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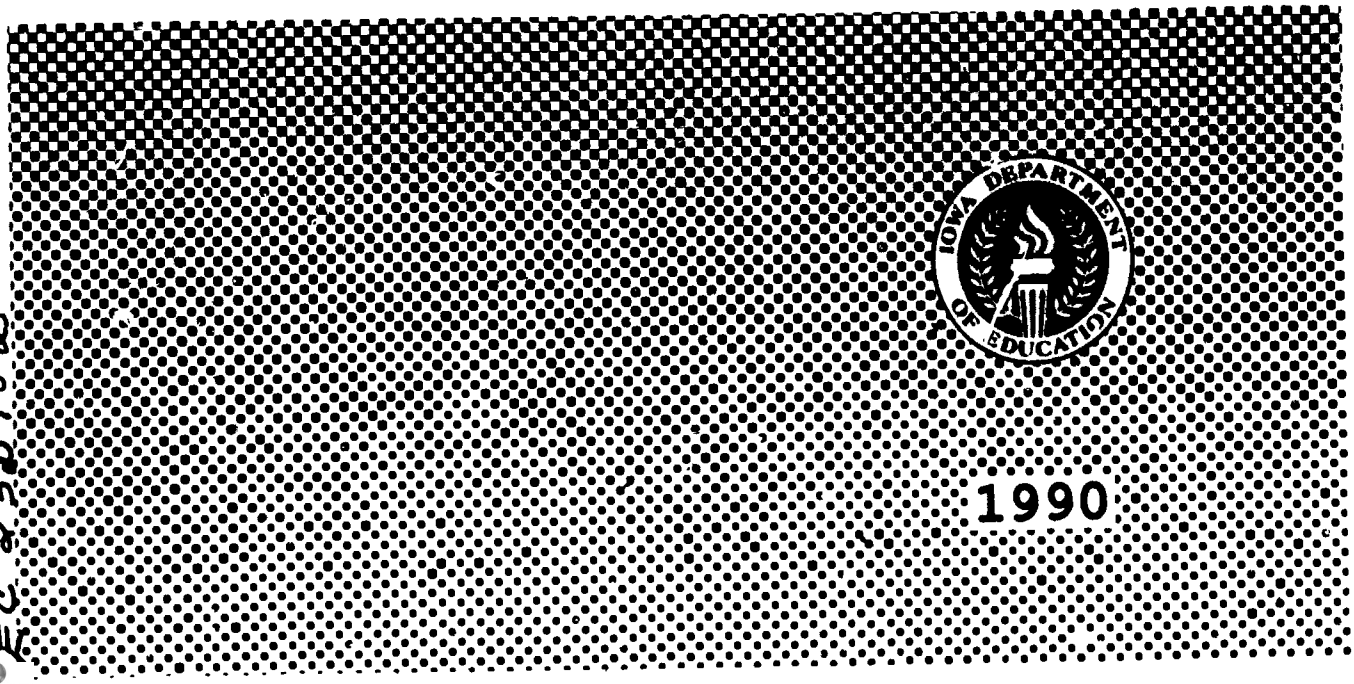
ABSTRACT

This study investigated the adult adjustment one year after leaving school of 130 individuals with behavioral disorders who graduated from Iowa special education programs in 1985 and 1986; the adult adjustment of 70 dropouts was also investigated. Adjustment areas examined included: living arrangements, leisure activities, mechanisms used to cope with personal problems, difficulties with law enforcement agencies, percent employed, location of employment, hours worked, wages, status of job, and fringe benefits. Employed versus unemployed individuals are compared in terms of gender, type of vocational training received in high school, paid employment during high school and individuals' ratings of the usefulness of their high school experiences. Results are reported separately for graduates and dropouts and for students in resource teacher programs versus the more restrictive program models of special class with integration, special clars with little integration, and self-contained special class. Among findings was that only about one-third of the graduates and one-quarter of the dropouts were judged to have made a satisfactory adjustment. About one-quarter of the graduates and one-half of the dropouts were neither employed nor a homemaker nor in a training program. Far fewer females than males were employed. Contains 18 references. (DB)

Iowa Statewide Follow-up Study

Adult Adjustment of Individuals with Behavior Disorders One Year after Leaving School



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Iowa Statewide Follow-up Study:

Adult Adjustment of Individuals with Behavior Disorders

One Year after Leaving School

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Preface

This monograph is one product of the Iowa Statewide Follow-up Study. Monographs have been developed, or are currently being completed, on the other major disability groups. An Action Group of the Iowa Statewide Follow-up Study Task Force has also been formed to draft specific programming recommendations based upon the data collected.

The follow-up study is a five-year project funded by the Iowa Department of Education, Bureau of Special Education, using EHA Part B discretionary funds. The purpose of this project is to determine the adult adjustment of special education graduates and dropouts (of all disabilities and program models) throughout the state of Iowa. The Iowa Statewide Follow-up Study is a joint effort of the Bureau of Special Education, Iowa Department of Education; the 15 Area Education Agencies in Iowa; Des Moines Public Schools; Iowa Braille and Sight Saving School; and the Division of Special Education, University of Iowa.

We gratefully acknowledge Merry Maitre, who originated the Iowa Statewide Follow-up Study; Dr. Timothy Z. Keith, who helped refine the data gathering procedures; Valerie Cool and Linda Cooper, who served as research associates for the project; and the Special Education Directors, Task Force members, and interviewers, who made the project a success. We also thank the individuals with disabilities who generously shared their stories and experiences with us.

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Abstract

This study investigated the adult adjustment one year after leaving school of 130 individuals with behavioral disorders who had been graduated from special education programs throughout the state of Iowa in the Classes of 1985 and 1986; the adult adjustment of 70 dropouts from these same classes were also interviewed. General adjustment areas investigated included: living arrangements, leisure activities, mechanisms used to cope with personal problems, and difficulties with law enforcement agencies. Percent employed, location of employment, hours worked, wages, status of job, fringe benefits, and source of help in finding a job are also reported. Employed versus unemployed individuals are compared in terms of gender, type of vocational training received in high school, and paid employment during high school. Individuals were also asked to rate their high school experiences relative to their usefulness in preparing them for various facets of adult life. All results are reported separately for graduates and dropouts and for students in resource teacher programs versus the more restrictive program models of special class with integration, special class with little integration, and self-contained special class.

Iowa Statewide Follow-up Study:

Adult Adjustment of Individuals with Behavior Disorders

One Year after Leaving School

Professionals have repeatedly called for research which will help define factors that contribute to the employment status and adult adjustment of individuals with mild handicaps (Bellamy, 1985; Fardig, Algozzine, Schwartz, Hensel, & Westling, 1985; Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985). Though research has addressed outcomes for individuals labelled mentally retarded (e.g., Frank, Sitlington, Cooper, & Cool, in press; Hasazi, Gordon, Roe, Hull, Finck, & Salembier, 1985; Stanfield, 1973) and learning disabled (Horn, O'Connell, & Vitulano, 1983; Schalock, Wolzen, Ross, Elliott, Werbel, & Peterson, 1986; Sitlington & Frank, in press; White, Schumaker, Warner, Alley, & Deshler, 1980) few studies have specifically analyzed the postschool status of individuals labelled behaviorally disordered while in school (Edgar & Levine, 1987; Neel, Meadows, Levine, & Edgar, 1988).

Recent research on postsecondary outcomes for individuals with mild disabilities has focused on similar types of variables and has included an analysis of some combination of the following areas: employment status, academic experiences, use of social service agencies, living arrangements, and participation in social activities (Clark, Hayden. & Lezzer, 1987; Fardig et al., 1985; Halpern & Benz, 1987; Hasazi, Gordon, & Roe, 1985; Mithaug et al., 1985). Fardig et al. (1985) reported that 69% of their sample completed high school, that over half of their subjects had been employed at least 50% of the time since leaving school, and that the best predictor of postschool adjustment was the highest completed grade. Hasazi, Gordon, & Roe (1985) also reported that over half of their sample was employed. They found that paid

part-time and summer jobs were good predictors of postschool employment; mixed results were obtained concerning participation in high school vocational programs. Mithaug et al. (1985) reported that almost 70% of their sample were employed primarily in part-time jobs which the students had found independently. Earnings of this group were reported to be at a marginal level and the number of social activities engaged in by the subjects was extremely low.

A major limitation of previous research is the small number of studies that have included individuals with behavioral disorders or analyzed their data separately for this group. Only two students labelled emotionally handicapped were included in the Fardig et al. (1985) study of 113 former students with mild disabilities. Hasazi, Gordon, & Roe (1985) reported on 296 resource students within their total sample of 462. Those students had received educational services in a resource room program and included students identified as learning disabled, emotionally disturbed, and mildly mentally retarded. However, their presentation of the research results by program model, rather than by disability, made an independent analysis of emotionally disturbed students impossible. Mithaug et al. (1985) concluded that underrepresentation of the group with emotional/behavioral disorders in their study was due to an unwillingness on the part of these former special education students to cooperate.

Recently, one strand of research has been conducted on individuals labelled behaviorally disordered. Neel et al. (1988) have presented data on 160 former students with behavioral disorders who were graduated from schools in the state of Washington between 1978 and 1986. Analysis of the results showed that: (a) less than one-fifth of the persons with behavioral disorders had been involved in postsecondary training programs in comparison to almost

one-half of the nonhandicapped sample; (b) the group with behavioral disorders was earning higher wages than the nonhandicapped group, in part due to the fact that a large number of the nonhandicapped cohort worked only part-time while attending school; (c) the group with behavioral disorders was three times more likely to be unemployed than the national unemployment level for people their age; (d) twice as many persons with behavioral disorders compared to nonhandicapped peers earned less than $50 per week; (e) individuals with behavioral disorders were not using social service agencies; (f) at the time of the study, almost one-third of the sample of individuals with behavioral disorders were not involved in any job or training program; and (g) one-third of the parents of persons with behavioral disorders were dissatisfied with the help that school provided to their children and were also not satisfied with the jobs obtained by their children. Neel et al. (1988) concluded that there is a need for further research to provide the information necessary for analysis of current programs and development of improved services for students with behavioral disorders. They specifically pointed to the need for longitudinal studies of persons with behavioral disorders.

In a related report from the same investigation, Edgar and Levine (1987) reported on a cohort of 52 students with behavioral disorders interviewed at six-month intervals following graduation from high school. Results showed that 55% of the group were employed 6 months after graduation, dropping to 49% 24 months after graduation. Twenty percent of the students were earning minimum wage or better at the six-month interview, but that figure declined to 0% by the 24-month interview. Subjects also reported decreased participation in postsecondary training programs, declining from a program attendance rate of 23% of the students at 6 months to 20% at 24 months after graduation. Conversely, the number of students who were not engaged in meaningful

activities rose from 10% at 6 months to 30% at 24 months after leaving school. While the number of individuals with other types of disabilities who were living independently increased over time, the proportions of individuals labelled behaviorally disordered fell from 30% to 10% during the same time period.

Both the Neel et al. (1988) and Edgar and Levine (1987) studies reported information solely on BD graduates. Also, other researchers either did not include a cohort of dropouts within their studies (e.g., Mithaug et al., 1985), or did not report their findings in a manner that allowed for an independent analysis of dropouts (e.g., Fardig et al., 1985). Apparently, no recently published research has analyzed a specific group of students labelled behaviorally disordered who dropped out of school before graduation. The high dropout rate of individuals with behavioral disorders makes it both important and more difficult to obtain information on their postsecondary adjustment. It is possible that information on the dropout population differs from the data obtained on students labelled behaviorally disordered who graduated from high school (Neel et al., 1988).

The present investigation was a component of the Iowa Statewide Follow-up Study, which is a five year project designed to determine the adult adjustment of a random sample of 50% of the graduates and dropouts (of all disabilities and program models) from throughout the state of Iowa. Variables investigated in this study include: (a) general adult status (e.g., marital status, leisure activities, living situation); (b) employment variables (e.g., percent employed, location and classification of jobs, wages); (c) types of vocational training at secondary and postsecondary levels; and (d) perceptions concerning selected aspects of their high school experiences.

Method

Subjects

The sample for this investigation was a merged data set from two separate classes (Class of 1985 and Class of 1986), each surveyed one year after their class was scheduled to be graduated. Each of the fifteen Area Education Agencies (AEAs) in the state of Iowa prepared a list of special education students (all exceptionalities) who were graduated from, or "aged out" of, high school at the end of each target year; a similar list was prepared of all special education dropouts who would have completed high school at the end of each target year. For each AEA, 50% of the students on each list (graduates and dropouts) were randomly selected for inclusion in the sample each target year.

School records of individuals in the sample were examined to obtain relevant information, including each student's primary disability label and program model at the time of exit from school, as well as type of vocational program(s) in which they were enrolled. Of the total sample of 2,476 former special education students, 293 had been identified as behaviorally disordered (BD) while in school and 204 of these students were actually interviewed during the course of the present study. Four of these individuals were excluded from this analysis because they received only supplemental assistance or were in institutional settings. Thus, the total number of individuals included in the analyses reported here was $N = 200$ (68% of the BD sample drawn; 75% of the graduates, 62% of the dropouts). Of the 89 individuals not interviewed, 1% were deceased, 34% had moved out of town and could not be located, and 17% refused to be interviewed. None of the remaining persons were located in jail, in the military, or in an institution; no information was available for 12% and other reasons for no interview were given for 36%.

When reasons for not being interviewed were examined by graduation status (graduates versus dropouts), the proportions remained quite similar.

Relevant data for individuals who were graduated from special education programs (n = 130) are presented in Table 1. Table 2 contains relevant information concerning individuals who dropped out of special education programs during senior high school prior to graduation (n = 70). Program model in both tables is used synonymously with type of special education instructional model attended by individuals while in high school. In programs designated resource teacher programs (RTP), students were placed for a minimal average of thirty minutes per day; these students attended regular classes for the remainder of each school day. In the special classes with integration model (SCIN), students attended special classes for the majority of the school day, while participating in the general education curriculum in one or more academic subjects. Students in special classes with little integration (SCIN-L) were integrated into regular classes for limited participation. Students in self-contained special classes (SSC) received all of their instruction from a special education teacher. t- tests revealed that differences between the mean math scores for graduates and dropouts of RTP programs were significantly different from mean math scores of individuals in each of the three types of special classes at the .05 level of probability. This was also true for mean reading scores. There were no significant differences, however, between the mean reading and math scores of the individuals in the three types of special classes. For this reason, and given the relatively small number of individuals involved in the more restrictive program models, all special class students were collapsed into one group referred to as Special Class persons in the analyses reported in this monograph.

Table 1

Selected characteristics of sample prior to graduation (Graduates)

Variable	Total Group	Program Model: RTP	Program Model: Special Classes
Gender	(n = 130)	(n = 59)	(n = 71)
% Male	72.3	76.3	69.0
% Female	27.7	23.7	31.0
Full Scale IQ	(n = 118)	(n = 54)	(n = 64)
M	92.97	96.41	90.06
SD	13.77	12.27	14.38
Academic Achievement			
Math G.E.	(n = 126)	(n = 56)	(n = 70)
M	7.05	7.85	6.41
SD	2.52	2.59	2.29
Reading G.E.	(n = 127)	(n = 58)	(n = 69)
M	7.88	8.59	7.29
SD	2.63	2.26	2.79

Table 2

Selected characteristics of sample prior to graduation (Dropouts)

Variable	Total Group	Program Model: RTP	Program Model: Special Classes
Gender	(n = 70)	(n = 25)	(n = 45)
% Male	67.1	64.0	68.9
% Female	32.9	36.0	31.1
Full Scale IQ	(n = 65)	(n = 23)	(n = 42)
M	91.95	91.83	92.02
SD	12.55	9.20	14.16
Academic Achievement			
Math G.E.	(n = 65)	(n = 22)	(n = 43)
M	6.50	7.76	5.85
SD	2.52	2.70	2.19
Reading G.E.	(n = 66)	(n = 23)	(n = 43)
M	7.05	8.64	6.21
SD	2.80	2.69	2.49

Instrumentation

The survey instrument used in this study was developed by project staff in conjunction with a task force of representatives of the 15 AEAs in the state of Iowa, the largest public school district in the state, and the state schools and correctional facilities. This task force identified the content areas to be covered in the interview form, based on previous follow-up studies conducted in other states and on other categories of information task force members felt would be useful in making programming decisions in their AEAs.

The survey form was piloted on a random sample of 878 subjects from throughout the state. The initial form contained a number of open-ended items; the most common responses to these items were incorporated into response choices for the revised instrument used in the current study. In addition, interviewer and coder comments were used to further refine questions which seemed to cause problems in interpretation.

The survey instrument was designed to provide the following types of information: background information about students (e.g., test scores from high school, disability label, instructional program model); information pertaining to their high school programs (e.g., number of regular and special vocational education courses taken, extracurricular activities); evaluations of their school experiences (e.g., "Did your school experiences help you to keep a job?"); information about current life circumstances (e.g., marital status, living arrangements, leisure activities); and information on past and current employment (e.g., job experiences during high school, location of current job, salary, hours worked per week).

Procedure

Interviews were conducted by professionals such as work experience coordinators, consultants, school psychologists, and teachers from the

students' school district or AEA. These paid interviewers were trained and supervised by the task force member from their respective AEA. In addition, an in-depth interviewer handbook and sample interview forms were developed by project staff, and interviewers also participated in one of several one-hour training sessions using these documents to insure consistency across interviewers. The project director was also on call to answer any general or specific questions arising from actual interviews. Interviewers were instructed to conduct a face-to-face interview with each former student, if possible. If the student could not be contacted either in person or by telephone, an individual such as a parent, spouse or sibling was interviewed. Of the 200 interviews analyzed in this study, 44% were face-to-face with the former student, 22% were by telephone with the former student, 17% were face-to-face with a parent or guardian, and 17% were through a telephone interview with a parent or guardian.

All survey forms were first returned to the task force member for an initial content and completion check. Next, the forms were submitted to the Iowa Department of Education for a second content and completion check and for removal of any identifying information other than the students' ID number. All surveys were then forwarded to The University of Iowa for a final content check, coding, computer entry and analysis.

Data were collected in two separate summers, each one year after the respective class was graduated. Data were analyzed separately for the two classes, and then compared on key variables. Since no significant differences were found on these variables, the two data sets were merged.

Data analyses were completed using routines described in the SPSS-X User's Guide (1986). Results are reported in two parts, one concerning graduates and the other, dropouts. Each part is subdivided into four

sections; the first addresses general characteristics of the former students while in school. In the second section, employed individuals are further described. The third section contains a comparison of employed and unemployed individuals on selected variables. The fourth section provides a description of those persons who were judged to have made a 'successful' adjustment to post-high school life.

Results

Graduates

General Status

General status variables concerning graduates involved in this investigation are presented in Table 3. Most graduates reported their marital status as single at the time of the interview. The most frequently reported living arrangement was with parents or relatives (57%). Independent living was the next most common living arrangement for graduates (15%). It is interesting to note that there was little difference between students in RTP and Special Class programs.

Approximately 90% of all graduates were involved in some type of leisure activities, with most reporting they participated in from one-to-three leisure activities. Socializing with family or friends was the leisure activity mentioned most frequently by graduates of both program levels.

The average number of paid jobs held by BD graduates since high school was 1.7 (range = 1 to 10). During the interview, graduates were asked about their current occupation. The proportion of individuals indicating they were currently employed (at least part-time) averaged 60% (59% for RTP and 61% for Special Class). The types and locations of jobs are discussed in the following section. An additional 14% of the total group was "otherwise

Table 3
General post-high school characteristics (Graduates)

Variable	Total Group	Program Model[a] RTP	Special Classes
Marital Status	(n = 130)	(n = 59)	(n = 71)
Single	89.2	88.1	90.1
Married	10.0	11.9	8.5
Divorced	0.0	0.0	0.0
Other	0.8	0.0	1.4
Living Situation	(n = 130)	(n = 59)	(n = 71)
Residential facility	5.4	3.4	7.0
Parents or relative	56.9	59.3	54.9
Group home/ suprvsd apt.	2.3	1.7	2.8
Live with friend	9.2	8.5	9.9
Live indepndtly	15.4	15.3	15.5
Buying own home	0.8	1.7	0.0
Other	10.0	10.2	9.9
Leisure Activities	(n = 130)	(n = 59)	(n = 71)
None	10.8	11.9	9.9
1 to 3	62.3	52.5	70.4
4 to 6	20.0	20.3	19.7
7 to 9	4.6	10.2	0.0
More than 9	2.3	5.1	0.0
Doing Now	(n = 130)	(n = 59)	(n = 71)
Homemaker	4.0	3.6	4.3
Student/job training	9.6	16.4	4.3
Disabled	0.8	0.0	1.4
Unable to find work	10.5	10.9	10.1
Fired/ laid off	7.2	7.2	7.2
Quit last job	1.6	1.8	1.4
Full/part-time work	60.0	59.3	60.6
Other	6.3	0.8	10.7

[a] Values are expressed as percentages by column within each variable. Percentages may not sum to 100 because of rounding error.

meaningfully engaged" (homemaker, student, or in job training); ranging from 20% (RTP) to 9% (Special Class).

Since the persons in this investigation had been in school programs for individuals with behavioral disorders, the mechanisms they used to cope with personal problems after exiting from high school were of concern to the investigators. Help from parents was the most frequently mentioned source of help (58%), followed by assistance from a friend (38%) (see Table 4). It is interesting to note that professionals (i.e., ministers and mental health professionals) were among the least often mentioned. This pattern held true across program models, although Special Class individuals were somewhat less likely to seek help from parents, and more likely to ask for support from friends and mental health professionals.

Graduates were also asked about difficulties they might have had with law enforcement agencies. Among the total group of graduates, 5% indicated they had committed felonies (2% of the group elected not to answer the question). When viewed by program model, it was found that 7% of RTP persons and 3% of Special Class persons reported being convicted of a felony.

Characteristics of Employed

Data about the current employment status of graduates in this study is contained in Table 5. The employment rate among males was 64%, with considerably fewer females being employed (50%); this was true for both RTP and Special Class females, with the discrepancy between sexes even greater for RTP graduates.

Each respondent's current occupation was categorized by the interviewer as competitive employment; community-based, but employed by sheltered workshop; or sheltered employment. For the total group of employed persons, 87% were in competitive employment, 8% were in sheltered employment and 5%

Table 4

Sources of help with personal problems (Graduates)

Sources of help*	Total Group		Program Model			
			RTP		Special Classes	
	n	%	n	%	n	%
Parent	75	57.7	41	69.5	34	47.9
Sibling	14	10.8	8	13.6	6	8.5
Friend	49	37.7	20	33.9	29	40.8
Minister	2	1.5	0	0.0	2	2.8
Spouse	7	5.4	3	5.1	4	5.6
Mental health professional	17	13.1	5	8.5	12	16.9
Other	22	16.9	8	13.6	14	19.7

* More than one source may have been given.

Table 5

Employment status (Graduates)

Program Model	n	Employment Status*	
		Employed	Unemployed
RIP			
Males	45	64.4	35.6
Females	14	42.9	57.1
Total subgroup	59	59.3	40.7
Special Classes			
Males	49	63.3	36.7
Females	22	54.5	45.5
Total subgroup	71	60.6	39.4
Total group			
Males	94	63.8	36.2
Females	36	50.0	50.0
Total	130	60.0	40.0

* Values are expressed as percentages by row.

were in community-based employment supervised by sheltered workshops (see Table 6). A somewhat smaller proportion of females than males were in competitive employment (78% vs. 89%); and a greater proportion were in sheltered employment. A much larger percentage of RTP vs. Special Class graduates were competitively employed (100% vs. 76%).

Occupations were also classified according to Duncan's classification system (Reiss, Duncan, Hatt, & North, 1961). Approximately three-fourths of all employed individuals in this investigation held low status jobs as laborers or service workers (see Table 7). An additional 14% held jobs as operatives or craftsmen. This pattern of low status jobs was more evident among Special Class than RTP persons. Males tended to be employed as laborers whereas females were more often working in service occupations. Further, no females were employed as craftsmen or operatives. It should be noted that only 4% of the total group were employed in "higher status" jobs, with females doing slightly better than males.

Slightly less than 60% of the employed were working full time, with an additional 33% employed between 21-37 hours per week (see Table 8). A substantially greater proportion of males than females were employed full time; in addition, more individuals from RTP than Special Class programs were employed full time.

A mean wage was calculated for all employed individuals as well as for males and females by program model (see Table 9). The mean wage for the total group was $3.94 per hour ($0.59 above current minimum wage), with the average wage of males being $1.73 per hour greater than that of females. Wages were also placed into three intervals around the minimum wage of $3.35 per hour. The only subgroup where more than half the individuals were receiving greater than $3.95 per hour involved males from RTP programs. Further, the clear

Table 6

Location of employment (Graduates)

Program Model	n	Location of employment[a]		
		Community Competitive	Community[b] Workshop	Sheltered Workshop
RTP				
Males	26	100.0	0.0	0.0
Females	6	100.0	0.0	0.0
Total subgroup	32	100.0	0.0	0.0
Special Classes				
Males	30	80.0	10.0	10.0
Females	12	66.7	8.3	25.0
Total subgroup	42	76.2	9.5	14.3
Total group				
Males	56	89.3	5.4	5.4
Females	18	77.8	5.6	16.7
Total	74	86.5	5.4	8.1

[a] Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

[b] Individuals are working over half of the time in the community, but as part of a mobile work crew or small group supervised by sheltered workshop or work activity center personnel.

Table 7

Type of employment (Graduates)

Program Model	n	Type of employment[a]					
		Laborer	Service Worker	Operative[b]	Craftsman	"Higher" Status[c]	Other
RTP							
Males	26	34.6	26.9	11.5	15.4	7.7	3.8
Females	6	0.0	83.3	0.0	0.0	0.0	16.7
Total subgroup	32	28.1	37.5	9.4	12.5	6.3	6.2
Special Classes							
Males	30	53.3	33.3	6.7	3.3	0.0	3.3
Females	12	33.3	50.0	0.0	0.0	8.3	8.3
Total subgroup	42	47.6	38.1	4.8	2.4	2.4	4.8
Total group							
Males	56	44.6	30.4	8.9	8.9	3.6	3.6
Females	18	22.2	61.1	0.0	0.0	5.6	11.2
Total	74	39.2	37.8	6.8	6.8	4.1	5.5

[a] Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

[b] E.g., meat cutter, assembler, machine operator, truck driver, shipping clerk.

[c] Technical, professional 1, school teacher.

Table 8

Number of hours employed per week (Graduates)

Program Model	n	Hours per week*		
		<21	21 - 37	>37
RTP				
Males	26	7.7	23.1	69.2
Females	6	0.0	50.0	50.0
Total subgroup	32	6.3	28.1	65.6
Special Classes				
Males	31	6.5	35.5	58.1
Females	12	16.7	41.7	41.7
Total subgroup	43	9.3	37.2	53.5
Total group				
Males	57	7.0	29.8	63.2
Females	18	11.1	44.4	44.4
Total	75	8.0	33.3	58.7

* Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

Table 9

Wages per hour (Graduates)

Program Model	N	M	Wages per hour*		
			<$3.35	$3.35-$3.95	>$3.95
RTP					
Males	20	$4.74	10.0	35.0	55.0
Females	5	$2.88	40.0	40.0	20.0
Total subgroup	25	$4.37	16.0	36.0	48.0
Special Classes					
Males	23	$3.99	17.4	43.5	39.1
Females	8	$2.44	62.5	37.5	0.0
Total subgroup	31	$3.59	29.0	41.9	29.0
Total group					
Males	43	$4.34	14.0	39.5	46.5
Females	13	$2.61	53.8	38.5	7.7
Total	56	$3.74	23.2	39.3	37.5

* Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

trend among RTP and Special Class persons was for males to receive higher wages than females. RTP graduates were also earning more than those from Special Class programs. The job benefits most commonly reported by graduates were health insurance and vacations (23%) (see Table 10), and the least mentioned job benefit was profit sharing (1%). Similar patterns held true for individuals from RTP and Special Class programs.

Individuals interviewed were also asked to indicate the main person that helped them get their current job. The majority of employed individuals from each program model relied on either family, friends or themselves in finding employment (see Table 11). The most significant departure from this trend occurred for Special Class females, where 17% said they sought help from a community agency and 17% from the school for assistance in finding their job. All individuals were asked with which community agencies they had talked. Job Service of Iowa had been consulted by 55% of the respondents, followed by Job Training Partnership Act agencies (18%) and Division of Vocational Rehabilitation Services (18%). All other community agencies had been consulted by less than 15% of those interviewed.

Comparison of Employed/Unemployed

Chi-square tests were conducted to analyze selected portions of the data related to employment/unemployment because of the importance placed on work in post-school adjustment. A .05 level of probability was used as the criterion level for significance. Where applicable, chi-square statistics are reported before the Yates correction.

A 2-way chi-square test was conducted to examine the proportions of employed and unemployed graduates by program model. Statistically significant results were not obtained. The proportions of employed individuals from RTP and Special Class programs were almost identical, 59% and 61% respectively,

Table 10

Job benefits received by employed individuals (Graduates)*

	Program Model					
	Total Group		RTP		Special Classes	
Job benefits received	n	%	n	%	n	%
promotion	74	16.2	33	15.2	41	17.1
sick leave	77	15.6	34	23.5	43	9.3
vacation	77	23.4	34	26.5	43	20.9
life insurance	77	11.7	34	14.7	43	9.3
dental insurance	77	7.8	34	11.8	43	4.7
health insurance	77	23.4	34	29.4	43	18.6
profit sharing	77	1.3	34	0.0	43	2.3
free meals	77	16.9	34	23.5	43	11.6

* Each value is the percentage of individuals who received the benefit as a part of their current employment.

Table 11

Source of help in finding employment (Graduates)

Program Model	n	Source of Help*				
		Self	School	Family/ Friends	Community Agency	Other
RTP						
Males	26	26.9	3.8	50.0	7.7	11.5
Females	6	33.3	0.0	66.7	0.0	0.0
Total subgroup	32	28.1	3.1	53.1	6.3	9.4
Special Classes						
Males	30	30.0	0.0	40.0	16.7	13.3
Females	12	33.3	16.7	25.0	16.7	8.3
Total subgroup	42	31.0	4.8	35.7	16.7	11.9
Total group						
Males	56	28.6	1.8	44.6	12.5	12.5
Females	18	33.3	11.1	38.9	11.1	5.6
Total	74	29.7	4.1	43.2	12.2	10.8

* Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

although there was a much higher percentage of RTP than Special Class graduates competitively employed (100% versus 76%). Employment status was further explored by doing a 3-way chi-square test of the proportions of employed and unemployed graduates by gender, controlling for program model. Statistically significant results were not obtained. For males, about two-thirds were employed, whereas approximately one-half of the females were employed. These findings held true for RTP and Special Class individuals.

Three-way chi-square tests were also conducted to examine the proportions of employed and unemployed graduates by type of vocational education received in high school across program models. Regular vocational education programs (e.g., industrial arts, home economics, distributive education, trades and industry) and specially-designed vocational programs (e.g., school-based simulated work, experiential exploration, work experience, etc.) were considered separately. In the first analysis, which focused on regular vocational education programs, a significant chi-square statistic was not obtained at either level, indicating that there was no significant difference in percent of employed by regular vocational education vs. no regular vocational education. For RTP graduates with some regular vocational training, 62% were employed; among those graduates with no regular vocational training, 43% were employed. Approximately 60% of Special Class graduates with some regular vocational training were employed, whereas 67% of those with no such training were employed. As indicated in Table 12, however, there were only 16 graduates who had not had some type of regular vocational education or training.

An additional 3-way chi-square test was conducted to further examine the association between employment status and type of regular vocational education, controlling for program model. For this analysis regular

Table 12

Comparison of types of regular vocational training by current employment status (Graduates)

	Types of Regular Vocational Training/Experiences[a]					
	No Training		General Training Only		Specific Training[b]	
Program Model	n	%	n	%	n	%
RTP						
Employed	3	42.9	12	66.7	19	61.3
Unemployed	4	57.1	6	33.3	12	38.7
Special Classes						
Employed	6	66.7	25	62.5	10	52.6
Unemployed	3	33.3	15	37.5	9	47.4
Total Group						
Employed	9	56.3	37	63.8	29	58.0
Unemployed	7	43.8	21	36.2	21	42.0

[a] Values are expressed as percentages by column within each level.

[b] Individuals with specific training may have also had general training.

vocational education was divided into general vocational education (i.e., industrial arts and home economics) and specific vocational education (i.e., office education, health occupations education, distributive education, agricultural education, and trades and industry). Individuals were assigned to one of three categories: a) those who had no regular vocational education, b) those who had at least one type of general vocational education, but no specific vocational education experiences, and c) those who had at least one specific vocational education experience (and may have had some general vocational education experiences as well). No significant statistics were obtained. A substantial majority of the employed and unemployed RTP and Special Class individuals, however, had participated in both general and specific vocational programs (see Table 12).

The second analysis focused on specially-designed vocational programs (see Table 13). A significant statistic was not obtained at either level. It was found that 62% of RTP persons with some specially-designed vocational training were employed; among those with no specially-designed vocational training, 57% were employed. Results for Special Class persons were quite similar.

Because of the widespread belief in the value of work experience programs for students with disabilities, a 3-way chi-square test was conducted concerning this specific subcategory of specially-designed vocational program by employment status, controlling for program model. For RTP graduates with some work experience, 68% were employed. A smaller proportion of RTP graduates with no work experience were employed (55%). Similar results were obtained for Special Class individuals. Statistical significance was not obtained, however, for either program model.

Table 13

Types of specially-designed vocational training by current employment status (Graduates)

	Types of Vocational Programs[a]							
	Specially-designed Program		No special Program		Work Experience[b]		No Work Experience	
Program Model	n	%	n	%	n	%	n	%
KTP								
Employed	18	62.1	17	56.7	13	68.4	22	55.0
Unemployed	11	37.9	13	43.3	6	31.6	18	45.0
Special Classes								
Employed	25	59.5	18	62.1	15	65.2	28	58.3
Unemployed	17	40.5	11	37.9	8	34.8	20	41.7
Total Group								
Employed	43	60.6	35	59.3	28	66.7	50	56.8
Unemployed	28	39.4	24	40.7	14	33.3	38	43.2

Note.. Individuals may have had regular vocational training/experiences.

[a] Values are expressed as percentages by column within each level.

[b] Work experience is a subcategory of specially-designed vocational programs.

A 3-way chi-square test was also conducted to determine if there was an association between paid emplcyment during high school and post-school employment, controlling for program model; 68 (57%) of the students had such paid employment in high school. Paid employment was defined as at least one paying job; persons with subsidized jobs were grouped with individuals who had no jobs during high school. A significant statistic was not obtained at either level. For RTP individuals, 69% of those with paid jobs during high school were employed, versus 44% of those who had no paid employment during school. For Special Class individuals, 63% of those with paid high school jobs were employed, versus 64% of those with no paid high school experiences

Graduates were asked about their postsecondary education and training experiences during the interview (see Table 14). Slightly less than one-third of the employed persons indicated they had participated in such programs, while 40% of the unemployed had received this type of training. When postsecondary education and training were examined by program model, it was found that more RTP than Special Class individuals had attended some form of postsecondary school. This finding held true for both employed and unemployed individuals. Among RTP individuals who had participated in these experiences, the one most frequently named by the employed was military service (16%), while the one most often named by the unemployed was a community college program (23%). For Special Class persons, community college programs were most frequently mentioned by both the employed and unemployed (15% and 27%, respectively).

Interviewers also inquired about the perceptions of graduates concerning the qual: y of their school experiences in several specific areas (see Table 15). Generally speaking, employed persons held positive perceptions of selected aspects of their school experiences, with two-thirds or more

Table 14

Postsecondary education and training (Graduates)[a]

Type of postsecondary education/training[c]	Employment Status by Program Model											
	Total Group				RTP				Special Classes			
	Employed		Unemployed[b]		Employed		Unemployed		Employed		Unemployed	
	n	%	n	%	n	%	n	%	n	%	n	%
none	72	68.1	35	60.0	31	64.5	13	53.8	41	70.7	22	63.6
junior college	72	1.4	35	0.0	31	3.2	13	0.0	41	0.0	22	0.0
community college	72	13.9	35	25.7	31	12.9	13	23.1	41	14.6	22	27.3
Adult Based Education	72	4.2	35	2.9	31	0.0	13	0.0	41	7.3	22	4.5
adult education	72	0.0	35	0.0	31	0.0	13	0.0	41	0.0	22	0.0
four-year college	72	2.8	35	2.9	31	3.2	13	7.7	41	2.4	22	0.0
military service	72	9.7	35	2.9	31	16.1	13	7.7	41	4.9	22	0.0
private training	72	1.4	35	2.9	31	0.0	13	0.0	41	2.4	22	4.5
apprenticeship	72	2.8	35	5.7	31	3.2	13	7.7	41	2.4	22	4.5

[a] Percentages indicate the proportion of individuals who had been involved in the education or training listed at some time since high school.

[b] Unemployed does not include homemakers, students, or persons in job training.

[c] Individuals may have identified more than one type of education or training.

Table 15

Satisfaction with school (Graduates)*

School was helpful/ very helpful in preparing you to:	Employment Status by Program Model											
	Total Group				RTP				Special Classes			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
	n	%	n	%	n	%	n	%	n	%	n	%
-find a job	78	66.7	50	50.0	35	62.9	24	58.4	43	69.8	26	42.3
-keep a job	77	76.6	49	55.1	34	76.5	24	58.4	43	76.8	25	52.0
-get along, deal with personal problems	78	85.9	49	61.2	35	85.8	24	70.9	43	86.1	25	52.0
-read things like newspaper, want ad, job info	78	87.2	50	76.0	35	91.4	24	79.2	43	83.7	26	73.1
-cook, clean, take care of children	78	62.9	50	54.0	35	62.9	24	54.1	43	62.8	26	53.8
-budget money, save money, understand taxes, insurance	78	67.9	50	62.0	35	80.0	24	62.5	43	58.2	26	61.5

* Each value is the percentage of individuals who rated their school experience relative to the statement as being helpful or very helpful.

indicating these experiences were helpful or very helpful. Unemployed persons were less positive about school experiences, where as many as half indicated that some aspects of school were not at all helpful. These findings were fairly consistent among individuals from RTP and Special Class programs, although unemployed Special Class persons tended to be somewhat more negative than unemployed RTP persons. Employed persons were also asked how well school prepared them for the job they now had. Fifty-five percent of RTP persons rated the school as helpful/very helpful, compared to 62% of Special Class individuals.

"Successful" Graduates

The overall adjustment of individuals was also of interest in this study. "Successful" graduates were defined as: (a) employed (full- or part-time), (b) buying a home, living independently, or living with a friend, (c) paying more than half their living expenses, and (d) involved in more than three leisure activities. No RTP and only two (2) Special Class individuals met these criteria. Thus, 1.5% of the graduates (n = 130) were judged to have been successful in making the transition to adult life.

The criteria for "successful" graduates are perhaps too high since the former special education students had been graduated from high school only one year previously. Therefore, a second set of criteria was selected, lessening the standards for success in every category. Under these less stringent criteria, graduates were judged to be "successful" if they were: (a) employed; or homemakers, students, or involved in job training; (b) buying a home, living independently, living with a friend, or living with a parent or relative; (c) paying at least a portion of their living expenses; and (d) involved in more than one leisure activity. Twenty (20) RTP and 25 additional Special Class persons met this second set of criteria. Thus, 35% the

graduates were judged to be successful when this set of criteria was used. When both groups were combined, 47 persons were rated as "successful," representing a little more than 36% of the graduates interviewed.

At the conclusion of the interviews, interviewers were asked to estimate how successfully each person had adapted to community life. They judged 35% of the BD graduates to have been successful or very successful, another 35% to have been unsuccessful or very unsuccessful, and the remainder to be somewhere between these two groups in terms of adult adjustment.

Dropouts

As mentioned previously, there were a total of 70 dropouts among those interviewed. Of these, 25 were originally in RTP programs and 45 were in special classes at the time they dropped out of school (see Table 2). It should be remembered that dropouts were surveyed with their original class, one year after that class was graduated. Thus, dropouts may have been out of school anywhere from one to four years at the time of the interview.

General Status

General status variables concerning dropouts involved in this investigation are presented in Table 16. Approximately 81% of these individuals reported their marital status as single, and the majority of the remaining persons indicated they were married; a much higher percentage of RTP versus Special Class individuals were married. The most common living arrangement was with parents (52%), followed by living independently (26%); this was true for both program levels. Close to 89% of the dropouts said they were involved in one or more leisure activities.

Participants in this study who had dropped out of high school were asked about their reasons for leaving school prior to graduation. Personal problems

Table 16

General post-high school characteristics (Dropouts)

Variable	Total Group	Program Model* RTP	Special Classes
Marital Status	(n = 70)	(n = 25)	(n = 45)
Single	81.4	68.0	88.9
Married	15.7	28.0	8.9
Divorced	1.4	4.0	0.0
Other	1.4	0.0	2.2
Living Situation	(n = 70)	(n = 25)	(n = 45)
Residential facility	4.3	4.0	4.4
Parents or relative	51.5	48.0	53.3
Group home/ sprvsd apt.	0.0	0.0	0.0
Live with friend	7.1	4.0	8.9
Live indepndtly	25.7	28.0	24.4
Buying own home	2.9	4.0	2.2
Other	8.6	12.0	6.7
Leisure Activities	(n = 70)	(n = 25)	(n = 45)
None	11.4	16.0	8.9
1 to 3	57.1	68.0	51.1
4 to 6	25.7	12.0	33.3
7 to 9	5.7	4.0	6.7
More than 9	0.0	0.0	0.0
Doing Now	(n = 70)	(n = 25)	(n = 45)
Homemaker	9.0	12.5	7.0
Student/Job training	4.5	4.2	4.6
Disabled	0.0	0.0	0.0
Unable to find work	31.3	16.7	39.5
Fired/ laid off	3.0	4.2	2.3
Quit last job	1.5	4.2	0.0
Full/part-time work	32.9	48.0	24.4
Other	17.8	10.2	22.2

* Values are expressed as percentages by column within each variable. Percentages may not sum to 100 because of rounding error.

were cited most frequently as the reason these individuals left school, followed by the individual's desire to leave. More individuals from Special Class programs cited personal problems than personal desire; the reverse was true for RTP persons (see Table 17). None of these individuals reported that they had the support of their parents in making this decision. Further, only one dropout left school because of a need to work.

Interviewers asked dropouts about their sources of help in dealing with possible personal problems. Over one-half identified a parent as a person they would turn to for help (see Table 18). Friends were named by about one-fourth of the individuals as a possible means of assistance. This pattern was fairly consistent across program model. Approximately 13% indicated they had been convicted of a felony. Only four persons refused to answer questions about criminal records.

The mean number of jobs held since high school by dropouts in this study was 1.4 (range = 0 to 6). Dropouts were asked during the interview about their current occupational status. About 33% of the individuals said they were employed at least part-time; when program model was considered it was found that 48% of RTP persons were employed, whereas only 24% of Special Class persons had jobs (see Table 16). The types and locations of jobs are discussed below. An additional 14% reported they were "otherwise meaningfully engaged" as homemakers, students, or in job training programs, 17% of RTP and 12% of Special Class dropouts.

Characteristics of Employed

The employment status of individuals in this study is presented in Table 19. The employment rate among males was 45%, with only 9% of the females employed. The employment problem was especially serious for Special Class persons, where only 24% of the dropouts had jobs. Virtually all of the

Table 17

Reasons given for dropping out of school (Dropouts)*

Reasons for dropping	Program Model					
	Total Group		MTP		Special Classes	
	n	%	n	%	n	%
School recommended it	10	14.3	5	20.0	5	11.1
Parents wanted it	0	0.0	0	0.0	0	0.0
Needed to work	1	1.4	0	0.0	1	2.2
Personal problems	25	35.7	7	28.0	18	40.0
I wanted to	19	27.1	9	36.0	10	22.2
Reason not specified	15	21.5	4	16.0	11	24.5

* More than one reason may have been given.

Table 18

Sources of help with personal problems (Dropouts)*

Sources of help	Program Model					
	Total Group		RTP		Special Classes	
	n	%	n	%	n	%
Parent	40	57.1	13	52.0	27	60.0
Sibling	6	8.6	2	8.0	4	8.9
Friend	20	28.6	6	24.0	14	31.1
Minister	1	1.4	1	4.0	0	0.0
Spouse	6	8.6	4	16.0	2	4.4
Mental health professional	5	7.1	2	8.5	3	6.7
Other	9	12.9	5	20.0	4	8.9

* More than one source may have been given.

Table 19

Employment status (Dropouts)

Program Model	n	Employment Status*	
		Employed	Unemployed
RTP			
Males	16	68.8	31.3
Females	9	11.1	88.9
Total subgroup	25	48.0	52.0
Special Classes			
Males	31	32.3	67.7
Females	14	7.1	92.9
Total subgroup	45	24.4	75.6
Total group			
Males	47	44.7	55.3
Females	23	8.7	91.3
Total	70	32.9	67.1

* Values are expressed as percentages by row.

employed dropouts held jobs in competitive employment (see Table 20). The most common job classifications for both males and females were laborer and service worker, while smaller numbers worked as operatives or craftsmen (see Table 21). Two-thirds of the males were employed full-time (i.e., over 37 hours per week); all of the females were employed less than full-time (see Table 22). The average wage per hour for males was $4.76; females earned an average of over $2.00 per hour less than males at $2.58 per hour (see Table 23). RTP males earned more per hour than Special Class males; conversely, Special Class females earned more per hour than RTP females (this involved only two individuals).

Most employed males and females (86%) reported they found their present job themselves or through family or friends (see Table 24). No females and few males indicated they received help from school personnel in finding their current job. Further, few individuals received assistance from community agencies in getting their job. All individuals were asked with which community agencies they had talked. Job Service of Iowa had been consulted by 78% of the respondents, followed by Job Training Partnership Act agencies (26%) and Division of Vocational Rehabilitation Services (9%).

When asked about the job benefits they received from their current employers, dropouts most frequently reported they were given health insurance (39%), followed by vacation time, life insurance, and promotions (30%) (see Table 25). These findings were not consistent across RTP and Special Class individuals. While the most commonly mentioned benefit by RTP persons was health insurance, Special Class individuals reported promotions most often.

Comparison of Employed/Unemployed

As was the case for graduates, chi-square tests were conducted to analyze the data for dropouts related to employment/unemployment. A .05 level of

Table 20

Location of employment (Dropouts)

Program Model	n	Location of employment[a]		
		Community Competitive	Community[b] Workshop	Sheltered Workshop
RTP				
Males	10	100.0	0.0	0.0
Females	1	100.0	0.0	0.0
Total subgroup	11	100.0	0.0	0.0
Special Classes				
Males	9	100.0	0.0	0.0
Females	1	100.0	0.0	0.0
Total subgroup	10	100.0	0.0	0.0
Total group				
Males	19	100.0	0.0	0.0
Females	2	100.0	0.0	0.0
Total	21	100.0	0.0	0.0

[a] Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

[b] Individuals are working over half of the time in the community, but as part of a mobile work crew or small group supervised by sheltered workshop or work activity center personnel.

Table 21

Type of employment (Dropouts)

Program Model	N	Type of employment[a]					
		Laborer	Service Worker	Operative[b]	Craftsman	"Higher" Status[c]	Other
RTP							
Males	10	30.0	20.0	0.0	40.0	0.0	10.0
Females	1	0.0	100.0	0.0	0.0	0.0	0.0
Total subgroup	11	27.3	27.3	0.0	36.4	0.0	9.1
Special Classes							
Males	9	55.6	22.2	11.1	0.0	0.0	11.1
Females	1	0.0	100.0	0.0	0.0	0.0	0.0
Total subgroup	10	50.0	30.0	10.0	0.0	0.0	10.0
Total group							
Males	19	42.1	21.1	5.3	21.1	0.0	10.6
Females	2	0.0	100.0	0.0	0.0	0.0	0.0
Total	21	38.1	28.6	4.8	19.0	0.0	9.6

[a] Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

[b] E.g., meat cutter, assembler, machine operator, truck driver, shipping clerk.

[c] Technical, professional 1, school teacher.

Table 22

Number of hours employed per week (Dropouts)

Program Model	n	Hours per week*		
		<21	21 - 37	>37
RTP				
Males	10	0.0	20.0	80.0
Females	1	0.0	100.0	0.0
Total subgroup	11	0.0	27.3	72.7
Special Classes				
Males	9	33.3	11.1	55.6
Females	1	0.0	100.0	0.0
Total subgroup	10	30.0	20.0	50.0
Total group				
Males	19	15.8	15.8	68.4
Females	2	0.0	100.0	0.0
Total	21	14.3	23.8	61.9

* Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

Table 23

Wages per hour (Dropouts)

Program Model	n	M	Wages per hour*		
			<$3.35	$3.35-$3.95	>$3.95
RTP					
Males	7	$5.19	0.0	14.3	85.7
Females	1	$2.16	100.0	0.0	0.0
Total subgroup	8	$4.81	12.5	12.5	75.0
Special Classes					
Males	9	$4.42	33.3	11.1	55.6
Females	1	$3.00	100.0	0.0	0.0
Total subgroup	10	$4.28	40.0	10.0	50.0
Total group					
Males	16	$4.76	18.8	12.5	68.8
Females	2	$2.58	100.0	0.0	0.0
Total	18	$4.51	27.8	11.1	61.1

* Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

Table 24

Source of help in finding employment (Dropouts)

Program Model	n	Source of Help*				
		Self	School	Family/ Friends	Community Agency	Other
RTP						
Males	10	20.0	10.0	50.0	10.0	10.0
Females	1	100.0	0.0	0.0	0.0	0.0
Total subgroup	11	27.3	9.1	45.5	9.1	9.1
Special Classes						
Males	9	44.4	0.0	55.6	0.0	0.0
Females	1	100.0	0.0	0.0	0.0	0.0
Total subgroup	10	50.0	0.0	50.0	0.0	0.0
Total group						
Males	19	31.6	5.3	52.6	5.3	5.3
Females	2	100.0	0.0	0.0	0.0	0.0
Total	21	38.1	4.8	47.6	4.8	4.8

* Values are expressed as percentages by row. Percentages may not sum to 100 because of rounding error.

Table 25

Job benefits received by employed individuals (Dropouts)*

	Program Model					
	Total Group		RTP		Special Classes	
Job benefits received	n	%	n	%	n	%
promotion	23	30.4	12	33.3	11	27.3
sick leave	23	26.1	12	41.7	11	9.1
vacation	23	30.4	12	50.0	11	9.1
life insurance	23	30.4	12	41.7	11	18.2
dental insurance	23	17.4	12	33.3	11	0.0
health insurance	23	39.1	12	58.3	11	18.2
profit sharing	23	0.0	12	0.0	11	0.0
free meals	23	21.7	12	33.3	11	9.1

* Each value is the percentage of individuals who received the benefit as a part of their current employment.

probability was used as the criterion level for significance. Where applicable, the chi-square statistics reported are those obtained before the Yates correction.

A 2-way chi-square test was conducted to examine the proportions of employed and unemployed by program model. A significant chi-square statistic was obtained, χ^2 (1, n = 70) = 4.04, p = 0.0444. For RTP persons, 48% were employed, whereas only 24% of the Special Class persons held jobs. Employment status was further studied by adding gender to the analysis and controlling for program model. A 3-way chi-square test revealed a significant statistic for RTP persons, χ^2 (1, n = 25) = 7.67, p = 0.0056. For males, about two-thirds were employed, whereas only 11% of the females were employed. A significant chi-square statistic was not obtained for Special Class individuals. In this analysis, only one-third of the males were employed, and 7% of the females had jobs.

Three-way chi-square tests were also conducted to exami the proportions of employed and unemployed individuals by type of vocational education and training in high school. In the first analysis, which focused on regular vocational programs, a significant chi-square statistic was not obtained at either program level, indicating that the employment rate of those who had some type of regular vocational education or training was not significantly higher than for those with no regular vocational education or training. For RTP dropouts with some regular vocational training, half were employed; among those dropouts with no regular vocational training 33% were employed. Approximately 28% of Special Class dropouts with some regular vocational training were employed, whereas 11% of those with no such training were employed.

An additional chi-square test was conducted to further examine the association between employment status and type of regular vocational education. For this analysis regular vocational education was divided into general vocational education and specific vocational education. As with the same analysis involving graduates, individuals were assigned to one of three categories: (a) those who had no regular vocational education, (b) those who had at least one type of general vocational education experience, but no specific vocational education experiences, and (c) those who had at least one specific vocational education experience (and may have had some general vocational education experiences as well). The chi-square statistics were not significant. Most RTP and Special Class employed and unemployed individuals had some amount of regular vocational training (see Table 26).

The second analysis focused on specially-designed vocational programs (see Table 27). A significant statistic was not obtained at either program level. About 57% of the RTP persons with some specially-designed vocational training were employed, while slightly less than half of those persons with no specially-designed vocational training were employed. Only 12% of Special Class persons with specially-designed vocational training were employed; about one-third of the dropouts without specially-designed vocational training were employed.

The relation between employment status, participation in work experience programs (a subcategory of specially-designed vocational training) was examined across program models. Statistically significant results were not obtained. Forty percent of RTP persons who were involved in work experience programs were employed; half of those not involved were employed (see Table 27). Among Special Class individuals who were in work experience programs in high school, none were employed, whereas 31% of those without such experiences were employed.

Table 26

Comparison of types of regular vocational training by current employment status (Dropouts)

	Types of Regular Vocational Training/Experiences[a]					
	No Training		General Training Only		Specific Training[b]	
Program Model	n	%	n	%	n	%
RTP						
Employed	1	33.3	6	60.0	5	45.5
Unemployed	2	66.7	4	40.0	6	54.5
Special Classes						
Employed	1	11.1	3	17.6	6	33.3
Unemployed	8	88.9	14	82.4	12	66.7
Total Group						
Employed	2	16.7	9	33.3	11	37.9
Unemployed	10	83.3	18	66.7	18	62.1

[a] Values are expressed as percentages by column within each level. Percentages may not sum to 100 because of rounding error.

[b] Individuals with specific training may have also had general training.

Table 27

Types of specially-designed vocational training by current employment status (Dropouts)[a]

Program Model	Types of Vocational Programs							
	Specially-designed Program		No special Program		Work Experience[b]		No Work Experience	
	n	%	n	%	n	%	n	%
RTP								
Employed	4	57.1	8	44.4	2	40.0	10	50.0
Unemployed	3	42.9	10	55.6	3	60.0	10	50.0
Special Classes								
Employed	2	11.8	9	32.1	0	0.0	11	30.6
Unemployed	15	88.2	19	67.9	9	100.0	25	69.4
Total Group								
Employed	6	25.0	17	37.0	2	14.3	21	37.5
Unemployed	18	75.0	29	63.0	12	85.7	35	62.5

Note. Individuals may have had regular vocational training/experiences.

[a] Values are expressed as percentages by column within each level.

[b] Work experience is a subcategory of specially-designed vocational programs.

A 3-way chi-square test was also conducted to determine if there was an association between paid employment during high school and post-school employment. Paid employment was defined as at least one paying job; persons with subsidized jobs were grouped with individuals who had no jobs during high school. A significant statistic was not obtained for RTP persons. Half of those with at least one paid job during high school were employed, while only 29% of those without paid work during high school were employed. A significant statistic was obtained for Special Class dropouts, χ^2 (1, n = 39) = 3.81, p = 0.0508. Among Special Class dropouts, about 41% who had a paid job during high school were employed; only 14% of those without paid work during high school were employed at the time of the interview.

Postsecondary education and training experiences were also discussed with interviewees (see Table 28). Among the total group of dropouts, 55% of the employed and 68% of the unemployed individuals had no postsecondary education or training. Of the remaining employed dropouts with postsecondary training, military service was the most frequently named (25%), while community college was most often mentioned by the unemployed dropouts. When postsecondary experiences among dropouts were examined by program model, it was found that RTP persons had a pattern similar to the total group. Similar proportions of Special Class and RTP employed individuals received postsecondary training, while substantially fewer unemployed Special Class than RTP persons obtained postsecondary training. Among those employed Special Class and RTP persons who did receive such training, military service was the most commonly mentioned experience (22% and 27%, respectively); the same proportion (22%) of employed Special Class persons participated in adult education programs. Community college programs were most frequently mentioned by unemployed Special Class and RTP persons.

Table 28

Postsecondary education and training (Dropouts)[a]

Type of postsecondary education/training[c]	Employment Status by Program Model											
	Total Group				RTP				Special Classes			
	Employed		Unemployed[b]		Employed		Unemployed		Employed		Unemployed	
	n	%	n	%	n	%	n	%	n	%	n	%
none	20	55.0	38	68.4	11	54.5	9	55.6	9	55.6	29	72.4
junior college	20	0.0	38	0.0	11	0.0	9	0.0	9	0.0	29	0.0
community college	20	5.0	38	10.5	11	9.1	9	22.2	9	0.0	29	6.9
Adult Based Education	20	5.0	38	0.0	11	9.1	9	0.0	9	0.0	29	0.0
adult education	20	10.0	38	5.3	11	0.0	9	11.1	9	22.2	29	3.4
four-year college	20	0.0	38	0.0	11	0.0	9	0.0	9	0.0	29	0.0
military service	20	25.0	38	0.0	11	27.3	9	0.0	9	22.2	29	0.0
private training	20	5.0	38	2.6	11	0.0	9	0.0	9	11.1	29	3.4
apprenticeship	20	5.0	38	2.6	11	9.1	9	0.0	9	0.0	29	3.4

[a] Percentages indicate the proportion of individuals who had been involved in the education or training listed at some time since high school.

[b] Unemployed does not include homemakers, students or persons in job training.

[c] Individuals may have identified more than one type of education or training.

The perceptions of dropouts concerning their high school education were explored during the interview. About half of the employed dropouts expressed the opinion that school was helpful to them in selected areas of academics and job training, with the notable exception being practical reading, where over 90% indicated that school was helpful (see Table 29). Unemployed dropouts tended to be less positive about school, where only about one-third of the individuals viewed school as helpful in the areas of job training and practical math. This pattern of perceptions was fairly consistent across program levels. Employed individuals were also asked how well school prepared them for the job they now held. Half of RTP persons rated the school as helpful/very helpful, compared to only 27% of Special Class dropouts.

"Successful" Dropouts

The overall adult adjustment of dropouts was also of interest in this study. "Successful" was defined in this analysis in the same way as for graduates. Dropouts were considered to have made a successful adjustment to adult life if they were: (a) employed (full- or part-time), (b) buying a home, living independently, or living with a friend, (c) paying more than half their living expenses, and (d) involved in more than three leisure activities. One (1) dropout met these criteria (from an RTP program), thus representing 1% of the dropouts. When the expanded criteria used with graduates were applied to dropouts, 8 additional individuals (11%) from RTP programs and 10 (14%) from Special Class programs were identified. The combined total number of dropouts judged to be "successful" was 19, representing 27% of the dropouts (N = 70) in the study.

Following each interview, interviewers were asked to estimate how successfully each individual had adapted to community life. Interviewers judged 18% of the BD dropouts to have been successful or very successful.

Table 29

Satisfaction with school (Dropouts)*

School was helpful/ very helpful in preparing you to:	Employment Status by Program Model											
	Total Group				RTP				Special Classes			
	Employed		Unemployed		Employed		Unemployed		Employed		Unemployed	
	n	%	n	%	n	%	n	%	n	%	n	%
-find a job	23	43.5	47	36.2	12	58.3	13	30.8	11	27.3	34	38.2
-keep a job	23	52.2	46	32.6	12	66.7	12	33.3	11	36.4	34	32.4
-get along, deal with personal problems	23	60.9	47	55.4	12	58.3	13	53.9	11	63.7	34	55.9
-read things like newspaper, want ad, job info	23	91.3	47	82.9	12	100.0	13	92.3	11	81.9	34	79.4
-cook, clean, take care of children	23	52.1	46	47.8	12	58.4	12	66.6	11	45.5	34	41.1
-budget money, save money, understand taxes, insurance	23	43.4	47	38.3	12	41.6	13	38.5	11	45.5	34	38.3

* Each value is the percentage of individuals who rated their school experience relative to the statement as being helpful or very helpful.

They viewed 46% as having made an unsuccessful or very unsuccessful adaptation to community life. The remaining 35% were seen as having made an "OK" adjustment.

Discussion

The results of this investigation suggest that individuals labelled behaviorally disordered while in school have not achieved a level of adult adjustment that would be desirable, with only 36% of the program graduates and 27% of the dropouts meeting the criteria used in this study for being at least minimally "successful." Results in specific areas of adult adjustment will be discussed below, in terms of graduation status (program graduates versus dropouts), program model, and gender. The findings will also be contrasted with results from Edgar & Levine (1987) and Neel et al. (1988), since the target populations were similar. Comparison between the present data and these studies should be viewed with some caution, however, because all program graduates in the present study had been out of school for only one year, whereas the program graduates of the previous studies had been out of school for varying periods of time.

Almost all individuals (regardless of graduation status, program model, or gender) were single. About half of the respondents were living with a parent or relative, a proportion similar to that found by Neel et al. (1988) (58%); and considerably fewer than the 66% of non-handicapped individuals Neel et al. (1988) reported as living with parents. The vast majority of persons in the present investigation were involved in one or more leisure activities.

In terms of overall employment, the present study found 60% of the program graduates employed at least part-time; this pattern was true for individuals from RTP and Special Class programs. Far fewer dropouts were employed, with only 33% indicating they were working at least part-time; a

higher percentage of RTP (48%) than Special Class (24%) dropouts were employed. The employment rate for program graduates compared favorably with the rates for graduates reported by Neel et al. (1988) (60%) and Edgar & Levine (52%), but was less than the employment rate for non-handicapped persons (73%) included in the Neel et al. (1988) study. Over three-quarters of the program graduates and virtually all of the dropouts in the present study who were employed were working in competitive employment. Although the employment rates for program graduates may be viewed with some optimism, it should be kept in mind that less than two-thirds of the program graduates and dropouts were employed full time.

Further, a smaller proportion of females than males were employed; this difference was particularly marked among dropouts. Of those females employed, a smaller proportion than males worked more than 37 hours per week. Lower rates of full-time employment were also found among Special Class versus RTP individuals (both program graduates and dropouts); competitive employment was also lower for Special Class versus RTP graduates.

The average wage among program graduates was $3.94 per hour, with males in each program model earning considerably more than females. Although slightly over three-fourths of the program graduates were earning at least minimum wage ($3.35 per hour), this must be viewed with caution since not all were working full-time. Further, this level of compensation could hardly be seen as a living wage when the cost of living is considered. The mean wage per hour among dropouts was somewhat higher at $4.51 per hour. Wage patterns similar to program graduates by gender and program model were found among dropouts, as was the overall proportion of dropouts earning at least minimum wage (72%). Greater proportions of individuals in the present study were earning minimum wage than both BD (62%) and non-handicapped persons (49%) in

the Neel et al. (1988) study, as well as individuals with behavioral disorders from Edgar & Levine (20%, 1987).

At least two-thirds of the program graduates and dropouts were employed in low status occupations as laborers and service workers. The job descriptions of employed individuals reported in the Neel et al. (1988) study were converted to the classification system used in the present study (Reiss, Duncan, Hatt, & North, 1961) for comparison purposes. This conversion revealed that the proportion of persons with BD in the Neel et al. (1988) study (67%) employed in low status occupations was similar to that in the present study. About 10% fewer of the non-handicapped persons in the Neel et al. (1988) study were in these low status occupations (57%), the difference appearing in the laborer category.

Of major concern in this investigation were the findings related to the proportion of individuals who were "unengaged." Unengaged was defined in this study to mean persons who were unemployed and were not homemakers, in job training, or students. Approximately one-quarter of the BD program graduates and one-half of the dropouts were unengaged at the time of the interview. Neel et al. (1988) reported that 31% of the BD program graduates in their study were unengaged, while Edgar & Levine (1987) reported a much lower percentage (10%) for individuals out of school six months. A far smaller proportion of the non-handicapped individuals in the Neel et al. (1988) study (8%) were unengaged.

The proportions of program graduates who had been involved in some type of postsecondary training ranged from one-third (employed graduates) to one-half (unemployed graduates); the proportion of dropouts receiving postsecondary training ranged from one-third (unemployed dropouts) to 44% (employed dropouts). These findings compare very favorably with the

proportion of non-handicapped persons (47%) in the Neel et al. (1988) study who had been involved in some type of postsecondary training; and are at least double the proportion of BD graduates in the Neel et al. (1988) and Edgar & Levine (1987) studies with such training.

The extent to which community resources were used by individuals in the present study to find work was examined as a part of the investigation. Participants were asked to indicate the persons/agencies with whom they had talked to about job information or assistance. Twenty-one percent of the graduates and 14% of the dropouts had talked to the Department of Vocational Rehabilitation; only 4% of the individuals with behavioral disorders in the Neel et al. (1988) study had sought help from this agency. In addition, over half of the individuals in the present investigation went to Job Service of Iowa for assistance. Further, 19% of the graduates and 37% of the dropouts talked to Job Training Partnership Act (JTPA) agencies about finding work. Curiously, when employed individuals in the present study were asked who helped them find their present job, at least three-fourths said they found employment on their own or with the help of family or friends. Further study is needed to determine why individuals with behavioral disorders seek help from these community agencies, but do not see these as the agencies who actually helped them locate their job.

The results in the area of vocational programming are difficult to interpret. As in previous studies with mildly handicapped (Hasazi, Gordon, & Roe, 1987; Frank et al., in press), no significant relation was found between either regular or specially-designed vocational programs in high school and employment as an adult. In a number of cases, however, a higher percentage of those with regular vocational training were employed than those without such training. A complicating factor in the interpretation of the data related to

vocational training may be the high percentage of students who were enrolled in regular vocational education programs; thus, we had no adequate comparison between individuals who had and had not had such experiences. We also had no means of calculating the amount of time these individuals were in regular or specially-designed vocational programs; content of these programs and experiences also varied across school districts. It should also be remembered that in looking at the effects of vocational training, comparisons were made on employed versus unemployed status only. Location of employment, hours employed, and wages were not taken into consideration. Paid employment in high school had a significant effect only for dropouts.

Finally, we have analyzed the results of this study according to instructional program models (resource program versus more restrictive special class models). The existing differences (or lack of differences) in adult adjustment across these program models may have been caused by differences in curriculum and other program experiences, or by differences in functioning levels of the individuals in these programs, or by an interaction between these two factors.

Conclusions

Previously reported research about the adult adjustment of individuals labelled behaviorally disordered while in high school is very limited, and almost nonexistent concerning dropouts. The purpose of this investigation was to examine the adult adjustment of graduates and dropouts one year after the graduation of their high school class. The results of this study should be viewed with the realization that some of the data were obtained by self report of individuals, all of whom attended school in Iowa.

Although the former students with behavioral disorders compared favorably to those surveyed in the Edgar and Levine (1987) and Neel et al. (1988)

investigations, the results are mixed relative to what might be considered a satisfactory adult adjustment. On the positive side, the divorce rate for both graduates and dropouts was low, and almost all were involved in some type of leisure activity. Most of those with jobs were employed competitively and earning above minimum wages. On the negative side, only about one-third of the graduates and one-quarter of the dropouts were judged to have made a satisfactory adjustment. One-third were working less than full time, and thus not making a true "living wage." In addition, about one-quarter of the graduates and one-half of the dropouts were "unengaged," neither employed nor homemaker or in a training program. In view of these data, it is not surprising that the majority of both graduates and dropouts were living with parents or relatives.

Findings regarding females are particularly discouraging, especially in the area of employment. In the case of both female graduates and dropouts, a much lower percentage than their male counterparts were employed, and those that did have jobs were working fewer hours and at a much lower wage. Curiously, a higher proportion of female than male graduates and dropouts were living independently.

According to Halpern (1985), the transition from school to adult life consists of three equally-important components: (a) laying a strong foundation in the high school years, (b) building strong bridges to adult life through generic services available to all individuals, time-limited special services, or ongoing special services, and (c) ensuring a successful community adjustment in the areas of residential, employment, and social and interpersonal networks. This model provides a framework within which we can make recommendations regarding programming and future research.

With regard to the first component, the foundation, we need to make successful life adjustment a top priority of programs for individuals with behavioral disorders. To reach this goal we must develop alternative career/vocational training options, both classroom instruction and community-based experiences, for the high percentage of students who drop out of the traditional education system. We also need to determine what options are most effective with those who remain in school, and what additional assistance is needed by females to make them more employable.

The second component of Halpern's model, the bridge, consists of planning for the transition of individuals from school to adult life. We need to begin early in the student's junior high school years to work with the student, parents, and adult service providers to determine employment, living, and social/interpersonal options for the student as an adult. We need to continue this systematic planning throughout the student's high school years, and to provide the support the individual needs to cross the bridge to adulthood. In the process of building the bridge, we need to determine the role of the school in the transition process.

The final component of Halpern's model involves providing the needed support to ensure the individual's continued adjustment after leaving high school. This entails involving the relevant adult service providers early in the transition planning process, and working with the staff within these agencies to enable them to deal effectively with individuals labelled behaviorally disordered. It also involves working with the adult service system to identify and establish the short-term and ongoing services that are needed by this population.

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