excessive noise. These appear to be rather characteristic "youthful driver" offenses and similar data for normal school graduates would be interesting.

The automobile accidents range from minor ones, such as backing into a post, and fender-bending in a parking lot, to major head-on collisions. Most of the accidents of female drivers were "hit by the other driver", suggesting the possibility that there are deficits in reaction time, and failure to anticipate the other drivers maneuvers or a lack of what is sometimes described as "defensive driving."

Police Problems:

Apart from traffic offenses, there was concern over whether major social conflicts with the law might occur with substantial frequency among these graduates.

Among the females only one of the 57 total number encountered police difficulty. She was arrested for breaking a car window, and threatening another girl. Subsequently she was hospitalized for mental illness.

Among the 53 recent male graduates, one from each school was involved. One from School A was arrested for pandering and was institutionalized. One from School B was arrested for illegal purchase of alcoholic beverages, when he complained to the police that the 'teenagers for whom he made the purchase had stolen his money.

Six older graduates have had police contacts. These include one each for gambling, driving without a license, absconding when he refused to pay traffic tickets, theft of cigarettes, non-support of child, and "general nuisance" on the part of a borderline psychotic subject. The remaining 131 male subjects have had no encounters with the law, other than those connected with driving.

Community Participation:

One of the goals of education is to train for "good citizenship." Like many other worthy objectives, no precise definition is available, by which a judgment can be made as to whether the graduates are indeed good citizens. One criterion, is evidence of some kind of participation in worth while community activities, membership in some organized group, or signs of effort in promoting the welfare of others. Of the many possible evidences, three were chosen: membership in some organized group or club, voter registration and church membership and attendance. Membership in a union was tallied separately since it is highly related to certain types of industrial employment.

Clubs:

Table 17 shows the distribution of membership in clubs and organizations.

Table 17

Both the males and the females of School B show a higher proportion of membership in clubs and organizations and this difference is statistically significant. Only 1 woman and 1 man from School A are active whereas 13 men and 8 women from School B participated in clubs. This relatively high degree of participation of graduates from School B is true over the entire period studied.

Of the 22 female graduates who participated in clubs, 10 belonged to social and benevolent organizations affiliated with churches. Five were active in the YWCA, 4 were in bowling leagues and single memberships were reported in a farm club, Girl Scout leader group, PTA room mother, Eastern Star, Union auxiliary and card club.

Of the 48 men who were active in some group, 11 were in bowling leagues (one man was in three leagues), 12 were in church groups, 6 were in fraternal orders (Moose, Elks, Eagles), 7 were in a variety of sports and health clubs, and the remainder in organizations like Knights of Columbus, Senior DeMolays, YMCA, music groups, auto racing clubs, etc. Several listed more than one activity.

While an urban community may offer a wider variety of organized groups, nevertheless the difference is not as great as the participation suggests. Graduates of School B had been encouraged to participate in school and community groups, and the fact that one-third continue some form of group activity, indicates that this emphasis has had a long-term effect. If

Table 17

Membership in Clubs and Organizations

	Male					Female				
	Yes		No			Yes		No		
	No.	%	No.	%		No.	%	No.	%	
School A 1964-5	1	4	26	96	$X^2=12.32$	1	7	13	93)	Fisher test
School B 1964-65	13	50	13	50	$X^2_{.05}=3.84$	8	53	7	47)	
School B 1960-63	15	30	35	70		8	40	12	60	
School B 1956-59	11	55	9	45		3	50	3	50	
School B 1952-55	8	50	8	50		2	100	0	0	

it is accepted that participation of this kind has merit, a segregated school must make special effort to prepare its graduates for participation after leaving school.

Unions:

Participation, or at least membership, in Union activities, is largely influenced by an individual's employment situation.

None of the graduates of School A belonged to a Union. Ten (38%) of the 26 recent male graduates of School B and one of the women, belonged to a Union. None of the older women graduates belonged, but 45% of the men in previous classes from School B belonged to a Union.

As with clubs, the degree of activity is not specified. It was known from the interviews that some were nominal, dues-paying members, while others were very active, spending many hours in various roles in their groups.

Voter Registration:

Table 18 shows the distribution of voter registration for both schools. It is apparent that there is no significant difference between School A and B. A very substantial proportion were still under 21 years at the time of the survey. If the experience with the older groups at School B is any indication, interest in voting does not become marked until the graduates have been out of school more than 5 years. It can be speculated that involvement in school elections, when their own children enter school, may be a factor. In School B, at least, there is a high level of interest in such elections and parents are encouraged to vote.

Table 18

Church Membership:

Another indicator of social stability in the community is membership in a church and participation in its services. Table 19 shows the distribution for this group.

Recent graduates of School B are church members substantially more often than are graduates of School A and this difference is statistically significant (X^2=6.13, X^2=2.84). Of those who belong, the proportion for regular church attendance is approximately the same for both Schools. The relatively high level of membership is true for all groups from School B. Degree ofactivity is substantially less for the older groups, and

Table 19

Table 18

REGISTERED VOTERS

	MAIE			FEMAIE		
	Yes	No	Not old Enough	Yes	No	Not old Enough
School A Kent (64-65)	4	11	12	1	7	6
School B Dbn. (64-65)	4	11	11	2	1	12
School B Dbn. (60-63)	24	26	0	13	7	
School B Dbn. (56-59)	14	6	0	5	1	
School B Dbn. (52-55)	14	2	0	2	0	
Total	60	56	23	23	16	18

Table 19

DISTRIBUTION OF CHURCH MEMBERSHIP AND PARTICIPATION

	Belong to Church								Attend Regularly							
	MAIE				FEMAIE				MAIE				FEMAIE			
	Yes		No		Yes		No		Yes		No		Yes		No	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
School A Kent (64-65)	16	59	11	41	9	64	5	36	13	81	3	19	7	78	2	22
School B Dbn. (64-65)	24	92	2	8	12	80	3	20	18	75	6	25	9	75	3	25
School B Dbn. (60-63)	39	78	11	22	18	90	2	10	22	56	17	44	12	67	6	33
School B Dbn. (56-59)	17	85	3	15	6	100	0	0	8	47	9	53	4	67	2	33
School B Dbn. (52-55)	16	100	0	0	2	100	0	0	11	69	5	31	1	50	1	50
B Total	96	86	16	14	38	88	5	12	59	61	37	39	26	68	12	32
Grand Total	112	81	27	19	47	82	10	18	72	64	40	36	33	70	14	30

only half to two-thirds of members attend regularly. While no comparable figures for the general population are available, observation of church attendance as compared with membership figures would suggest that special education graduates do not differ from other citizens in this respect. It can be inferred that encouragement to participate in group activities has some carry over to church membership, but that degree of activity is influenced by other factors.

Military Service:

Still another indicator of community adjustment is found in the military service record of the men. Persons who are clearly unsuited for service, or for whom potential adjustment difficulties are predicted, are likely not to be accepted for service. While recent graduates of both schools are still within the draftable age range, some differences appear in the distribution shown in Table 20.

Table 20

Of the total 33 from School B who have seen military service, 22 have been honorably discharged, 6 were in service at the time of the survey, 4 had medical discharges and 1 was released because of family hardship. Duration of service was for the usual period of enlistment or draft, up to one 10 year period of service. Maximum ranks attained included 4 corporals, 2 sergeants, 6 Spec. 4, 1 machinist mate, 1 boatswain's mate, 5 PFC and the rest seamen, apprentices, etc. Medical discharges include the onset of epilepsy, not known while he was in school, and one Section 8 discharge of a subject who had been a borderline psychotic for some years. Interestingly enough he remained in service for two years, had an excellent record the first year, but gradually disintegrated as the pressure in an overseas assignment increased.

Retrospective Impressions of School:

The interview was closed with a somewhat open-end discussion of the subjects' attitudes toward and impressions about his education. This served as an opportunity for relaxation after the more detailed and objective questions. It was also hoped that some helpful suggestions could be derived. It proved to be extremely difficult to quantify the replies or to gain more than a general impression. Many of the replies were vague and general, reflecting the respondents' meager language skills and limited concept and abstract thinking. While the interviewers occasionally found this section interesting, more often replies were so sparse that there was a high risk that the inter-

Table 20

MILITARY SERVICE

	No		Yes		
	No.	%	No.	%	
School A 64-65	27	100	0	0	
School B 64-65	22	85	4	15	(3 hon. disch. 1 in service)
School B 60-63	30	66	20	40	(11 hon. disch. 4 med. disch. 5 in service)
School B 56-59	15	75	5	25	(4 hon. disch. 1 hardship disch.)
School B 52-55	12	75	4	25	(4 hon. disch.)
School B Total	79	71	33	29	
Grand Total	106	76	33	24	

viewer influenced the question. Valuable as such information on attitudes could be, some other techniques or device will need to be developed to secure it on an objective basis.

Summary:

Out of a pool of 216 graduates of special classes for the mentally handicapped, it was possible to interview 196 or 91%. Of these 41 graduated from 'separate' program and 41 from an 'integrated' program in 1964 and 1965. The remaining 114 graduated from the integrated program between 1952 and 1963.

The basic comparison between the recent graduates of the two types of programs shows findings as follows:

1. The attendance record of males in School B is better than that of males in School A.

2. The observable difference in full time employment of males between School A (85%) and School B (100%) is not statistically significant.

3. The occupational level of graduates from School B is higher than that of graduates from School A, but in both groups there is a similar distribution of employment in the semi-skilled, slightly skilled and unskilled occupations. The rate of employment for both groups is as good as or slightly better than the rate for adult males in general.

4. Graduates of School B earn significantly higher wages. Recent male graduates of School A earn an average of $92 per week, and $3786 per year. Male graduates of School B earn an average of $134 per week and $5917 per year. Incomes of graduates from School B are consistently higher, with higher maximums and are comparable to the range and median income for their community.

5. Female graduates earn consistently lower wages than males, but the difference is not statistically significant between School A (average weekly $45, annual $1875) and School B (average weekly $56, annual $2458).

6. There was no significant difference between job stability of graduates from Schools A and B. Median job changes for both groups were 1 for the period since graduation.

7. There were no differences in the methods by which present jobs were reported to have been secured. "Direct application" was most frequent, with placement agencies and relatives next. Want ads were reported as leading to jobs infrequently.

8. Graduates of School B continue to get some form of training significantly more often than graduates of School A and this trend is evident in graduates of preceding years. Approximately half from School B secure some type of post-high school education, while only about 10% of School A did so.

9. Male graduates of School B possess savings accounts (100%) and purchase government bonds (42%) significantly more often than their peers from School A (67% and 7% respectively).

10. Graduates of School A marry earlier and in larger numbers (30% of males, 50% of females) than graduates of School B (15% of males, 13% of females), within 2 years after graduation.

11. Half of males graduating from School B remain single at least as late as their mid-thirties.

12. The rate of divorce for both groups is less than 4% of recorded marriages.

13. Of the 196 subjects, there are 77 marriages, 30 of them without children at the time of the interview. Forty-seven couples had a total of 82 children. Family size ranged from 1 to 5 children.

14. While 18 (90%) of the school age offspring of special class graduates are in regular grades, 2 (10%) are in special classes for the mentally handicapped.

15. Graduates of School A reported significantly fewer illnesses than School B. Injuries from auto accidents among males were the most frequent reported causes of illness.

16. There were no differences in living arrangements between graduates of Schools A and B. Approximately 12% were purchasing their own homes within two years after graduation.

17. The quality of the neighborhood, interior furnishings and exterior of the dwelling, was rated as significantly higher for graduates of School B than School A.

18. Over 75% of both groups of males owned cars within two years after graduation and 80-90% had drivers licenses. There was no difference between schools, or between successive classes in the same school in this regard.

19. Of the 196 interviewees only 1 female and 8 males have had encounters with the police, including graduates from the entire 1952-1965 period.

20. Graduates from School B were significantly more often members of clubs and organizations (50-53%) than graduates of School A (4-7%).

21. A distinctly higher proportion of men from School B had membership in unions (38%) than from School A (0%).

22. A significantly higher proportion of graduates of School B report church membership than School A but the proportion of regular attenders is approximately the same in both groups.

23. A significantly higher per cent of recent graduates of School B (15%) were in military service than School A (0%).

In addition, the following observations are made, not at a statistically significant level, but on the basis of differences which may have some social and educational implications.

1. The attendance of girls in special classes is not as regular as that of boys.

2. The graduates of an integrated program tended to have fewer job changes than those from a segregated program.

3. The frequency with which relatives were mentioned as instrumental in securing jobs, suggests this is a resource which can be developed further.

4. Savings accounts are the most popular form of bank usage, with over 90% of all School B graduates possessing accounts. Approximately one-third of School B graduates use checking accounts and about one-third purchase government savings bonds. School A graduates, both male and female, make use of these forms of financial planning substantially less often.

5. There is no evidence of a high proportion of large families, and during the 20-35 age period the average family size of 2 children was no higher, and is possibly smaller than that for the general population.

6. There are very few homes of special education graduates which are rated as "very poor" or "distinctly below average" with regard to neighborhood, interior cleanliness and arrangement and appearance of the home.

7. Fewer women graduates than men own cars or have driver licenses, or sustain accidents. Their driving records are consistently better than for the men.

8. Although the difference is not statistically significant there was an appreciably higher number and per cent of traffic violations and automobile accidents among male graduates of School A (59% violation, 41% accidents) than of School B (35% violations, 19% accidents).

9. There are no significant differences in voter registration, with nearly half of the recent graduates still under voting age.

10. Graduates of special classes are not limited to unskilled labor, but are to be found at all levels of moderately skilled employment. While there is a tendency for graduates with IQ's above 90 to constitute about half of those in skilled technical and managerial levels, two-thirds of those with IQ's above 90 are still to be found in the lower 3 occupational categories. Half of those graduates in Category III have IQ's less than 90. While a high test score represents an advantage, it is not assurance of occupational success, nor does the possession of a lower test score preclude success in middle socio-economic occupations. Identifying the differentiating factor would be a major contribution to the education and guidance of students who cannot cope with an academic program.

Conclusion:

The major differences can be summarized as follows: Graduates of School B (an integrated program) had a better school attendance record, more frequently held full time jobs and at a

higher occupational level, earned more money, were more likely to seek further education, manage their money with greater prudence, marry later or remain single more often, have better homes and take part in more community activities than their peers from School A (a segregated program).

To the extent that the values implied by these trends are accepted as preferable, the program with which they are associated would be preferred. If these values are to be achieved, it may mean that special efforts will have to be made by any segregated program to acquaint its graduates with job requirements, needs for further education, etc. This study does not rule out the possibility that a 'separated' program may have subtle, long range benefits which were for some reason not reflected in this study.

In any event the present findings, even when restricted to objectively verifiable facts (income, further education, age at marriage, number of children, etc.) suggest that very careful consideration be given to the arguments for an integrated program. Since the programs in this study may have some unique characteristics, replication of this study in other communities would be desirable.

References:

1. Readers Digest Almanac, 1966, U. S. Bureau of Census and U. S. Public Health Service data on marriage and divorce rates. Pleasantville, New York

2. Siegel, Sidney Nonparametric Statistics For the behavioral Sciences. New York: McGraw-Hill, 1956.

3. Taussig, F.W. Principles of Economics Vol. II, New York: Macmillan, 1921

4. U. S. Bureau of the Census: Trends in Social and Economic Conditions in Metropolitan and Non-Metropolitan Areas Series P. 23, No. 33, U. S. Government Printing Office, Washington, D. C. 20402

Kent-Dearborn
High School Spec. Ed.
Follow-Up Study
5/66

Supplementary Instructions to Interviewers

Record as much information as possible on the interview forms. Information can always be tabulated appropriately, but there is nothing that can be done with information which is omitted. If more space is needed, make a note and include the information in "Comments".

Trial runs of the questionnaire have suggested the following items:

On the face sheet, all the spaces should be filled in except the Code Number.

The interviewer should ask about attendance record and graduate-dropout status, but these statements should be checked for accuracy in the school records.

In Question 3, if the interviewee is a housewife, record this and also record the husband's occupation and income. If the interviewee is married and both persons work, record this and also record the spouse's occupation and income in the space between Questions 3 and 4.

In Question 4, record the most recent job first and list jobs in chronological order from most recent to the interviewee's first job. Make a check mark to note those jobs which were held under school supervision. Record employer and reason for leaving.

In Question 14, if the interviewee belongs to some clubs, or unions, how active is he?

In Question 16, if the interviewee belongs to a church (identifies with religion), but does not attend services, record this information.

In Questions 18 through 20, try to record the interviewee's comments word for word. Avoid leading questions, encouragement, or prompting that could result in biased responses in these sections.

Kent-Dearborn
High School Spec. Ed.
Follow-Up Study
5/66

Interviewer: _____

Date of Interview: _____

Code Number: _____

FOLLOW-UP INTERVIEW RECORD

_____ (Name) _____ (Birthdate)

_____ (Address) _____ (Telephone)

_____ (School)

☐ Graduate (Year) _____ ☐ Drop-out (Year) _____ Grade _____ Age _____

Reason for drop-out: _____

ATTENDANCE RECORD

☐ regular, rare absences

☐ regular, less than 5 days absent per semester

☐ fair, 10-20 half-days absent per semester

☐ poor, 20+ half-days absent per semester

Suggested Introduction for Interviewers -

We are interested in improving our high school program. Your opinions will be valuable in helping us make necessary improvements. Your answers to the following questions will be looked at only by your former teachers. When you answer these questions it is important that you answer them carefully and honestly.

1. Present employment status:

- ☐ employed full-time
- ☐ employed part-time
- ☐ unemployed
- ☐ housewife
- ☐ service
- ☐ other (explain)

2. How did you get your present job?

- ☐ direct application
- ☐ school placement
- ☐ relatives
- ☐ want ads
- ☐ other (explain)

3. If employed:

Where employed _____

Type of job: _____

Last years income: _____ Current weekly income: _____

4. List all jobs held since high school.

DATES	JOBS	EMPLOYER	REASON FOR LEAVING

5. Have you received any further education since you left high school?

- ☐ correspondence school
- ☐ night school
- ☐ trade school
- ☐ other (explain)

6. Have you had any serious illnesses or accidents?

☐ illness - type_____

☐ accidents - type_____

7. Marital status:

☐ single ☐ divorced or separated (date)_____

☐ married ☐ previous marriages (date)_____
age at marriage_____ duration_____

List children's names, ages and school grade:

NAME	AGE	SCHOOL GRADE

8. Living facilities:

☐ owns own home
est. cost_____

☐ lives with parents

☐ house
☐ apartment } rented
☐ room

Monthly rate
_____

9. This is an attempt to qualify the ratings of the socio-economic level of the neighood and house. Circle the number which seems most appropriate.

A. General Appearance of Neighborhood

5	4	3	2	1
"Deluxe" area.	Better than average. Homes well kept, lawns, flowers, neat, etc.	Clean, reasonably tidy, "average neighborhood". Minor repairs and improvements might be needed.	Neglected grounds, shabby and unattractive. Evidence of needed repairs.	Badly run down neighborhood, "slummy".

B. Interior and Furnishings

5	4	3	2	1
Deluxe, "decorator furnished".	Good taste, clean, orderly, above average quality and amount.	Average, sufficient for needs, not "apple-pie" in order or cleanliness, but average.	Furnishings meager, or untidy, neglected.	Filthy, barren, disorderly, neglected.

C. Dwelling

5	4	3	2	1
Single family large, and/or large lot.	Single family, small or good sized apt., well kept.	Small house, or duplex or apt. with separate entrance and facilities. Good trailer, etc.	Small trailer, small apt. with shared entrance.	Multiple dwelling single room, shared facilities, plumbing, etc.

10. Bank account:

savings account	☐ yes	☐ no
checking account	☐ yes	☐ no
government bonds	☐ yes	☐ no

11. Do you drive? ☐ yes ☐ no Car owned: Model_____

Years of driving:_____ Year_____

12. Have you had any serious driving tickets or accidents?

Number of tickets:_____ Describe briefly:_____

_____

_____

Number of accidents:_____ Describe briefly:_____

_____

_____

13. Since leaving school have you been in any trouble that involved the police?

☐ Serious or frequent trouble - describe briefly:_____

_____

_____

☐ Minor trouble - describe briefly:_____

_____

_____

☐ No trouble.

14. Do you belong to any clubs or organizations? List of Clubs, etc.:_____

_____

_____

_____

_____

15. Are you registered to vote? ☐ yes ☐ no ☐ not old enough

16. Do you belong to a church? ☐ yes ☐ no

Attend regularly? ☐ yes ☐ no

17. Have you been in military service? ☐ yes ☐ no

Draft classification:_____ Rank on separation:_____

Length of service:_____ Kind of separation or discharge:_____

18. a. How much does your high school training help you in your present job?

_____

_____

_____

_____

b. How useful was the on-the-job training you received in high school?

_____

_____

_____

_____

c. How useful was your school training?_____

_____

_____

_____

_____

d. How satisfied are you with present job?_____

_____

_____

_____

e. What are future job plans?_____

_____

_____

19. What are your hobbies?

What do you do for fun?

What do you do when you are on vacation from work?

20. a. What are your feelings about your high school experience?

b. What problems were created by being in special class?

c. What were the best things about the high school program?

d. What things would you change?

e. What suggestions for improvement of program?

21. Comments: