A FOLLOW-UP STUDY OF 1989-90 GRADUATES AND DROPOUTS
WITH LEARNING DISABILITIES PARTICIPATING IN VOCATIONAL
PROGRAMS IN A LARGE URBAN SCHOOL SYSTEM

by

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(ABSTRACT)

More than four million disabled individuals, of whom forty percent are learning disabled, receive special education support in part by federal funds, as provided by Public Law 94-142 (U.S. Department of Education, 1985). Several programs are designed to serve these students. Unfortunately, increasing numbers of students with learning disabilities are dropping out of the school system before completing these programs.

This study was designed to describe a number of demographic and school experience factors associated with learning disabilities. Subjects included 70 (46 males and 24 females) graduates and dropouts who participated in a shared time vocational education program at six career centers in a large urban public school system, and exited in 1989 and 1990. Follow-up data were collected from former students, parents, or relatives by telephone or mail survey. Data were collected in the following categories: further education and training, independent living status, employment history and
experience, rating of occupational skills, and support service delivery. Data were presented in a descriptive format.

Results revealed that the majority of graduates and dropouts were not adjusting to their post-school life, especially dropouts. Few sought further education and training, and most of the students were still living with their parents. Although half of the students were working, the majority were not working in the occupation in which they were trained. Those students who were working in the occupation in which they were trained were in child care, barbering, and business.
DEDICATION

This work I dedicate to God, to my beloved children and family, especially deceased members of family including my sister, Nora Butler, who was more like a mother and whose understanding and sacrifices made it possible for me to do my work.

Richly Blessed

I asked God for strength that I might achieve;
I was made weak,
that I might learn humbly to obey.

I asked for health, that I might do great things;
I was given infirmity,
that I might do better things.

I asked for riches, that I might be happy;
I was given poverty, that I might be wise.

I asked for power, that I might have
the praise of men;
I was given weakness, that I might feel
the need of God.

I asked for all things, that I might enjoy life;
I was given life, that I might enjoy all things.

I got nothing that I asked for --
but everything I had hoped for.

Almost despite myself,
my unspoken prayers were answered.

I am among all men,
most richly blessed

attributed to an unknown Confederate soldier
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I appreciate the support of officials and staff members within the local school system for allowing me to use the data that were generated for this study and for helping
me collect information. I hope that the analysis of these data will be utilized for improving education planning proposes in their vocational education programs.

I thank God, who brought me all the way, my parents Dow and Clara McNair, and all my sisters and brothers and other family members and friends for their unfailing support.

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CHAPTER I

INTRODUCTION

Learning disabilities, as a diagnostic entity, emerged over two decades ago and has become the largest single category of students receiving special education services (Karvale & Forness, 1985). The Education of all Handicapped Children Act (Public Law 94-142) was passed by Congress in 1975 in response to the concerns of legislators, parents, advocates, and educators who wanted to insure the appropriate identification and provision of services for students with special needs until graduation from school, or age 22 (Public Law 94-142, Section 401). This has resulted in tremendous expansion of programs for children with disabilities. This mandate, in combination with the growing number of adolescents who have been identified as learning disabled and determined to need special education services, has led to the design and implementation of a variety of service delivery options in our nation's secondary schools.

The identification of children with learning disabilities has been problematic since Public Law 94-142 (P.L.94-142) was first conceived. The number of children receiving services under the learning disabled category has risen dramatically since the law was passed (Tugend, 1985). There are several reasons why the number of students with learning disabilities are increasing. For one thing, there are better methods of identifying these students than there were a few years ago. Educators are now more aware that
specific types of dysfunctions within the brain can affect the way some students process information. Previously, students with learning disabilities were classified as being mentally retarded. The number of mentally retarded children identified under Public Law 94-142 dropped over the last 16 years, while the number of students with learning disabilities rose. The trend has continued, with 50,000 students with learning disabilities graduating from high school each year and an additional 1.9 million currently receiving learning disability services in the public schools (Office of Special Education and Rehabilitation Services, 1987). As Congress has reviewed progress in special education, the question asked by lawmakers has shifted from, "How many students are being served?" to "What is happening to these students?" (Edgar, 1985, p.470).

In October of 1984, Congress passed the Carl D. Perkins Vocational and Technical Education Act (Public Law 98-524). This legislation mandated access to mainstream vocational education for the nation's secondary age disabled youth. Cobb and Kingsbury (1985, p. 33), have called it "a dynamic and forward-thinking piece of legislation", reflecting the promise vocational education holds for students with special needs. The most recent vocational education legislation, the Carl D. Perkins Vocational and Applied Technology Education Act of 1990, has continued the mandate to serve all who can benefit from vocational education. This legislation calls for equal access to the entire range of vocational programs and provides for special services needed to enhance the participation of youth and adults with disabilities (Schwartz and Taymans, 1991). The Act offers assurances including access to occupationally specific courses of study,
cooperative education, apprenticeship programs, comprehensive career guidance, and counseling services. The Act also offers modification in curriculum, equipment, instruction, supportive personnel, transition services from high school to post-high school employment, and career opportunities for disabled students. These programs must be monitored by the Individual Educational Program (IEP) as mandated by both the Perkins Act and P.L. 94-142.

Since the passage of Public Law 94-142, a number of programs were designed which incorporated primary placement of students with disabilities in mainstream classes or part-time remedial instruction. Since many students with learning disabilities are often unable to meet the academic demands of college preparatory classes in high school, the most common mainstream routes for these students is vocational education. When these students age out of (leaves school between ages 19 and 21) or graduate from secondary education service(s) and public schools, parents, advocates, and educators are concerned that they face an uncertain future (Schloss, 1985; U.S. Commission on Civil Rights, 1983). Because of this concern, there is a need to identify vocational success and adult adjustment of the learning disabled who participated in vocational education programs.

In response to the U.S. Department of Education's Sixth Annual Report to Congress on Public Law 94-142, Gerber (1984), called for systematically designed national longitudinal data on special education which would provide valuable resources for research and policy-making endeavors. Only in recent years have researchers begun to examine adults with learning disabilities for the characteristics that they displayed
while in elementary and secondary education. Numerous studies have been reviewed (Horn, O'Donnell, and Vitulano, 1983) which seem to indicate that adults with disabilities experience similar work successes as non-learning disabled adults. Upon closer examination, it should be noted that the majority of those studies occurred in the early-to mid-1960's. Such studies cannot be taken out of the context of the 1960 studies. Therefore, caution is necessary when interpreting such research results. Another problem that confronts the adult with learning disabilities is an acceptable definition of learning disabilities as it applies to them when they become adults. Polloway, Smith, and Patton, (1988) point out that the "key question is no longer: Did he/she outgrow a given problem?", but rather, "How does this adult adapt and deal with demands made on him/her, and/or what facilitates success or leads to failure in this person's adult life?" (p. 266).

At the time of this study, more than four million adults with disabilities, of whom 40% were learning disabled, received special education support, in part by federal funds, as provided by Public Law 94-142 (U.S. Department of Education, 1985). Several programs were designed to serve these students. The programs have not met expectations because the increasing numbers of students with learning disabilities are dropping out of the school system before completing them. Statistics confirm that the high school dropout rate is one of the most critical problems confronting the American educational system. Despite the historical trend of general improvement, the dropout rate phenomenon is at present a topic of major concern (Gerber, 1990).
For many people it might be hard to believe that in this highly developed society of the 1990’s, about a quarter of the students do not finish high school or vocational education programs. Despite the general consensus on the importance of high school completion, researchers still lack a common definition for dropping out of school. Definitions vary across state agencies, school districts, administrators, and researchers (Rumberger, 1987; Wolman, Bruininks, & Thurlow, 1989). A review of the literature on special education dropouts’ identified numerous issues that need to be investigated, including the problems of defining dropouts and determining the characteristics that differentiate dropouts from graduates within the special education population (Wolman, Bruininks, and Thurlow, 1989). Wolman et al., also believed that if characteristics of dropout-prone students in special education could be clarified early, interventions for those students and the subsequent application of intensive preventive strategies should help deal with the problem (1989).

The U.S. Department of Education’s Tenth Annual Report to Congress (1988), reported that students with learning disabilities were more likely to drop out of school than students with other disabling conditions, such as students with mental retardation and emotional disturbances. Levin, Zigmond, and Birch (1985), reported that the rate of dropout among students identifying themselves as learning disabled was much higher than among those identifying themselves as non-disabled. Although these studies provided important information, it is somewhat difficult to interpret their findings collectively because there is not a universal definition of dropouts. Most studies rely on
school records which are subject to error and mostly focus on characteristics of students who fail to complete school.

The transition of special education youth from school to post-high school life has become a concern of parents, advocates, and professionals. The future is uncertain for special education students from American public schools. Recent studies investigating the status of school exiters with learning disabilities reported that underemployment and high unemployment rates have been the primary problems of post-school adjustment (Haring & Lovett, 1990; Hasazi, Gordon, Hasazi & Johnson, 1989; Mitgang, Horiuchi & Fanning, 1985; Wagner, 1989).

Background Information

Circumstances of recent graduates have been investigated by several research studies. However, these studies have offered little information on specific vocational programs students completed (Benz & Halpern, 1986; Edgar, 1987; Hasazi Gordon, Hasazi & Johnson, 1989; Horn, O'Donnell & Vitulano, 1983; Wagner, 1989). Students with learning disabilities have been mainstreamed into vocational programs for more than a decade and yet the literature reveals little research based on information about whether or not the least restrictive environment is an effective way to educate students with disabilities. Two questions have emerged: (a) What should special education programs do to best prepare students for life as productive, self-reliant citizens in the mainstream of
society? and (b) What supports are needed to aid the post-high school adjustment of special education students who have spent a majority of their school experiences in special education classes?

In re-authorizing the Education of the Handicapped Children Act discretionary program (Public Law 98-199), Congress responded by calling for increased efforts in evaluating program effectiveness. A number of studies have evaluated the effectiveness of secondary level special education services to determine what happens to graduates or "age-outs" of public school special education programs (Hasazi, Gordon & Roe, 1985; Mithaug, Horiuchi & Fanning, 1985). There is a need to evaluate the effectiveness of special education programs preparing students to lead independent lives as adults (Will, 1987).

Students with learning disabilities find it difficult to achieve comparably with non-disabled students. Teachers frequently express concerns about inadequate time to offer all that is needed (Dick, 1985). Should special education continue to emphasize academic skills and knowledge achievement, shift focus to vocational education and specific preparation for entry into the work field, provide students with skills that will enhance their socialization and independent living opportunities, or should these choices be integrated? In order to answer these questions, baseline data are needed about the actual experiences of former graduates and dropouts.
Need for the Study

As part of the ongoing process of the purpose and outcomes of special education, there is a need for parents, educators, and community leaders to be aware of the relationship between high school experiences of special education students and their post-high school life. School officials have a responsibility to provide leadership in developing school experiences which lead to positive outcomes for students with disabilities. In order to achieve this, educators need to know what happens to the students who have received special education. Kokaska, (1983), points out that "we are loaded in the "front end" of our programs (i.e., classroom suggestions and assessment) but we need information from people who have taken our training and tried to apply it in the adult world" (p. 194). In order to provide students with the tools to obtain adequate levels of economic, personal, and social fulfillment, educators need to know the effectiveness of previous instructional programs and supports to facilitate students transition from high school to adult life.

Today, more than half of the graduates of the nation's high school programs for students with learning disabilities fail to make a successful transition from school to employment (Will, 1984). Each year these jobless youth join the 67% of all Americans with disabilities between the ages of 16 and 65 who are unemployed (Rusch and Phelps, 1987). A study conducted by the U.S. Commission on Civil Rights (1983), revealed that 50% of all people with disabilities are unemployed.
Those who are involuntarily unemployed, after leaving high school become consumers of public resources rather than contributors to society. Depending on the severity of the disability, the annual costs borne by taxpayers for sheltered workshops, adult day care services, and income transfer programs that support the unemployed can run as high as $12,000 per person annually (Phelps, Blanchard, Larken & Cobb, 1982; Walls, Zawlocki & Dowler, 1986).

Through the re-authorization of the Education of the Handicapped Act, Public Law 98-199, in 1983, legislators emphasized the need for program evaluation and for coordination of services between public schools and adult services for disabled persons. Follow-up studies of former students with learning disabilities were conducted to assess the extent to which program goals were achieved by those who left the programs and to investigate their adjustment to society. To date, there are no data to confirm that a follow-up study has been conducted on graduates and dropouts who exited vocational programs in the large urban public school system under study. Today, students with learning disabilities are better educated and trained than they were 20 years ago and have higher aspirations, yet most states are just beginning to collect a different type of data than follow-up studies on the anticipated service needs of youth with disabilities exiting public school systems.

This study responds to the need for additional information by obtaining a detailed look at the outcomes of students with learning disabilities after graduating or dropping out of vocational programs. It will help educators find answers to the following questions
relative to students with learning disabilities: (a) Does vocational education make a
difference? (b) Are students with learning disabilities more employable as a result of their
participation in vocational programs? and (c) Do students with learning disabilities adapt
to community living more successfully because of vocational education training?

While public school vocational education programs are not the only responsible
agent for post-school adjustment, they bear major responsibility for preparing youth with
disabling conditions to enter the adult community with skills commensurate with their
need to enjoy a quality life. The results of this study can be a first step toward identifying
more appropriate curricular efforts by school systems which serve inner city populations.

**Purpose of the Study**

The purpose of this study was to examine the patterns of further education and
training, status of independent living, and work experiences of graduates and dropouts
with learning disabilities. This study determined the effectiveness of vocational
education programs for students with learning disabilities and established a demographic
and biographic data bank for graduates and dropouts for future reference and use by
vocational programs.
Specific Research Objectives of the Study

1. What is the post-school adjustment of graduates and dropouts with learning disabilities, including further education and training, independent living status, and employment experiences?

2. What are students’ reported perceptions of the impact of vocational education for graduates and dropouts with learning disabilities?

3. What are the effects of mandated support services on the post-school adjustment of graduates and dropouts with learning disabilities?

Statement of the Problem

A follow-up study of graduates and dropouts with learning disabilities in vocational programs had not been conducted by the special education department the system being studied. Feedback data from graduates and dropouts were needed to assist in making evaluations and pragmatic decisions critical to maintaining and improving relevant vocational programs. There was also a need to determine graduates’ and dropouts’ post-high school further education and training, living status, employment history, their perception of the impact of vocational education, and the use of support services.
Definitions

Career Development Center: Vocational and technical education courses are taught in the school system investigated. Vocational education programs are in the area of business education, employability/entrepreneurship (cooperative education), health education and trade and industrial education.

Disability: A physical or mental impairment that substantially limits one or more of the major life activities of such individuals; has a record of such an impairment; or is regarded as having an impairment (Public Law 94-142).

Dropout: For the purpose of this study, a dropout is a student who did not complete a vocational education program or a comprehensive high school program for reasons of non-attendance or for dropping out of school.

Follow-up: The attempt to secure information from or about former students for purposes of planning, reporting, evaluation, or conducting research.

Independent Living: For purposes of this study, independent living will be defined as related to graduates and dropouts.

1. Utilization of money management services.
2. Marital status and living arrangements.

3. Utilization of leisure time.

Individual Education Program (IEP): A written individualized educational
program mandated by Public Law 94-142 is designed to include: (a) the present level of
educational performance; (b) a statement of annual goals and short-term instructional
objectives; (c) specific educational services to be provided; (d) amount of time in regular
class, starting date of program, and duration of program; and (e) appropriate objectives
criteria and evaluation procedures and schedules for determining, at least on an annual
basis, whether or not objectives are being achieved; (Public Law 94-142).

Individualized Transition Plans (ITP): Written objectives added to the students'
IEP to establish and implement a plan for either employment or additional vocational
training of a student with disabilities who will graduate or leave school. The process
must include special educators, parents and/or the student, adult service system
representative, and possibly an employer (Public Law 101-476).

Special Education: Specially designed instruction, at no cost to parents or
guardians, to meet the unique needs of a child with disabilities, including classroom
instruction, instruction in physical education, home instruction, and instruction in
hospitals and institutions (Public Law 94-142).
Specific Learning Disabilities: Disabilities that encompass a minimal brain
dysfunction that "may manifest themselves in an imperfect ability to listen, think, speak,
read, write, spell, or do mathematical calculations" (Section 602(15), Public Law 94-
142).

Vocational Assessment: A comprehensive process conducted over a period of
time, involving a multi-disciplinary team with the purpose of identifying individual
characteristics, educational training, and placement needs, which provides educators the
basis for planning an individual's program (Sarkees and Scott, 1986).

Vocational Education: Organized educational programs offering a sequence of
courses which are directly related to the preparation of individuals in paid or unpaid
employment in current or emerging occupations requiring other than a baccalaureate or
advanced degree. Such program shall include competency-based applied learning which
contributes to an individual's academic knowledge, higher-order reasoning, and problem-
solving skills, and work attitudes, generally necessary for economic independence as a
productive and contributing member of society. This term also includes applied
technology education (Public Law 101-392).

Vocational/Technical Education Completers: Students who complete a two year
vocational educational/technical program in a specific area at a career center in a large
urban public school system receiving a certificate upon completion.
Limitations of the Study

This study was based on graduates and dropouts from vocational programs who were identified as students with learning disabilities, and who participated in vocational education in a large urban public school system. It will not include the full range of students with learning disabilities, but only those defined by this study.

This study limited its focus on patterns of post-high school education, status of independent living, employment history, graduates' and dropouts' perception of vocational education. Additionally, limitations may be in the reporting, ability, and willingness of populations to report accurately. It is generalized only to the extent that other students or other graduates and dropouts are similar to those studied.

Chapter Summary

Chapter I dealt with the background information useful to introduce this study which was the follow-up of 1989 and 1990 graduates and dropouts with learning disabilities of vocational programs in a large urban public school system. The purpose of the study was to examine the patterns of post-high school education and training, status of independent living, and work experiences of graduates and dropouts with learning disabilities. The study also determined the effectiveness of vocational education for
students with learning disabilities, and for future reference and use by vocational 
education programs.
CHAPTER II

REVIEW OF THE LITERATURE

A review of the literature revealed three major areas that were essential to this study. These areas are: Post-school adjustment, secondary vocational programs, and support services. A summary of each follows.

Post-School Adjustment

A common procedure to determine the effectiveness of ongoing educational programs is a follow-up study of graduates. Graduates of these programs serve as the major source of information regarding program quality. It is clear that legislative mandates intend that follow-up data relative to the product and process of vocational programs be collected and that the results of these follow-up activities be used in the planning and evaluation of vocational programs.

The Vocational Education Amendments of 1976 (Public Law 94-482), emphasized the need for follow-up of former vocational education students and their employers. Two criteria mandated in this act are the extent to which former students obtain employment in occupations related to their training and the satisfaction employers of these students express relative to their pre-employment preparation. Public Law 98-
199, Education Handicapped Act Amendments of 1983, mandated collection of data regarding students who leave the education system and a requirement to conduct follow-up studies about their educational lives. The Job Training Partnership Act (JTPA) of 1984, (Public Law 97-300), also called for follow-up services.

School personnel operating programs and related services for students with learning disabilities rarely have information on post-school outcomes of students who receive these services. Yet this kind of information is needed to make programming and planning decisions to improve transition services (Bruinink, Lewis, Lange, & Thurlow 1989).

Assessing the post-school status of former students in special education has several important goals:

1. To influence and change public policies about programs and their populations (Schroedel, 1984).

2. To identify needed post-school services and problems in coordinating assistance for former students and their families.

3. To document continuing needs of former students for use in making decisions about reforms in school curricula and practices.

4. To evaluate program cost effectiveness (Bruinink, Lewis, & Thurlow, 1988).
Follow-up studies of former students with learning disabilities should be conducted to investigate program goals achieved and also individuals' adjustment in society. These program goals should be improved and modified, as needed. Systematic, independent documentation and evaluation of student adjustment by the public school system are essential.

Adjustment may be reflected in several areas of life including interpersonal relationship, employment, financial status, and community participation, (Bruinink, & Thurlow, 1988; Edgar 1988). Schools should not only be interested in employment, but community adjustments and other adjustments in post-school life.

In a survey of the published literature since 1960, Horn, O'Donnell and Vitulano (1983) reported 24 long-term follow-up studies of students with learning disabilities. Only five of the studies included measures of students' post-high school work or education experiences, none of which occurred after the full implementation of Public Law 94-142. Varied outcome measures and inconsistent results (three found generally good vocational outcomes while two did not) point to the need for further research which can be replicated in a variety of demographic areas.

The adjustment of former special education students with learning disabilities have been the focus of a number of studies in the past few years (Hasazi, Gordon, & Roe, 1985; Mithaug, Horiuchi, & Fanning, 1985). One of the primary purposes of these investigations has been to examine factors related to the employment status of persons with learning disabilities after exiting high school. The population of the Hasazi et al.,
study consisted of students who exited Vermont high schools between 1979 and 1983. The study revealed that over half of the sample (55%) were employed and that most of the youth found jobs either by themselves or through family members or friends (also called the “self-family-friend” network). Summer or part-time work during high school seemed to be predictors of current wages or the percentage of time employed since high school. In contrast, non-paid working experience during school had no significant effect. The author noted that subjects had no contact with other agencies, such as vocational rehabilitation or state employment services during and after school.

Mithaug et al. (1985) revealed that 32% of 234 learning disabled students studied had held a job at one time since graduation, but only 69% were employed when interviewed. Over half of those working earned less than $4.00 an hour. Respondents indicated a need for more training in specific areas, such as social participation and job search and selection.

The Office of Vocational Education of California initiated a statewide three-year follow-up study of vocational education graduates (Kim and Wright, 1984). This involved a comparison of the educational and employment status of special needs graduates of vocational education programs with the status of non-special needs graduates. Within the two groups, relatively similar percentages (35-40%) of graduates sought further training. However, special needs graduates maintained a lower rate of employment. The mean number of months employed since high school was 25% lower for special needs students. This study included a survey of students one year after leaving
school. It was found that the number of graduates working in a field related to high school training were not sufficiently qualified. The authors noted that the discrepancy between the pay rate of special needs graduates and non-special needs graduates was less for those special needs students who maintained employment in their field of study.

Miller, Rzonca, and Snider (1991) investigated selected variables related to the type of post-secondary experience chosen by young adults with learning disabilities. Five post-secondary education opportunities were analyzed: (a) junior college (n=27), (b) community college (n=109), (c) 4-year college/university (n=14), (d) military (n=42), and (e) private training programs (n=33). This research was based on the Iowa Statewide Follow-up Survey data base. The subjects were drawn from the second year (1985 graduates and terminators) of the statewide follow-up survey one year after subjects had graduated or left school. The researchers focused on students who were primarily learning disabled, although all disability groups were included. Two hundred and fifty of the 539 subjects participated in some post-secondary education experiences in the year after high school, such as military and private training programs. There was considerable homogeneity among subjects attending junior college, community college, four year college, and private training. There was no statistical difference in Intelligence Quotient (IQ), reading or math level and participation in the five post-secondary education opportunities. Subjects choosing the military were mostly males with only two of the 42 participants being females. It appears that subjects who chose the military had participated in industrial arts and trades and industry course work while in high school.
The researchers felt that further research is needed for a long-term continuing follow-up of the study on which data was based.

In a related study, Fourqureen and LaCourt (1990), followed 215 young adults with disabilities and their parents in a large school district in southern Texas. The average time since exiting school ranged from one to three years. Students with learning disabilities made up the largest group (66%) of exiters. This study gathered data from children and their parents regarding the transition process of post-secondary adjustment.

The majority of the subjects (73%) attended a combination of special education and general education high school classes. The remaining subjects (27%) attended all general classes, (8%) attended separate campus designed classes. Overall, 65% of these former students were living at home with parents or living on a college campus supported by their parents. The students with learning disabilities were most likely to live at home (71%). Overall, 18% of the total sample were "un-engaged", neither employed nor continuing their education. Twelve percent of the subjects had received help from adult service agencies or from public assistance. Supplemental Security Income (SSI) was received by 5% of the sample, and 30% received food stamps or welfare. Only 17% had received services from the Texas Rehabilitation Commission. The employment rates of students with learning disabilities was 82% and most had found employment through family and friends or on their own. Since exiting high school, only 38% of the total sample had completed at least one semester of college or technical school. At the time of the follow-up, 19% were attending school.
College proved an area of particular frustration for many students in this follow-up study. Of the students with learning disabilities and emotional disturbance (n=80), those who had enrolled in colleges or universities had dropped out by the time of the follow-up study. Six students with learning disabilities were required to take remedial classes. Some colleges were disinterested in students with learning disabilities, while others appeared to have elaborate provisions for learning problems.

Difficulties in post-secondary education were also reported in a study by Fairweather and Shaver (1991), who looked at a national sample of special education students with learning disabilities who had left high school to determine their participation in post-secondary educational programs. The results showed that youth with disabilities participated in post-secondary programs at only one-quarter the rate attained by their counterparts without disabilities and at only one-third the rate attained by economically disadvantaged youth. The relationship of post-secondary education for youth with disabilities to long-term success in employment was not determined.

Participation in post-secondary education varied by the type of education setting. Youth with disabilities with low family income and less-educated parents are less likely to enroll in post-secondary programs than youth from parents with higher income and education levels. Youth with learning disabilities participate at a considerably lower rate than do youth with non-disabilities.

Difficulties in post-secondary employment were reported in several studies which focused exclusively on the adult employment adjustment of individuals labeled "learning
disabled” while in school. Humes and Brammer (1985) conducted a follow-up study of
individuals in Virginia. Approximately 90% were either employed or in training
programs. Of those employed, most were in entry level unskilled or semiskilled jobs.
The authors attributed the high employment rate to an effective guidance and counseling
program and an opportunity to participate in vocational/technical training.

A related study by Hasazi, Gordon, & Roe (1985) reported that over half of the
sample that exited Vermont high schools between 1979 and 1983 were employed
primarily in service occupations. Most of them found jobs through the self-family-friend
network. Employment outcomes were related to secondary vocational and training
experiences and to part-time or summer work during high school.

A study by Shalock, Wolzen, Ross, Elliot, Werbel, and Peterson (1986)
investigated the post-secondary community placement of 65 youths with learning
disabilities who had graduated from high school between 1979 and 1983. These
researchers found 73% were employed (typically less than full-time), and an additional
8% were attending technical schools or colleges. Only one-fourth of the respondents
were living independently, but the majority (71%) said the primary source of their income
was personal.

Zigmond and Thornton (1985) examined the employment status of a group of
youth with learning disabilities and a control group of non-learning disabled, same-age
peers from a northeastern urban area. They reported significantly lower basic skills and
competency levels among youth with learning disabilities. In addition, both graduates
with learning disabilities and non-disabled high school dropouts were employed at the
time of follow-up at a significantly lower rate than their graduating peers.

A study of post-secondary aged mildly disabled youth in rural areas in four
counties in a southern state (Fardig, Algozine, Schwartz, Hensel, and Westling, 1985)
examined the background of 113 students to determine what educational variables were
predictive of their current occupational status. Forty females and 73 males participated in
the study, which included 64 African Americans and 49 Caucasians, age 19.1 years. The
researchers developed an employment training index based on Halpern's 1973 model to
find the demographic and academic backgrounds, of employment status, and education
and training of former students.

Analysis of the results indicated that former students were employed an average
of 50% of the time after termination of the secondary education program. Fifty subjects
were employed full-time; eight were employed part-time; 16 were students; 13 were
homemakers; four were members of armed services; three were incarcerated, and 19 were
unemployed. Of the 62 employed, 33 had been on the job at least 12 months. Wages
ranged from $25 to $250 per week. Males fared better than females; age and race were
not related to adjustment scores.

Thornton and Zigmond (1987) examined the labor market experiences for
learning disabled secondary mainstream vocational training completers and compared
them with non-disabled vocational education peers from a large urban school district in
the eastern United States. Similar rates of employment were noted, but the percentage of
time employed for the learning disabled sample was 50% compared to 66% for the non-learning-disabled control. However, rates of engagement, to include education and training, were 69% for the learning disabled sample and 76% for the control group. While this comparison indicated no significant differences, the study noted that one-third of the learning disabled sample was unemployed at the time of the study and that as a group, they had been unemployed 50% of the time since they left high school. The majority had neither employment nor post-high school training related to their vocational training.

In an effort to obtain baseline data on the combined efforts of ten school systems in the state of Washington, Gill (1984) surveyed 14% (n=194) of the mildly disabled students who left school between 1981 and 1984. Sixty-nine percent (69%) of the sample was comprised of students with learning disabilities. He discovered that the unemployment rate for special education students was double the unemployment rate for 18 to 24 year olds and five times the unemployment rate for the total population for that area. Disabled students had only a 50/50 chance of employment when they left school and 23% of the sample had not worked in the past three years. Earnings for 28% of the sample were below the poverty level for a single person and an additional 40% were near or below the poverty level for a family of two people. Only 19% of the sample had had any additional education or training. Seventy percent (70%) of those seeking additional training enrolled in vocational programs.
Montgomery County Public Schools, Maryland compared two follow-up studies of special education graduates (Hawkins, 1984; 1985) one-year after high school. The majority of employed special education graduates reported earning less than $4.00 an hour, compared to an average of $5.00 an hour reported by regular high school graduates. Graduates were generally employed in relatively low skilled job categories. Over 20% were employed in food service and a higher percentage were reported in clerical and service jobs. A sizable proportion (30%) pursued some type of post-secondary training, most frequently at a local community college. One additional finding indicated that mildly disabled graduates were more likely to work after graduation if they received some type of specific job training during high school. This last finding was consistent with a study by Mertens and Seitz (1982), which explored the feasibility of using the New Youth Cohort of the National Longitudinal Surveys of Labor Market Behavior database to examine the effects of vocational education on disabled individuals. The evidence suggested that disabled vocational graduates had a higher rate of employment than did their disabled non-vocational peers.

In 1982, the Association for Children and Adults with Learning Disabilities (ACLD) conducted an extensive nationwide survey of a wide age range of 562 adults with learning disabilities. Of the total sample, 160 (28%) ranged in age from 21 to 24 years. The male/female ratio in this sub-sample was 4:1; two-thirds of them had attended public elementary and secondary schools; and 40% had been in special education classes in high school. Nearly one-third reported having been enrolled in a vocational education
program in high school. Only one subject was still enrolled in high school and 12.5% reported having dropped out.

At the time of the follow-up, 50% were employed and 60% of those employed were satisfied with their employment. Eight percent had never been employed. Of the subjects who had completed high school, 28% were currently in colleges and an additional 18% had enrolled in two- or four-year colleges but had subsequently dropped out.

A related study by Okolo and Sitlington (1986) summarized the findings of follow-up studies that have focused on adults with learning disabilities or included them in their sample. They pointed out that, despite methodological concerns about these studies, there were some consistent results. The individuals studied appeared to be employed at approximately the same rate as non-disabled peers. However, their employment was often part time and at entry level or minimum wage. Moreover, these individuals frequently received little vocational counseling in high school.

Research by Cobb and Crump (1984) followed 100 young adults who had been identified as learning disabled while enrolled in a southern, rural school system. Seventy-five of these young adults had been placed in learning disability programs in high schools and 25 had been identified as learning disabled but were not placed in special education programs. The male/female ratio was 2.2:1 and black/white ratio was 8:92. The mean number of years from referral to follow-up was 8.3 and subjects ranged in age, at the time of the follow-up, from 20.0 to 26.8 years (n=22.1). The SES range for the majority of the
subjects was upper lower to lower middle class and the mean IQ score was 94.3. The reported overall high school dropout rate was 42% (44% and 36% for the placed and non-placed sub-samples, respectively).

In addition to demographic data, an examination of secondary vocational education enrollment patterns indicated that 14% of the total sample had been enrolled in vocational education for six semesters and 64% had been enrolled for at least one semester. The mean number of semesters in vocational education as 2.5 and indicated that the group of subjects had been enrolled in twenty different vocational education programs. Of the subjects who responded to questions about the value of vocational education, 89.6% rated it fair or very helpful. Sixty-nine percent of the sample had received no additional academic or vocational training since high school. Of the 42 dropouts, only seven had received GED certificates.

Further, the unemployment rate for the total sample was 13% and compared favorably with a 15.1% overall unemployment rate during the same time frame in that area. Of the 87% who were employed, the largest single category of workers was production occupations. The majority of those employed expressed satisfaction with their current jobs and had worked on their current jobs for over two years.

A study by Scuccimarra and Speece (1990) also investigated the employment outcome and social adjustment of mildly disabled students with learning disabilities who exited high school. The purpose of the study was to supplement and extend findings to a group under-represented in follow-up studies who were young adults classified as
learning disabled, and to improve upon the methodology used in previous follow-up studies. The authors explained that although the literature on post-high school adjustment appeared to have shifted documentation of employment and implementation of training models, knowledge of the life circumstances of young adults remained incomplete, especially of their social lives. They further stated that the social status of students with learning disabilities had received relatively little emphasis, even though this information is of vital importance to post-school adjustment (Edgar, 1985).

The results show that the majority of students worked on a full-time basis for minimum wage or better, were satisfied with their jobs, and had relied on a self-family-friend network to secure employment. The majority were single, resided at home, and were engaged in a variety of social activities on a regular basis. When employment and social activities were combined, 60% were employed and held positive perceptions of their social life.

In order to find out the employment prospects for students with disabilities, Schwarz and Taymans (1991) investigated the outcome of mainstreaming urban youth with learning disabilities into regular vocational/technical programs. The authors reported that 70% of the respondents were referred to a vocational/technical program (VTP) by either a school counselor or a special education teacher, as opposed to self or family initiated referrals. Few had experienced involvement in counseling (13%), employability skills, and career guidance services. They selected their own courses through parents and friends.
Investigating employment outcomes, forty-eight percent worked through a federal subsidized program while they were in school. Seventy-eight percent of the participants were employed at the time of this survey in maintenance and food service positions. All VTP completers had had at least one job since graduation, 26% had held two jobs, and one individual had held three jobs. The majority (77%) had been employed for a total of six months or less. Eighty three percent reported earnings of $4 an hour or less; however, two males earned between six and seven dollars an hour. Sixty-one percent stated they were not qualified for jobs in the vocational area in which they were trained. Forty-one percent expressed difficulty with filling out applications. All of the respondents were living at home and none had any additional vocational training. The respondents could not name service providers, and had not been referred to services available to them. The results of this study provide some preliminary evidence that participation in vocational/technical programs had some limited benefits for learning disabled completers.

To enhance employment success, Siegel and Gaylord-Ross (1991) designed a four factor model to investigate the employment success of young adults with learning disabilities. The factors included job match and accommodation, social acceptance, work attitudes, and special services. The study investigated job situations in a manner that allowed for a whole system or part of a system of factors to be correlated with vocational success. The authors reported that although the young adults received a tremendous amount of school provided services, they had limited financial and residential independence. Few community or vocational training resources were available to them.
and they experienced minimal adult adjustment. When examining adult adjustment, it was also noted that of the 41 participants in the study, 52% were employed in better paying jobs. With regard to the number of job since graduation, 46% had held one job, 22% had held two jobs, 12% had held 3 jobs, and 20% had held 4 or more different jobs. Employers of the participants reported that 40% had worked 35 hours per week and 54% had worked between 35 and 48 hours per week. The most common jobs held were bus persons, fast-food positions, cashiers, crew members, mail clerks, and stock clerks. At least 48% of the students had been fired or terminated by the time the study was completed.

Elksnin and Elksnin (1991) reported that employers found that inadequate social skills, especially the inability to communicate, immature manners or mannerisms were related to employment difficulties rather than to inadequate vocational preparation. Therefore, social skills should be included in vocational education training for students with learning disabilities. The authors reviewed eight commercial skill training programs: ACCESS, ASSERT, Getting Along with Others, The Prepared Curriculum, Skill Training, The Adolescent, Social Skills for Daily Living, Social Skills in the Classroom, and the Waksman Social Curriculum. The skills included in each of these programs were correlated with the 20 interpersonal skills reported by Greenan (1984) to generalize across vocational programs. However, not all of Greenan's 20 interpersonal skills were included in the commercial programs. Greenan's interpersonal skills were noted to be commonly concerned with the transferability of cognitive, affective, or
psychomotor skills which are necessary for success within and across vocational programs and occupations.

Elksnin and Elksnin (1991) believed that the acquisition of validated job-related social skills and improved decision-making skills would foster the level of independence needed by adolescents with learning disabilities to become vocationally successful. The purpose of their study was to explore factors in the past and current life experiences of young adults that are related to success and life satisfaction. Fifty young adults age 18 to 25 were divided into two groups: Successful (n=29) and unsuccessful (n=21). Information was used from case records, parent ratings, current testing, and in-depth interviews. The groups were compared both quantitatively and qualitatively. The two groups were similar on many background variables. Those variables that significantly discriminated the groups (verbal IQ at enrollment, length of enrollment, and math achievement discrepancy) did not result in accurate prediction of group membership. For both groups, current testing and personal accounts revealed the chronic nature of academic skill difficulties and the ongoing struggle to cope with a learning disability.

Qualitative analysis revealed a set of personal attitudes, behaviors, and external support systems that were related to success. The groups were similar in many ways since they were mostly white and from middle class families or above. Students who scored high were not necessarily successful. It was also noted that a learning disability does not disappear when one reaches adulthood.
Lichtenstein (1987) conducted a longitudinal study of 52 adolescents with learning disabilities in an urban school to investigate the dropout problem. It was found that 24 of the students (47%) had stopped attending high school before graduating.

The purpose of recent study conducted by Ramasamy (1995) was to examine former students' opinions regarding the kind of schooling they had received to prepare them for post-school life. Specific questions were about high school programs that prepared them for employment, independent living, and social adjustment in the community. The sample consisted of 132 Apache Youth between 18 and 26 years of age.

Fifty-two students in the sample were classified as students with learning disabilities. Results were compared with those of general education students. Students with learning disabilities viewed math (23%) and English (13%) to be most helpful for job preparation and wished they had taken math (15%), computer study (12%), and office skills (12%) to be adequately prepared for job market entry. Regular education students' perception was somewhat different. They ranked math (26%) and English (17%) as being the most helpful academic subjects and wished for more programs in computer study, math, business education, English, and farming.

The Halpern et al., study (1995), examined predictors of participation in post-secondary education for school leavers with disabilities, using instruments, procedures, and logistic regression analysis from an original study in Oregon and Nevada and a two year replication study in Arizona. Participants were students with disabilities in the process of transition from school to adult life. Three samples of participants were the
initial focus of data collected for the study. There were 315 students from Oregon, 107 students from Nevada, and 565 students from Arizona. Students were 17 years of age or older during the first round of data collection. The study found six predictors to be associated with participation in post-secondary education:

(a) high scores on a functional achievement inventory, (b) completing instruction successfully in certain relevant curricular areas, (c) participating in transition planning, (d) parent satisfaction, and (e) student satisfaction with instruction received by the student and parent perception that the student no longer needed help in certain critical skill areas.

The findings emerged were also suggestive of program and policy development that might enhance participation in post-secondary education by school leavers in the future.

Transition services and interagency service coordination for youth with disabilities have increased significantly during the past 10 years. The development of these services has necessitated the creation of new human services professional roles. One emerging role is that of transition specialist. A study was conducted to identify and validate competencies for transition specialist practitioners. Practitioners across the United States from the field of vocational special education, special education, and vocational rehabilitation identified competencies believed essential to providing effective transition services.

The sample was composed of 42% male and 56% female transition specialists from 48 states and the District of Columbia. More than 65% had been working in their field for more than ten years. A total of 116 competencies and 12 domains were
identified. The domain of “knowledge of agencies and system change” ranked as the top domain. The domain containing competencies related to “curriculum instruction, and learning theory” received the lowest ratings.

A study by Gerber (1994) focused attention on adults with learning disabilities. As the field of learning disabilities begin to include manifold issues of adulthood, there is need for a framework for studying adults with learning disabilities. Currently, the research on adults focuses primarily on service delivery systems. If a life-span developmental perspective is utilized as a conceptual approach in future research, then the knowledge gained will be more meaningful.

When students with learning disabilities exit mandated school programs and become adults, they enter a stage of their lives that necessitates not only new accommodations and services, but also, and more important, new ways of thinking about their disabilities. There has been little research about adults with learning disabilities. According to Gerber, a learning disability is a lifelong disability; it persists throughout the entire stage of adulthood.

Several researchers have investigated adults with learning disabilities and labeled them into many age-span categories and domains. Gerber believes that research about adults with learning disabilities would be more meaningful if it emanated from an adult-development perspective. He further believes that persisting problems in adulthood tend are exacerbated as the adult years unfold. Since there is a deterioration of skills and
abilities as adulthood progresses, this factor should be included in research designs, possibly via the use of age-span analysis.

Sitlington and Frank (1993) investigated the adult adjustment of randomly selected students with learning disabilities in the class of 1984 and 1985 one and three years after they exited high school. Four hundred twenty-two (90% of those selected) from the class of 1984 were interviewed one year out of high school and 271 from this same year were interviewed three years out of school. Five hundred seventeen students (82% of those selected) from the class of 1985 were interviewed one year out of high school; 513 were interviewed again three years out of high school.

The results were reported in four parts: Total group by gender, by program model, Resource Teaching Program and Special Class with Integration (RTP and SKIN) and by graduation status (graduates and dropouts). Data reporting focused on Group 2 three years (G2Y3) after graduation in 1985.

Major changes in adult adjustment one year versus three years after graduation revealed a significant improvement which was defined as a change of greater than or equal to 15% in the desired direction. There were significant shifts in all three general status variables - employment, independent living, and education; for the total group as well as for all subgroups with only a single exception concerning dropouts where the shift relative to financial assistance was not substantial.

The total group and subgroup realized a 50 cent per hour increase in wages between years one and three. Dropouts experienced the least number of gains in adult
adjustment. Although a number of positive shifts were observed for the total group and subgroups from years one to three, the question remains about how successful these respondents were relative to their overall adjustment as adults. Eleven percent of the total Group 2 met the high standard of success. Among RTP vs. SKIN individuals, the differences were small between those who met the high criteria.

About one-half of the individuals were living independently, and a similar proportion reported paying all of their living expenses. Eight-three percent were employed. The average wage per hour among employed persons was $5.56 an hour with one-half receiving health insurance and vacation time as a job benefit. Less than one-half did not receive post-secondary education. More females were living independently than males and more males were employed than females.

A comparison of group one and two for the number of years out of school and in changes from year 1 and 3, show some similarities and differences between group 1 and 2. The groups were similar in terms of general functioning level while in high school and by their last program change.

A number of studies tracking graduates and non-completers in special education have illuminated the post-school success and failures of youths with learning disabilities. The majority of these studies, however, have been descriptive, rather than explanatory. Follow-up studies in the school system studied have been few and have not focused upon graduates and dropouts with learning disabilities who participated in vocational education programs. This follow-up study will fill the void that exists in the area of follow-up
studies in vocational education on graduates and dropouts with learning disabilities, especially in the large urban public school system studied.

**Secondary Vocational Programs**

Special education programming at the secondary level appears to be pointless when not linked to a career or vocational program appropriate to the needs of students with learning disabilities (Campbell, 1985; Corthell and VanBoskirk, 1984). The programs and services available through vocational education can provide options for students with learning disabilities and provide an appropriate program in the least restrictive environment (Greenan, 1982).

Both special educators and vocational educators have critical roles to play in the preparation of adolescents with learning disabilities. However, secondary special education must take the lead in the development and delivery of services oriented toward vocational programming and in forging a partnership with vocational education (Okolo and Sitlington, 1986). In-service programs may be needed for special educators to better understand the needs and concerns of vocational education. Miller and Stadt (1983) suggest that a better interface of special education and vocational education could be achieved if special educators were required to have field experience with students with disabilities in career courses or centers. The extent to which students with learning disabilities enter and succeed in vocational programs depends to a large extent on how
well special and vocational educators are committed, prepared, and willing to work together as a team (Greenan, 1982).

In our society a great deal of emphasis is placed on a person's occupation. Indeed, many judgments and assumptions are made based upon the type of work in which a person is engaged. This is no less so for persons with learning disabilities. However, it has been only in recent years that the impact of learning disabilities, as it relates to a person's occupational success, has been researched.

Unfortunately, adults with learning disabilities have been left on their own to secure and adjust to work after graduation from school. Patton and Polloway (1982) suggest that such an individual approaches this task in one of three ways: (a) by achieving a normal, successful lifestyle, (b) by experiencing problems but dealing with them in a covert fashion, or (c) by "encountering major difficulties with the resultant effect being overt reactionary manifestations" (p. 79). Numerous studies (Hoffman, Sheldon, Minskoff, Sauter, Steidle, Baker, Bailey, and Echols, 1987; Fafard and Haubrich, 1981; Buchanan and Wolf, 1986; Patton and Polloway, 1982) suggest that the adults with learning disabilities are often subject to the third option. Patton and Polloway (1982), go so far as to state that "the end result may be regression rather than progression" (p. 80).

The major fault thus far in the public education of the students with learning disabilities is that services are terminated when the student exits the system. It is finally being recognized that a learning disability is long-term in nature and that the individual or
the disability should be considered "life-long". In fact, the National Joint Committee on Learning Disabilities has composed a position paper (1985), making recommendations to enhance the education of students with learning disabilities.

Buchanan and Wolf (1986) conducted a survey of adults with learning disabilities and compared the results to their case histories. Evidence indicated that: (a) many of the same characteristics persist into adulthood, and (b) adults with learning disabilities have a poor understanding of their disabilities and how they affect various aspects of their lives. It is somewhat disturbing to realize that adults do not gain a better understanding of themselves during their many years in school.

In another study of the perceived importance of occupations, Plata and Bone (1989) found that students with learning disabilities value skilled, semi-skilled, and unskilled occupations more highly than do non-learning disabled peers. This was, in part, attributed to the occupations of their parents and/or the lack of role models in the home environment. The authors also noted that the student's self-concept is strongly tied to the way in which an occupation is selected and the reactions and aspirations the student expresses.

Research conducted by Okolo and Sitlington (1988) indicates that students with learning disabilities are under-represented in school vocational programs, their potential is unchallenged when enrolled, and they are often trained for "blue-collar" occupations. Additionally, the authors remind us that vocational preparation usually begins late in the high school program.
Parents, however, provided necessary support to assist their children in the areas where the school system failed. Parents often assisted their children in securing employment by being aware of opportunities in the community and utilizing a network of acquaintances.

Finally, when students with learning disabilities enter secondary education, educational needs most often have changed while the focus on remedial and academic skills remains. Okolo and Sitlington (1988) suggest that "the emphasis on basic academic skill instruction with adolescents with learning disabilities should be continued, but that it should be conducted in the context of the types of reading required in the world of work" (p. 296).

Gray (1981) elaborates on this recommendation by suggesting that "information about reading needs at home or on the job, about verbal and non-verbal communication skills in the individual's environment, about performance of specific job skills, or about expectations placed on the individual by persons in his/her environment appear to provide a great deal more usable information and more practical intervention targets than information about visual perception, auditory memory, digit span, figure-ground discrimination, or other variables so often included in the assessment of the learning disabled" (p. 428). The author also points out that the great emphasis placed upon reading during the student's school years often results in a skewed view of its importance in a particular vocation. Another shortcoming has been the lack of transition preparation and follow-up services offered by school systems. Fafard and Haubrich (1981)
interviewed 21 adults with learning disabilities and their parents in order to determine their ongoing needs. The majority of adults held only part-time positions in relatively low-paying situations. Only one of the adults was receiving services at the Division of Vocational Rehabilitation and few knew of its existence. In the same study, it was evident that the school system did not provide vocational planning but instilled the attitude that one parent expressed, "it'll all work out by the end" (p. 127).

The role of public education has been to provide an academic foundation that affords all individuals the basic tools to succeed in the post-secondary world. While there have been attempts to develop the functional skills of adolescents with learning disabilities, the fact is there are few established programs to prepare these untrained and non-experienced individuals for entry into the labor market. According to the U.S. Department of Education, there is a need to provide a coordinated continuum of services to aid young people with learning disabilities from school into competitive employment.

The need for a public awareness campaign has been substantiated and advocated by the vast majority of those persons involved in this field. A recent position paper, by the National Joint Committee on Learning Disabilities (1987) recommends that:

"programs must be initiated to increase public and professional awareness and understanding of the manifestations and needs of adults with learning disabilities" (p. 172). More specifically, the Committee acknowledges the need to target employers in particular. Education of both students with learning disabilities and local industry is one of many functions of the public school system.
In a recent survey the needs of adults with learning disabilities were assessed from the viewpoint of the adults with learning disabilities services providers, and advocates (Hoffman, Sheldon, Minskoff, Sauter, Steidle, Baker, Bailey, & Echols, 1987). Results indicated that the adults had received very little vocational and/or career guidance while in high school. Only 36% of the 381 adults with learning disabilities surveyed were employed at the time the survey was conducted. The adults with learning disabilities listed "filling out job applications" as their most persistent problem in getting/keeping a job. However, service providers gave "following directions" the most emphasis. Again, we are reminded that individuals with learning disabilities often have a difficult time viewing themselves objectively and accurately assessing their problems.

An additional area that all surveyed agreed upon was the overriding problem of knowing where to get a job. Associated with this is obtaining job training and interviewing skills. All persons confirmed that the adults had received little or no vocational/career preparation and/or follow-up. These findings illustrate the need for a more coherent, cohesive program planning process in the education of secondary students and adults with learning disabilities.

Several programs have been developed and are currently being piloted to test their effectiveness in intervening and preventing such life/work adjustment problems. Roessler and Johnson (1987) reported on the Vocational Coping Training Program. This training program was developed to teach job retention skills to adolescents with learning
disabilities. It is well-known that social and interpersonal skills of persons with learning disabilities are often underdeveloped and unrefined.

Okolo and Sitlington (1988) suggest that instruction focus more on "generalizable or transferable skills". This would encompass interpersonal and social skills as well as post-secondary programming for the learning disabled. Several studies have indicated that more than half of the 50,000 students with learning disabilities graduating from high school each year will access post-secondary education (Mithaug, Horiuchi & Fanning, 1985; White, Alley, Deshler, Schumaker, Warner & Clark, 1982). Research is now being generated concerning the transition from high school to college for the learning disabled. It is expected that more students will be attending college in the late 1990's.

The federal government has addressed the needs of the learning disabled by passing legislation dealing with transition to work and employment. The Americans With Disabilities Act, which was signed by the President and became a law July 1990, was a breakthrough for individuals with learning disabilities. This Act gives the disabled the same Civil Rights protection in jobs, accommodations, and services that currently apply to minorities, women, and the elderly.

Vocational education programs are skill training programs designed to provide students with marketable skills for gainful employment. These programs could work for students with learning disabilities when instructions are keyed to the environmental demands where the skills will be used (Gaylord-Ross, 1986). Because of their better learning potential through real experiences, these students can readily develop skills that
can prepare them for the world of work (Nathanson, 1982). The extent to which students with learning disabilities enter and succeed in vocational programs depends to a large extent on how well special and vocational educators are committed, prepared, and willing to work as a team (Greenan, 1982).

**Support Services**

Both special education and vocational education can prepare the student with learning disabilities for entry into vocational education and employment settings at the secondary and post-secondary level. Each discipline can offer distinct but complimentary services. To optimize such a joint venture, secondary special educators must take the lead in developing and delivering services oriented toward vocational education. Special education is best equipped to provide students with instruction in job-related academics and interpersonal skills. Provisions of support services and access to appropriate relevant educational opportunities are somewhat dependent on how well service providers are able to pool their resources for the common good of students with learning disabilities. This cooperation is crucial to the transition process.

Secondary special education programs can offer a comprehensive set of vocational relevant services to equip adolescents with learning disabilities with needed experiences and skills to increase coordination and cooperation between special and
vocational education in the delivery of services. Okolo and Sitlington (1988),
recommended six types of vocational relevant activities to achieve these goals:
(a) occupational awareness, exploration and basic work experiences, (b) in-depth
career/vocational assessment, (c) instruction in job related and interpersonal skills,
(d) support services to other disciplines involved in vocational programming, and
(e) post-school placement and follow-up. Secondary level special educators can further
facilitate their students’ vocational and employment opportunities by providing support
services to disciplines and agencies that are affiliated with vocational educational
programming, including not only vocational education, but vocational rehabilitation and
programs funded under the Job Training Partnership Act (JTPA).

A review of the literature on the high school foundation for the transition process
reveals six key components needed for a comprehensive, special education program and
support services which can facilitate student’s probability for success. However, on
support services is limited. The six components overlap in scope and function, but will
be presented separately for discussion. These components were not agreed upon by all
authors. No attempt is made to present them in order of priority or importance. The six
components are: (a) career education, (b) vocational assessment, (c) instructional
accommodation/fundamental academics, (d) employment skills, (e) career counseling,
and (f) transition linkages.
Career Education

Career education as a concept can be traced back generally to prehistoric days with reference to children learning the minimum vocational needs for survival, hunting, fishing, cooking, bodily care, and later the planting and harvesting of foods. Career education took on increasing significance as civilization became more formal and specialized. Whitehead (1929) was one of the first to give verbal expression of career education when he said, "There can be no adequate technical education which is not liberal, and no liberal education which is not technical and intellectual vision. Education should turn out the learner with something he knows well and something he can do well" (p. 7).

Many writers have broadened the work/vocational aspect in defining career education. Kokaska and Brolin, (1979) presented a widely accepted definition of career education: "Career education is the process of systematically coordinating school, family, and community components together to facilitate each individual’s potential for economic, social, and personal fulfillment" (p. 102). These authors also stated that career education was: (a) for all persons kindergarten through adult, (b) a process that focuses on learning experiences, related to self understanding education and endeavors and career potential, (c) a process that provides experiences related to a sample of jobs at all levels of the occupational spectrum, (d) a way for students to find satisfying worthwhile work, and (e) a way to motivate students.
Many people confuse career education with vocational education; however, there are distinct differences between the two concepts. For example, career education includes: (a) awareness, exploration, decision-making preparation, and entry and advanced stages, while vocational education is the preparation stage only, (b) career education is for all people, whereas vocational education is for people seeking vocational-technical education, and (c) career education emphasizes paid and unpaid work, while vocational educational emphasizes paid employment.

Kokaska (1978) defined the process of career education as having four parts: (1) career awareness, which should be developed during the elementary years, (2) career orientation for grades 7-8 which expose the learner to all levels of occupation and provide real life experiences, (3) career exploration for the junior high school level, where the learner can explore the world of work with simulated and hand-on experiences, and (4) career preparation in the early high school years, when the learner is placed in vocational education, on-the-job training, apprenticeship, co-op programs, and job placement. Retraining, upgrading adults, and continuing education, are continued throughout working life due to technology changes.

Career education should be a part of students’ with learning disabilities educational plans and should be introduced in the elementary grades. Students should be provided with experiences to enhance their preparation for the world of work throughout their high school years. Career education is crucial for students with learning disabilities. Consequently, appropriate educational programs should be developed. Teachers must
prepare students and help them to maintain the career education skills which they have learned in the classroom. Support of career education goals by school administrators, family members, social agencies, and employers is essential. The implementation of career education falls into five categories: (a) assessment, (b) planning, (c) curriculum materials, (d) generalization and maintenance, and (e) system commitment (Brolin, 1983).

Appropriate measures should be available to assess the career education needs and vocational potential, such as aptitudes, interests, and coping abilities of students with learning disabilities. Techniques for measuring role in the community are not widely used by school and rehabilitation personnel. Career education planning and programs suffer; moreover, students too often lose out because of inadequate preparation for real life demands (Interagency Office on Transition Services, 1987). Suitable assessment tools should be available to prevent shortcomings in planning strategies.

The formation of any plan must include the cooperation and approval of the parents. They need to increase their knowledge and understanding of their child's vocational needs and to assist the school and counselors in insuring the success of the student's vocational plan (O'Connell and Fay, 1986; Cobb and Hasazi, 1987). Many students often lose out because of inadequate preparation for real life demands, which can also cause career planning and programs to suffer (Interagency Office on Transition Services, 1987). Special education planning must expand IEPs to include more vocational education goals and a longitudinal plan that provides opportunities which
prepare the student for transition. Numerous observers have criticized IEPs for failing to specify a student's employment related needs, program objectives, and related services (Longo, 1982). IEPs may overlook the variety of objectives. Even if objectives are stated, they may be only vaguely related to students and classroom learning. A systematic focus on each student's career education is necessary throughout elementary and secondary years and should begin immediately with placement into special education (Mithaug et al., 1985). The opportunities in the plan should be clearly outlined in purpose and design in addition to being revised as students progress through their public school experience.

Elrod and Lyons (1987) identified the lack of sequenced career education curriculum as a major obstacle to program reform. Other concerns were the needs to: (a) modify and expand vocational training options, (b) increase the amount of time available to implement required services, (c) develop new career exploration and awareness materials, and (d) improve instruments for assessing the impact of career education programs. A school-based curriculum based on career education principles should focus on preparing for competencies in the three cluster areas: (a) daily living skills, (b) personal social skills, and (c) occupational guidance and preparation (Elrod and Lyons, 1987). Career education is usually added to existing instructional programming where the tendency, based on student's academic deficits, is to deal with remedial or instructional strategies rather than career needs (Clark and White, 1985). Planners must not overlook the need to do more than institute new school-based curriculum because

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students also need assistance in generalizing and maintaining career education outside school settings.

Generalization and maintenance of skills requires settings in the community in which students can practice the career education skills they have learned in the classroom. Too few on-the-job evaluation and training opportunities are available in local business and industry (William T. Grant Foundation, 1988). Until generalization and maintenance of career education skills are truly stressed through programming services, students with disabilities will continue to run the risk of dropping out of high school into one of the three program options: "a day treatment program, a sheltered workshop, or...no program at all" (Giangreco, 1986). Students with disabilities should have transition preparation and planning throughout the career education process, and should have vocational assessment on a continuous basis to better understand their potentials for post-school adjustment.

**Vocational Assessment**

Vocational assessment is a systematic ongoing process designed to help students and their parents understand their vocational potential. It measures abilities and interests, and identifies appropriate work environments. Vocational assessment has become an integral part of planning for students with disabilities during secondary school years. The Carl D. Perkins Act of 1984 and its Amendment of 1990 authorized funds to support
vocational education programs, and specifically listed assessment as a service to be considered when planning vocational programming for special needs students, including learning disabled.

Section 204 (c) of the Perkins Act requires that special needs students enrolled in vocational education receive an assessment of their interests, abilities, and special needs relative to successful completion of the program. As students progress through the various stages of career development, they should be reevaluated frequently by counselors and teachers, using appropriate standardized and teacher-developed measures.

As students become interested in and able to make specific career choices, the assessment process will become increasingly comprehensive, examining the match between specific aspects.

Vocational assessment is vital in the design of career and vocational education instruction. The Division of Career Development of the Council for Exceptional Children stresses that career and vocational assessment should be a continuous process that begins in the elementary grades and continues throughout adulthood (Sitlington, Brolin, Clark, and Vacanti, 1985). Assessment should begin before and continue after placement into a vocational program. It should be an ongoing process of collecting information to suggest prescriptions and intervention with respect to the functional learning requirements of vocational education programs and the world of work (Mori, 1982; Peterson, 1985; Roberts, Doty, Santineban & Tang, 1983).
Vocational assessment must go beyond the individual and include other factors such as job analysis and labor market surveys, and properly fit the person and the work setting. (Szymula and Schless, 1986; Tucker, 1985). It should also be viewed as a screening device for vocational programs, and should begin and continue after placement into a vocational program.

An important part of the vocational process is the development of learning profiles, which are a list of charts that describe the skills and attributes of learners with special needs. The profiles should contain data and information in academic, psychological, psychomotor, medical, social, and vocational skills. This information should be obtained over time through real life work situations and/or simulated work activities, and may include such areas as information relative to an individual's: (a) vocational aptitudes, (b) vocational interests, (c) work habits, (d) socialization skills, (e) personal adjustment skills, (f) work attitudes, and (g) work tolerance.

Vocational assessment should not be limited to specialized laboratory activities or formalized testing. More informal, classroom-based processes can effectively provide valuable information (Porter and Stodden, 1986). Assessment should be exploratory as well as preparatory and must include a continuous process of information retrieval and dissemination. Neubert (1986) suggest that the kind or amount of curriculum modification that a student may require may be identified through assessment.

There is a need to develop proper and valid assessment instruments for the learning disabled. Gray (1981) suggests that: "New devices should be constructed to
assess the individual's level of competence in relation to expected competencies in his/her various environments and the modifications necessary and/or possible in those environments" (p. 429). The National Joint Committee on Learning Disabilities (1987) recommends that program planning should be based on "the results of a comprehensive and integrated assessment of the individual that will provide a description of specific patterns of abilities and disabilities" (p. 173).

Such advancements would enhance academic instruction, pre-vocational and vocational instruction, career counseling, and the individual's occupational choice and preparation. However, designing assessment instruments suitable to a variety of conditions and needs may be virtually impossible.

Buchanan and Wolf (1986) pointed out the usefulness of utilizing case studies or vignettes in representing problems experienced and/or presented by the learning disabled. The possibilities of enhancing assessment results in such a way are encouraging. Such presentation could assist a potential employer in best placing the learning disabled in a work position.

In many schools, the vocational assessment needs of both students and teachers may best be served by not using commercial laboratory processes, but rather, involving the assessment staff more directly in classroom environments, their curricula, and the development of classroom-based performance samples directly related to those curricula (Cobb and Larkin, 1985).
The majority of students with learning disabilities are not college bound, although some students may benefit from tutoring in academic subjects, or continued remediation in reading and math. To better serve these students, academic skills instruction must be oriented toward those skills which are needed in vocational education and employment settings at the high school level (Okolo and Sitlington, 1986).

Greenan (1983) suggested one method for designing more relevant academic instruction as through job-related academic skills. He identified a common core of skills necessary and important for success in program and occupations. He acknowledged that to succeed in many programs and employment settings, students need a certain degree of proficiency in skill areas such as reading, math, communications, and reasoning.

A survey conducted by Sitlington (1984) revealed that vocational education emphasizes the importance of linear measurement skills and verbal communications. Special educators provide initial or supplementary instructions in those areas. In addition, individualized instructional activities in the learning disabled program stress those academics that are most relevant for a learner’s present vocational training setting. Special educators in a local school could design instructional units that prepare adolescents with learning disabilities to meet the skill demands they will face in vocational or employment settings. The common basic skills for instruction within
and/or across secondary vocational programs should be in academic and social areas (Miller and Schloss, 1982; Campbell, 1985; Lister, 1985).

Holler and Gugerty (1984) acknowledged the value of academic instruction. They emphasized that special education teachers must coordinate courses according to the needs of vocational education courses and on the job training programs. Due to deficits in academic areas students with learning disabilities have need precise instruction and supervision and an organized application of what they learn in academic classes.

A number of factors in the past decade have captured widespread attention in focusing on the crucial need to ensure that students in our nation's schools be provided with stronger academic skills for graduation. These factors are described by Pritz and Crowe (1987) as:

1. A need for renewed emphasis on basic skills instruction and increased academic performance as stressed in A Nation at Risk (1983).

2. Increasing public concern regarding the academic outcomes of high school graduates and the growing call for accountability from public school curricula.

3. Increase in the academic courses necessary for graduation in many states in the nation's search for excellence, and the resulting changes in curricula.
4. Requests from business and industry that graduates be
prepared with a foundation of basic academic skills that can
be related to entry level jobs.

5. Advances in technology which have increased the
necessary levels of math, reading, communication skills,
and critical thinking skills for emerging occupations (p. 1-
2).

Students with disabilities often lack the foundation in basic academic skills that
will enable them to succeed in school or on a job. Sarkees-Wirchenski and West (1990)
believe that a combined effort must be made by vocational educators, academic
instructors, vocational special needs personnel, and support personnel to prepare special
needs learners with an integrated program of vocational and academic skills that will
make them employable.

Employability Skills

Job-related academic and specific vocational skills are increasingly seen as
contributing significantly to the ability to compete for employment. Instruction in these
areas must be provided if we are to maximize the potential of youth with learning
disabilities to successfully obtain and maintain employment. In the past, the term “basic
skills” has meant the ability to read, write, and compute well enough to function in daily
life. But the concept of basic skills is a constantly moving target, one that has grown to encompass more than the 3R's. As the information-processing demands of most occupations have grown, the term "basic skills" has evolved to include higher-level thinking skills, the capacity to learn new tasks, and the ability to solve increasingly complex problems.

The Committee on Economic Development (1985) noted that "mastery of the old basics of reading, writing, and arithmetic may be sufficient for entry level jobs, but because of the constantly changing nature of work, minimum skills are not sufficient preparation for career advancement. Schools must make a greater effort to develop higher-level skills, such as problem solving, reasoning, and learning ability".

Another study by The National Academy of Science (1988) reported that young people entering the work-force today need "the ability to learn what will be the essential hallmark of the successful employee" (p. 64). Employers reported that they wanted workers who could not only read and write, but who were punctual, could follow instructions, and would act responsibly on the job. These employment requirements still stand today.

A more recent study by the American Society for Training and Development (1988) reported that employers want employees who have seven key work-place skill groups including: (a) learning to learn, (b) 3R's (reading, writing, computation), (c) communication, (d) creative thinking/problem solving, (e) self esteem/goal setting-
motivation/personal and career development, (f) interpersonnel/negotiation/teamwork skills, and (g) organizational effectiveness and leadership.

Mithaug et al., (1988) developed an instructional model designed to teach students generic employment adaptability skills. The model was based on the hypothesis that the ability to acclimate to a dynamic work environment and maintain acceptable levels of work performance, self evaluation, and adjustment was crucial for success.

It was also indicated that youths with learning disabilities need the same level of employability skills and personality traits as their peers. This raises the question of how much employability training youth receive while in school. Such training is vital to the enhancement of employment opportunities for our learning disabilities population if stereotypical perceptions of special education learners by employers are to be overcome. Employability skill training received while in high school can be helpful to program developers. Educators have recognized the need to increase employability skill training for students with learning disabilities.

Two training models were suggested to develop marketable employability skills and competencies necessary for independent living (Botterbush 1989; Brolin 1989; Clark and Kolstoe, 1990). Both of these models assume that the learner has certain skills prior to job placement and is assumed to have mastered skills necessary for success in adulthood. Clark and Kolstoe (1990) suggested work experiences and work-study programs be implemented in order for students to gain employability skills while in high
school. These programs permit students to gain some work experience before being placed on a job.

Career Counseling

Career counseling for students with disabilities has been inadequate because there was seldom anyone in the special education framework to create necessary links between special education and vocational education or post-high school experiences. Given the emphasis on career development and the need for a comprehensive, systematic, sequential program which ultimately leads to successful post-high school work or education, the counselor is in the best position to provide the required coordination (Humes and Hohenshil 1985). The high school counselor generally participates in the development of the IEP, maintains student schedules, maintains contact with teachers, and is the person most likely to have knowledge of, and contact with post-high school services. In addition to counselors, school psychologists may also be logical people to provide this service (Shepard, Dielman, and Eilenwood, 1984). School psychologists might well serve the special needs of students with disabilities more effectively than traditional secondary counselors, especially with the assessment knowledge they obtain, knowledge of family background, and their possible interaction and experiences with government agencies and services. Regardless of who provides it, better counseling is needed to help students with
disabilities develop a better awareness of their opportunities and of available services (Campbell, 1985).

**Transition/Linkages**

During the past years, a great deal of interest emerged about "transition" programs and services for students with disabilities who are preparing to leave school. Federal initiatives played a major role in sparking this interest through the articulation of policy (Will, 1984a; 1984b) and the provision of funds to support this policy.

The Individuals With Disabilities Education Act of 1990 (IDEA) defines transition services as:

"A coordinated set activities for a student, designed within an outcome-oriented process which promotes movement from school to post-school activities, including post-secondary education, vocational training, integrated employment (including supported employment) continuing and adult education, adult services, independent living, or community participation".

The key elements of transition are information necessary to adjust to personal, family, home, community, and work responsibilities, career education and work preparation to supplement general and specific academic skills, actual employment experiences in the least restricted and non-segregated community environments, and linkages with adult service agencies.
The expanded definition of the IEP contained in IDEA mandates the IEP must include:

"A statement of the needed transition services for students beginning no later than age 16, and annually thereafter (and, when determined appropriate for the individual, beginning at age 14 or younger)".

The process from school to working life is an outcome oriented process encompassing a broad array of services and experiences that lead to employment. Transition is a period that includes high school, the point of graduation, additional post-secondary or adult services, and the initial years in employment.

Since the services and experiences that lead to employment vary widely across individuals and communities, the traditional view of transition as a special linking service between school and adult opportunities is insufficient. The present definition emphasizes the shared responsibility of all involved parties for transition success, and extends beyond transition notions or service coordination to address the quality and appropriateness of each service area.

In the past decade, considerable emphasis has been placed on facilitating transition from school-based programs to adult service programs (Janacone and Stodden, 1987; Prieschel, 1988). The procedures used to construct this bridge, known as transition practices, have been defined by Hutinger (1981) as strategies and procedures that are planned and employed to insure the smooth placement and subsequent adjustment of the child as he/she moves from one program to another (p. 8). Noonan and Kilgo (1987)
maintain that these definitions indicate that transition is: (a) a longitudinal plan, (b) a goal of smooth/efficient movement from one program to the next, (c) a process including preparation, implementation, and follow-up, and (d) a philosophy that movement to the next program implies movement to a program that is less restrictive than the previous program (p.26).

Campbell, Gardner, and Winterstein (1984) view transition as a series of pathways beginning with entry into high school and continuing until work is established as the majority activity. These pathways involve periodic choices and can be seen as progressing stages. The first stage begins with selection among high school curricula; the second begins at graduation with decisions about further education or training; and the third begins with entry into full-time, competitive employment. The pathways are not straight but marked by delays, interruptions, failure to complete a pathway, and by new decisions. A variety of factors influence the choice of pathways which culminate in paid employment as an established major activity.

The OSERS (1984b) made the improvement of transition a national priority. Will (1984b) conceptualized a transition model based on quality secondary programs, employment services which "bridge" from school to work and the availability of appropriate options for meaningful work. Will described transition as a "bridge" from the security and structure of high school to the opportunities and risks of adult life, stressing that any bridge must have a strong foundation at either end. Successful employment should be in the outcome of education and transition.
Halpern's (1985) model views adjustment to adult life as having other dimensions besides employment. Halpern recognizes the importance of employment, but sees skills for social, interpersonal and residential environments as independently important too. He combines these elements into a "primary target" of living successfully in one's community.

Wehman's (1985) model deals almost exclusively with employment. The Three Stage Vocational Transition Model for Disabled Youth include: (a) school instructions, (b) planning the transition process, and (c) placement into meaningful employment. The input and foundation stage of the model features a secondary education program that utilizes a functional curriculum with training activities designed to prepare learners for potential employment opportunities available in their communities. Instructional experiences in school settings should be integrated to enhance interpersonal skill development with other learners. Instructional experience should be provided at training sites in the community to provide learners with the opportunity to develop specific job skills in a realistic work environment.

The process stage of the model involves the development of formalized individual programs for each special needs learner (Individual Education Program (IEP)/Individual Transition Program (ITP) that specify the transition responsibilities of school personnel and professionals from participating agencies. Input should be obtained from students, parents, and interagency cooperation. The final stage is the development of multiple employment outcomes and the placement of learners with different capabilities in the
most suitable employment options. Employment options include competitive employment with support enclaves in industry, specialized industrial training, mobile work crews’ special work stations in industry, resource sharing, and cooperative agreements with industry.

The IEP and ITP are closely parallel both in importance and implementation. According to Public Law 94-142 (1975), the Education Act for All Handicapped Children, the IEP and ITP should be integrated by the time a student is 16 years old or at the end of the students secondary program. Little research is available regarding best practice for the ITP; however, recommendations regarding the form and function of ITPs are found in the literature. Although there is considerable variation, several features are recommended with a fair amount of uniformity. The purpose of the ITPs are: to facilitate entry into and maintenance in adult working and community life situations for students with disabling conditions and to coordinate educational and post-secondary community services toward this end (Hardman and McDonnell, 1987). The ITPs span a multi-year period; stress the involvement of a transition team of educators and adult service providers; and are broad in scope, including vocational, residential, leisure, social, and other community living skills.

Rather than supplant IEPs, ITPs and IEPs should be integrated (McDonnell, Wilcox, and Boles, 1986; McDonnell and Hardman, 1985). Other features, although not as frequently mentioned, are that ITPs should include annual goals and short-term objectives (Hardman and McDonnell 1987; Wehman, Kregel, Barcus and Seyfarth 1985).
timeliness for completions of the activities (Hardman and McDonnell 1987; Hasazi, Salembier and Finck, 1983), and assessment and evaluation (Hardman and McDonnell, 1987).

The development of ITP plans includes conducting a person's environment analysis (Shalock, et al. 1986), implementing the ITPs over a pilot period prior to the end of the students' secondary education program (Bates, Suter, and Pollvoadre, 1985; Shalock et al., 1986), and determining the agency or person to be responsible for the ITPs (Hardman and McDonnell 1987; Wehman et al., 1985). Measurable goals and objectives, pilot implementation, employment, and community transition outcomes were seldom mentioned or not mentioned at all in sample ITPs from 27 out of 56 responding states.

There is also an emphasis on the need for schools to increase their involvement with business and industry employers and with adult agencies and services. The educational system must get involved and collaborate within disciplines and among community agencies (New York State Department of Education, 1984). For many educators, this includes facilitating post-high school placement or post-high school services. Educators and employers are frequently confused about what each others' roles are or should be about and how best to prepare or respond to the needs of each other (Schwamm, 1985). Just having contracts between school and adult providers greatly improves the quality of programming (Edgar, Horton, and Maddox 1984).

Providers form a consistent, usable data base; establish a communication network which can limit expenditures of resources; and facilitate the integration and assimilation
of techniques and strategies (Langone and Gill, 1985). For the student and family this can help avoid frustration and anxiety.

**Chapter Summary**

The review of the literature in Chapter II has served to provide a background for the researcher. In spite of differences in some of the studies, there were some consistent findings that emerged from the studies regardless of demographic differences. The majority of persons with disabilities are employed; however, the percentage of time they have been employed since graduation is lower than for non-disabled peers, and they have not been employed or engaged in post-secondary education for the full length of time since leaving school.

Follow-up findings indicated that a large majority of persons with learning disabilities who are furthering their education are choosing the community college as their vehicle for post-secondary education because community colleges offer a variety of services to assist students with learning disabilities. Exposure to community college resources leads to community college participation and exposure to other agencies leads to the participation in a four-year college.

Consistent with the review of the literature for this study, students with learning disabilities cannot achieve the goals of transition without system-wide commitment which includes parental involvement in IEP development, administrative support in the
schools, support from the community and local businesses, and legislative incentives and mandates promoting transition from school to work.
CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The present study was conducted on graduates and dropouts with learning disabilities who participated in vocational education programs in a large urban public school system during 1989 and 1990. The purpose was to examine the patterns of further education and training and the status of independent living and work experiences. The study was designed to provide data to aid in making programmatic decisions.

Population and Sampling

A total of 132 students with learning disabilities who received vocational services from a large urban public school system and exited in 1989 and 1990 were identified for the study. Non-respondents included 57, due to incorrect phone numbers and addresses; three, who were deceased, and two who were incarcerated. Seventy (n=70) students participated in the study, including 46 males and 24 females. Students were enrolled in a shared-time program, where they attended a comprehensive high school one half day to receive their academic courses, and a vocational education program for one half day to receive vocational technical training. Six career development centers and six
comprehensive high schools were involved. High school graduates received a high school diploma, and vocational completers received a certificate.

The population included students who were learning disabled and were in program Level I and II. Level I students were mainstreamed in regular education classes 100% daily and monitored by the special education teacher on an as-needed basis. Level II students were mainstreamed in regular education classes and spent from 1 to 2 periods daily in the resource center.

Data on graduates and dropouts during the 1989 and 1990 school years were identified through the school system. The initial list was generated by using records from the vocational program and the registrar’s high school records. Each name was then put onto a matrix to classify each student’s method of exiting the program. The four categories used were: (a) students who graduated from a vocational program and from their comprehensive high school, (b) students who graduated from their comprehensive high school, but did not complete a vocational program, (c) students who completed a vocational education certificate program, but did not graduate from their comprehensive high school, and (d) students who dropped out of a vocational education program and their comprehensive high school program. Because of the relatively few graduates and dropouts during the two-year period, 1989 and 1990, the two years were merged.
Instrumentation

The investigator used two instruments: (a) a structured personal interview, and (b) a school record information form. The items on the survey were organized according to current information concerning further education and training, independent living arrangements, work history, student reported perception of the impact of vocational education, and the use of mandated support services. Additional items were included on a separate school record information form. Items selected for this study paralleled information collected in recent follow-up studies with similarly disabled students. Items representing the following areas were selected for inclusion:

1. Further education and training—education information section
2. Status of residence—Independent living information section
3. Employment status—Employment information section
4. Perception of vocational education—education, independent living section, and employment information section
5. Use of mandated support services—School records information section.

Questions about graduates’ and dropouts’ education and training experiences were included on the instrument to obtain the status of post-school education and training experiences since leaving high school. Students were asked what type of post-secondary education and training had they been enrolled in, why they sought further education and training, what programs they were enrolled in, and when they would complete the
program. Open-ended questions were included for a maximum amount of information if they had not sought further education and training.

For information about current independent living, students were asked about their marital status, number of dependents, and their living arrangements. They were asked if they owned vehicles, telephones, computers, reference books, insurance policies, or bank accounts. They were also asked if they had received financial assistance from family, government agencies, friends, or the community beyond their income from work, or if they had applied to a government agency for adult assistance. Finally, students were asked if they had hobbies, and if they were members of organizations, such as church, unions, civic, recreational, or professional clubs.

In order to identify post-school employment, the investigator asked how students had located employment after graduation and for them to list how many jobs they had held. Additionally, students were asked to provide current job information including employment status; the name of their current position; if they were employed full-time or part-time in the occupation for which they were trained; the number of hours per week they worked; how often they got paid; their salary before deductions; and how many bonuses or pay raises they had had since graduation. Additional questions concerning changes that had taken place in job assignment, fringe benefits received from their jobs, and any problems they might had had on the job, were open-ended to allow for a maximum amount of information.
Students were asked if they were satisfied with their present jobs and were required to respond to information that was recorded on a Likert scale. They were also asked to describe their general perception of the impact of vocational education. Finally, students were asked to respond to an open-ended question concerning suggestions they might have had to improve vocational programs. Using the information gained from the school record information form, a composite profile of graduates and dropouts with learning disabilities was developed to measure the effects of mandated support services on post-school adjustment.

The initial drafts of both instruments were based upon findings in the review of the literature and the concerns of the researcher. The instrument was reviewed by university faculty members to insure that survey items focused on the desired information to assure content validity. The instrument was piloted with students scheduled to graduate at the end of the 1991-1992 school year. The purpose of the pilot test was to determine the clarity of directions for completing the survey and to identify ambiguous and confusing statements and words, as well as the amount of time necessary to complete the survey. Students and parents were contacted for permission to take the pilot test. At the end of the pilot test period, each item was reviewed by university faculty and the following revisions were made in the instrument before use on the study:

1. Instructions for completion were revised.

2. The demographic section was eliminated except for three items which were transferred to the independent living section.
3. Questions of perceptions were transferred to the end of each section:
   Education, independent living, and employment.

4. Levels I and II were added to the student information record form.

**Procedures**

Permission was granted from Virginia Polytechnic Institute and State University to use human subjects in the study. Permission was also received from the school system to conduct the study (Appendix D). A copy of the survey instrument, along with an abstract of the proposed study and a copy of the letter to parents seeking permission for their son or daughter to participate in the study was mailed to appropriate school officials.

Two letters were mailed to parents, one seeking permission for their son or daughter to participate in the study and the second letter to review school records. A self-addressed stamped envelope was enclosed in each parent letter. Parents were requested to verify their address and telephone number. For those parents who responded to the permission letter, a telephone call was made to schedule an appointment for a personal or telephone interview with a mailed survey as an alternative, upon request. Two weeks after the initial mailing, a second mailing was made to non-respondents. For those parents not responding to the second mailing, an attempt was made to locate relatives, teachers, or close friends to increase the probability of locating students and/or parents. A third letter
was mailed to non-respondents to further enlist their cooperation. Fifty-seven respondents (n=57) still did not respond to the second and third mailings.

Collection of Data

Data were collected through personal interview or by telephone, with a mailed survey as an alternative, upon request of the researcher. The following format was developed to ensure consistency: (a) parents were contacted by telephone to schedule an appointment for the interview and (b) if the student was unavailable for a personal interview, arrangements were made to interview the student by telephone. The researcher sought information specified on the survey. If a student could not be scheduled for a personal interview or a telephone interview, a survey was mailed upon request. In some cases, if a student could not be contacted or was unable to respond, the parents were asked to respond to the survey questions. Each survey form was coded to facilitate follow-up identification of non-respondents in compiling data.

Treatment of Data

The research was a descriptive study to collect information about graduates and dropouts with learning disabilities of vocational education programs. The completed survey was coded and analyzed. Data were summarized by descriptive statistics for
research question number one, below. Results will be reported in four parts: Group A students who graduated from high school and completed their vocational education program, Group B students who graduated from high school but did not complete their vocational education program, Group C students who completed their vocational education programs but did not graduate from high school, and Group D students who dropped out of both programs.

Research Question 1

What is the post-school adjustment of graduates and dropouts with learning disabilities, which includes further education and training, independent living experiences, and employment experiences?

The data pertaining to this question were obtained through survey questions items. A series of statements related to further education and training consisted of items 1-5, independent living consisted of items 7-16 and employment experiences consisted of items 18-31. The responses to the items selected for this study were analyzed descriptively. Data analysis were limited to descriptive techniques due to the limited number of graduates' and dropouts' participation.
Research Question 2

What are students’ reported perceptions of the impact of vocational education on graduates and dropouts with learning disabilities?

Three statements were used to ascertain perceptions of vocational education effectiveness as reported by graduates and dropouts. Data pertaining to this research question were obtained through items 6, 17, and 32. Students were asked to respond on a Likert scale indicating the effectiveness of vocational education. The dependent variables were items 6, 17, and 32 (See Appendix B for a detailed description of these variables). The independent variable was vocational status, as previously described.

Research Question 3

What are the effects of mandated support services on post-school adjustment of graduates and dropouts with learning disabilities?

Items 34-39 on the school record information form were used to measure the effects of mandated support services on post-school adjustment. The dependent variables were items 2, 3, 8, 9, 10, and 11 (See Appendix B for a detailed description of these variables). The independent variable was vocational status (i.e., graduates and dropouts).
Chapter Summary

A descriptive research design was used to follow up all 1989 and 1990 graduates and dropouts with learning disabilities who participated in vocational programs in a large urban public school system. A face-to-face telephone interview or a mailed survey, upon request, were means of gathering data. Data were analyzed and coded and presented in descriptive format. This follow-up study provides current, relevant, and reliable data on graduates and dropouts for future reference for vocational program planning.
CHAPTER IV

RESULTS

The present study described a number of demographic and school experience factors associated with students with learning disabilities. The study population consisted of graduates and dropouts who participated in vocational educational programs in a large urban public school system and exited in 1989 and 1990. The purpose of the study was to examine patterns of further education and training, status of independent living and work experiences after exiting secondary education.

In addition, the study was designed to obtain a profile of the target population by reviewing students' school records in areas such as: (a) race, (b) gender, (c) year entered program, (d) service delivery, (e) program model, and (f) manner of school exit. The three research questions sought a history of post-school education and training, a history of employment, and the status of independent living. Section One reports perceptions of the impact of vocational education on students' post-school adjustment, followed by the effect of mandated support services.

This chapter is organized into four sections. The background information provides a profile of the participants in the study, followed by three sections which present data for each of the research questions. Descriptive statistics were used to answer
research questions and to examine the association between the four program models and manner of school exit on the following variables: (a) post-school education, (b) employment status after high school, (c) students' living in various residential situations, (d) students' satisfaction with life, and (e) the perception held about the value of various skills learned in vocational education programs.

The target population consisted of 132 graduates and dropouts with learning disabilities from 1989 and 1990. The students attended career centers for one half day and spent the other half day at comprehensive high schools. Data collection for the study began when necessary information about the students in the two graduating classes was available. Parents of students from the two graduating classes who could be located were asked for permission for their son or daughter to participate in the study. After permission was granted, the researcher scheduled interviews with participants in person or by telephone, or by mail as an alternative, upon request.

The names of the 132 students were generated from both classes. Because of the relatively low number of students exiting any one year, the two years were merged. Of names generated from both classes for the study, three students (n=3) were deceased and two students (n=2) were incarcerated, leaving a total of 127 students (n=127) to be contacted. Seventy graduates and dropouts (n=70) responded to the survey, 46 males and 24 females. Thirty students received a high school diploma and a certificate from their vocational education program. Fifteen students received a high school diploma, but dropped out of vocational education; six students received vocational education
certificates but did not graduate from high school; and nineteen students dropped out of both programs. Fifty-seven (n=57) students did not respond to the survey. They could not be located because of incorrect addresses, or telephone numbers that were either disconnected, changed to a new number, or changed to an unpublished number. Five attempts were made by telephone, followed by a letter to non-respondents. After two weeks, a second letter was mailed. Twenty-six (n=26) letters were returned because of incorrect addresses and thirty-one letters were not returned (see Table 1).

Table 1

<table>
<thead>
<tr>
<th>Program Model</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td></td>
</tr>
<tr>
<td>Total Population</td>
<td></td>
</tr>
<tr>
<td>Names generated</td>
<td>132</td>
</tr>
<tr>
<td>Total contacted</td>
<td>127</td>
</tr>
<tr>
<td>Number who responded</td>
<td>70</td>
</tr>
<tr>
<td>No response</td>
<td>57</td>
</tr>
<tr>
<td>Deceased</td>
<td>3</td>
</tr>
<tr>
<td>Incarcerated</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 2 describes the status of 57 non-respondents by gender and manner of school exit. About half of the male and female non-respondents were dropouts, although male respondents were less likely to be dropouts (one third). School records were reviewed to obtain a profile of the students.
Table 2
Non-Respondents by Gender/Ethnic Origin/Level

<table>
<thead>
<tr>
<th>Variable</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>HS/Not in VE</td>
<td>VE/Not in HS</td>
<td>Dropouts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N=30</td>
<td>N=15</td>
<td>N=6</td>
<td>N=19</td>
<td></td>
</tr>
<tr>
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<td>11</td>
<td>2</td>
<td>3</td>
<td>18</td>
<td>34</td>
</tr>
<tr>
<td>Female</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>23</td>
</tr>
</tbody>
</table>

HS = High school graduates  
VE = Vocational education graduates  
N = Sample size

Table 3 describes the program model by the four categories, manner of school exit, gender, and ethnic origin for 70 respondents. The gender of respondents was predominately male (60.7%), and the predominate ethnic origin was African American (90.1%). One-third of males and 5.7% of female respondents were dropouts while more than one half of the females were high school and vocational education completers.

The students in the study were functioning on Level I or Level II. Level I students were mainstreamed in regular education classes and spent time with special education teacher on an "as needed basis". Level II students were mainstreamed in regular education classes, but were scheduled 1 or 2 periods daily with a special
education teacher. Of the 70 respondents, 27 students were functioning on Level I and 43 were functioning on Level II (see Table 3).

Table 3

Respondents by Gender/Ethnic Origin/Level of Service by Model

<table>
<thead>
<tr>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/V E</td>
<td>HS/Not in VE</td>
<td>VE/Not in HS</td>
<td>Dropouts</td>
<td></td>
</tr>
<tr>
<td>N=30</td>
<td>N=15</td>
<td>N=6</td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
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<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
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<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
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<td>14</td>
<td>9</td>
<td>6</td>
<td>15</td>
<td>4</td>
<td>46</td>
<td>24</td>
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</table>

<table>
<thead>
<tr>
<th>Ethnic Origin</th>
<th>Native American</th>
<th>African American</th>
<th>Hispanic</th>
<th>West Indian</th>
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<tr>
<td>0</td>
<td>27</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>13</td>
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<td>0</td>
<td>0</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level I</th>
<th>Level II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13 43.3</td>
<td>17 56.7</td>
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<tr>
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<td>1 6.7</td>
<td>5 83.3</td>
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<td>6 31.6</td>
<td>13 68.4</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>43</td>
</tr>
</tbody>
</table>

HS = High school graduates  
VE = Vocational education graduates  
N = Sample size  

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Research Questions

To obtain a more comprehensive picture of program models and manner of exit, information was collected to develop a data base which provided a descriptive overview of respondents in the study. The students were asked to provide information which addressed three research questions. The findings relating to the three research questions follow. It should be noted that dropouts were interviewed as part of the original graduating class; thus, these individuals may have been out of school from one to three years longer than graduates. A number of dropouts displayed a history of moving in and out of the school system.

Research Question 1

What is the post-school adjustment of graduates and dropouts with learning disabilities, which includes further education and training, independent living status, and employment experience?

Descriptive data are reported in four categories of program models and manner of school exit: Group A students who graduated from high school and completed a career center’s program, Group B students who graduated from high school but did not complete a career center’s program, Group C students who completed a career center’s program but did not graduate from high school, and Group D students who dropped out of high school.
and a career center's program. Each group is labeled under the areas of further education and training, independent living status, and employment experiences.

Post-Secondary Further Education and Training

The survey assessed the pattern of post-school education by identifying information about students' education and training experiences since leaving high school. The following information was reviewed in order to identify past and present education and training: (a) attendance, (b) institution type, (c) full-time/part-time, (d) program type and (e) reason for seeking or not seeking further education and training.

Attendance. Table 4 illustrates that 70% of Group A, graduates and vocational education completers, were enrolled in post-secondary education or training. The most frequent type of experience was through vocational rehabilitation training (20%) and private training, which they financed themselves, followed by college/university 13.3%. Group B high school graduates only, reported 20% were attending college/university, and 20% joined the Job Corp. Group C, vocational education completers only reported receiving training through the Department of Vocational Rehabilitation, and one-third reported receiving training through adult-based education. Group D, drop outs, of both high school and vocational education programs, reported 10.5% receiving training through Vocational Rehabilitation services and 5.3% attending an adult-based education program. Although all groups participated in further education or training, students who
graduated after completing vocational programs attended post-education and training more often than any other group (see Table 4).

**Institution Type.** Thirteen percent of Group A respondents were attending a four-year college or university, 20% were attending a rehabilitation center, and 20% were in training at private institutions, which they financed themselves. Twenty percent of Group B respondents were attending four-year colleges or universities and 20% of the respondents joined the Job Corp. Group C respondents attended a vocational rehabilitation center for training (16.7%) or an adult-based education center (10.5%). Group D respondents attended a rehabilitation center for training (16.7%), adult-based education center (5.3%), or a private institution (5.3%). More respondents in Group A, C, and D attended rehabilitation centers. Only Groups A and B attended four-year colleges or universities, followed by training from private institutions. The majority of respondents in each Group except Group A were not attending a two or four-year institution (see Table 4).

**Full-time/Part-time.** Group A, graduates of both programs, were enrolled in post-secondary education full-time (47.7%) and 23.3% were attending part-time. Group B graduates only, were enrolled full-time (20%) in post-secondary education. Group C,
Table 4

Post-Secondary Education and Training

<table>
<thead>
<tr>
<th>Groups</th>
<th>Program Model</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HS/VE N=30</td>
<td>in VE N=15</td>
<td>VE/Not in HS N=6</td>
<td>Dropouts N=19</td>
<td></td>
</tr>
<tr>
<td>Type of Post-Secondary Education and Training Variable</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>None</td>
<td>9</td>
<td>30.0</td>
<td>9</td>
<td>60.0</td>
<td>4</td>
</tr>
<tr>
<td>Four-Year College/University</td>
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<td>13.3</td>
<td>3</td>
<td>20.0</td>
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<tr>
<td>Community College</td>
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<td>0</td>
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<td>Rehabilitation Training</td>
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<td>Other</td>
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<td>3.3</td>
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<tr>
<td>Total</td>
<td>21</td>
<td>70%</td>
<td>6</td>
<td>40%</td>
<td>2</td>
</tr>
</tbody>
</table>

HS = High school graduates  VE = Vocational education graduates  N = Sample size
vocational education completers, were enrolled in post-secondary education and training full-time (16.7%) and part-time (16.7%). Group D, dropouts, were enrolled in education and training full-time (10.5%) and part-time (10.5%). Group A were enrolled in post-secondary education full-time and more than any other group and about the same compared to graduate in other studies (see Table 5).

**Program Type.** Students in Group A, which was the largest group were more likely to pursue degrees, license, and certificates (56.6%) than Group B, C, or D. High school and vocational education completers were twice as likely to go into training for a trade, while high school graduates not in vocational education were twice as likely to pursue a degree or license. Dropouts who had been in vocational education were three times more likely to enter trade school than dropouts who were not in vocational education. Vocational education students were more likely to pursue trade certificates than any other group (see Table 5).

**Reason for Seeking or Not Seeking Further Education and Training**

The most cited reason respondents who sought further education or training gave was not that they had not had enough training to qualify for a job and they wanted a college degree. Those respondents not participating in post-school education most frequently cited that they did not continue because they were taking care of children or
Table 5

Student Status and Type of Post-Secondary Programs

<table>
<thead>
<tr>
<th>Program Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
</tr>
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<td>HS/VE</td>
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<tr>
<td>N=30</td>
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Type of Post-Secondary Education and Training

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>9</td>
<td>29.0</td>
<td>9</td>
<td>60.0</td>
<td>4</td>
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<td>15</td>
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<tr>
<td>Full-Time</td>
<td>14</td>
<td>47.7</td>
<td>3</td>
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<td>1</td>
<td>16.0</td>
<td>2</td>
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<td>Part-Time</td>
<td>7</td>
<td>23.3</td>
<td>3</td>
<td>20.0</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>71%</td>
<td>6</td>
<td>40%</td>
<td>1</td>
<td>16.7%</td>
<td>4</td>
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<table>
<thead>
<tr>
<th>Program</th>
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<td>30.0</td>
<td>9</td>
<td>60.0</td>
<td>4</td>
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<td>13.3</td>
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</tr>
<tr>
<td>Trade</td>
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<td>26.6</td>
<td>2</td>
<td>13.3</td>
<td>2</td>
<td>33.3</td>
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<tr>
<td>Other</td>
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<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>70%</td>
<td>6</td>
<td>40%</td>
<td>2</td>
<td>33.3%</td>
<td>4</td>
</tr>
</tbody>
</table>

HS = High school graduates
VE = Vocational education graduates
N = Sample size
did not have the money to go to college. Other explanations included that they were bored with school and did not feel that they had learned anything (see Table 6).

The most frequent responses to continue education given by Group B (graduates only) were that they wanted to earn a college degree and needed more skills to quality for a job. For respondents who did not seek further education and training (n=9), responses indicated they did not have money for school, were taking care of children, or were looking for work (see Table 6).

Respondents in Group C who continued training beyond high school cited the need for more training. Respondents who did not seek further education or training cited they were either working, looking for work, or were taking care of their children (see Table 6).

For respondents in Group D, dropouts, the most cited reason to continue training was to get a job, which they did not have due to the lack of employability skill. Male dropouts not seeking further education said that school was boring and they were looking for a job. Female respondents reported they were either pregnant or taking care of their children. It appears that all groups reported similar reasons for not seeking further education and training. All groups indicated a need for more training, were taking care of children, or were bored with school and were not learning anything (see Table 6).
Table 6

Why Graduates and Dropouts Sought Further Education and Training

<table>
<thead>
<tr>
<th>Reason</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 70</td>
<td></td>
</tr>
<tr>
<td>Time Mentioned</td>
<td></td>
</tr>
<tr>
<td>Not enough skills to get a job</td>
<td>10</td>
</tr>
<tr>
<td>Needed more education and training</td>
<td>9</td>
</tr>
<tr>
<td>To earn college degree</td>
<td>5</td>
</tr>
<tr>
<td>Could not get a job in the field trained</td>
<td>5</td>
</tr>
<tr>
<td>To earn a certificate in a trade</td>
<td>4</td>
</tr>
<tr>
<td>To complete vocational education program</td>
<td>3</td>
</tr>
<tr>
<td>To complete high school</td>
<td>2</td>
</tr>
</tbody>
</table>

Why Graduates and Dropouts Did Not Seek Further Education and Training

<table>
<thead>
<tr>
<th>Reason</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 70</td>
<td></td>
</tr>
<tr>
<td>Time Mentioned</td>
<td></td>
</tr>
<tr>
<td>No money for college or training</td>
<td>10</td>
</tr>
<tr>
<td>Taking care of children</td>
<td>5</td>
</tr>
<tr>
<td>School was boring; didn’t learn anything</td>
<td>5</td>
</tr>
<tr>
<td>Did not want to go to school</td>
<td>5</td>
</tr>
<tr>
<td>Working to save money for college</td>
<td>5</td>
</tr>
<tr>
<td>Pregnant</td>
<td>4</td>
</tr>
<tr>
<td>Incarcerated</td>
<td>2</td>
</tr>
<tr>
<td>Sick, unable to go to school</td>
<td>1</td>
</tr>
</tbody>
</table>

N = Sample size
Post-Secondary Independent Living Status

To get a more comprehensive picture of independent living status, respondents were asked to provide information in four general areas: (a) post-school characteristics, (b) status of personal possessions and organizational membership and hobbies, (c) use of financial and insurance services, (d) use of government agencies and hobbies, and (e) subsidized income. Data summaries are presented in these areas.

General Post-School Characteristics

The majority of respondents in all groups were single except one individual in Group A. About 20% of respondents in Group A, B, and C reported having one to three dependents. High school dropouts were almost twice as likely to have dependents as other groups (see Table 7). The majority of respondents in all groups were still living at home with their parents. Respondents in Group D were more independent in their living arrangements, with nearly one-third living with friends or renting their own places (see Table 8).
### General Post-School Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>HS/Not in VE</td>
<td>VE/Not in HS</td>
<td>Dropouts</td>
</tr>
<tr>
<td>N</td>
<td>N=30</td>
<td>N=15</td>
<td>N=6</td>
<td>N=19</td>
</tr>
<tr>
<td>Marital Status</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Single</td>
<td>29</td>
<td>96.6</td>
<td>15</td>
<td>100.0</td>
</tr>
<tr>
<td>Married</td>
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<td>3.3</td>
<td>0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependents</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>24</td>
<td>80.0</td>
<td>12</td>
<td>80.0</td>
<td>5</td>
<td>83.3</td>
<td>12</td>
<td>63.2</td>
<td>53</td>
</tr>
<tr>
<td>1-3</td>
<td>6</td>
<td>20.0</td>
<td>3</td>
<td>20.0</td>
<td>1</td>
<td>16.7</td>
<td>7</td>
<td>36.8</td>
<td>17</td>
</tr>
</tbody>
</table>

**HS = High school graduates**

**VE = Vocational education graduates**

**N = Sample size**
Table 8

**General Post-School Characteristics**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Program Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>HS/VE</td>
</tr>
<tr>
<td></td>
<td>N=30</td>
</tr>
<tr>
<td>Variable</td>
<td>N</td>
</tr>
<tr>
<td>Living Arrangements</td>
<td></td>
</tr>
<tr>
<td>Parents/Relatives</td>
<td>27</td>
</tr>
<tr>
<td>Friends</td>
<td>0</td>
</tr>
<tr>
<td>Renting Own Place</td>
<td>3</td>
</tr>
<tr>
<td>Group Home/Supervised Apartment</td>
<td>0</td>
</tr>
</tbody>
</table>

**Notes:**
- HS = High school graduates
- VE = Vocational education graduates
- N = Sample size
Status of Personal Possessions and Organizational Membership and Hobbies

Respondents were asked to report the status of their personal possessions, organizational membership, and their hobbies. They were asked to respond to all that applied.

The most commonly held personal possessions owned by Group A and B were cars, telephones, and bicycles. Only those in Group A owned reference books. Only telephones were owned by one-hired of those in Group C. The majority of respondents in Group D reported having few personal possession; however, it was more likely that respondents in all groups owned telephones. It should be noted that respondents were asked to name all that applied listed on the survey; however, these respondents might have owned other personal possessions not listed on the survey.

More than half of the respondents in all groups were members of a church, except dropouts. Dropouts were the least likely to participate in community organizations (see Table 9).

Respondents in all groups reported sports, music, and dancing as their primary hobbies. A few enjoyed skating and art work. These figures are reflective of less than seven percent of the respondents, so leisure activities are not central to the lives of these youth (see Table 10).
Table 9

Status of Student’s Personal Possessions & Organizational Membership

<table>
<thead>
<tr>
<th>Program Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>N=30</th>
<th>N=15</th>
<th>N=6</th>
<th>N=19</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS/VE Possessions &amp; Organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>None</td>
<td>2</td>
<td>6.7</td>
<td>3</td>
<td>20.0</td>
<td>4</td>
<td>66.7</td>
<td>15</td>
<td>78.8</td>
</tr>
<tr>
<td>Bicycle</td>
<td>4</td>
<td>13.3</td>
<td>3</td>
<td>20.0</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Car</td>
<td>9</td>
<td>30.0</td>
<td>2</td>
<td>13.3</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Telephone</td>
<td>9</td>
<td>30.0</td>
<td>4</td>
<td>26.7</td>
<td>2</td>
<td>33.3</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Truck</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
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<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>6.7</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
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<td>Home Computer</td>
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<td>0.0</td>
<td>1</td>
<td>6.7</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Reference Books</td>
<td>6</td>
<td>20.0</td>
<td>2</td>
<td>13.3</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Organizational Membership

| None | 10 | 33.3 | 6 | 33.3 | 1 | 16.7 | 9 | 47.3 | 25 |
| Church | 17 | 58.7 | 10 | 66.7 | 4 | 66.6 | 9 | 47.3 | 40 |
| Unions | 1 | 3.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 |
| Recreational | 0 | 0.0 | 0 | 0.0 | 1 | 16.7 | 1 | 5.4 | 2 |
| Other | 2 | 6.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 |

HS = High school graduates
VE = Vocational education graduates
N = Sample size

97
### Table 10

**Hobbies**

<table>
<thead>
<tr>
<th>Program Model</th>
<th>Times Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 70</td>
<td></td>
</tr>
<tr>
<td>Basketball</td>
<td>10</td>
</tr>
<tr>
<td>Dancing</td>
<td>10</td>
</tr>
<tr>
<td>Music</td>
<td>10</td>
</tr>
<tr>
<td>Football</td>
<td>10</td>
</tr>
<tr>
<td>Skating</td>
<td>6</td>
</tr>
<tr>
<td>Art work</td>
<td>3</td>
</tr>
<tr>
<td>Needlework</td>
<td>2</td>
</tr>
<tr>
<td>Collecting key chains</td>
<td>2</td>
</tr>
<tr>
<td>Volunteer work</td>
<td>1</td>
</tr>
<tr>
<td>Reading</td>
<td>1</td>
</tr>
<tr>
<td>Styling hair</td>
<td>1</td>
</tr>
</tbody>
</table>

*N = Sample size*
Use of Financial and Insurance Services

Respondents were asked to report their use of financial services and insurance services. One-fourth of the respondents in Groups A and B had no banking services. The most frequent service used by each was a savings account. Almost twice as many vocational graduates had checking accounts as did Group B, but an equal percentage had credit cards. Fifty percent of respondents in Group C had a savings accounts and only five percent of respondents in Group D had savings accounts. The majority of dropouts in Group D reported having no financial services. More respondents in Group A used bank services than any other, followed by Group B. Group C and D respondents were less likely to use bank services (see Table 11).

Respondents in Groups A, B, and C had life, medical, and dental insurance through their parents or Medicaid. Groups A, B, and D had automobile insurance. Groups A and C had more insurance services than Groups B and D. All groups using insurance services seemed to be through their parents or Medicaid (see Table 11).

Use of Government Agencies

Respondents in all four groups were asked to report their use of government agencies. The majority of respondents in Groups A and B reported contact with
Table 11

Use of Financial and Insurance Service

<table>
<thead>
<tr>
<th>Program Model</th>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HS/VE N=30</td>
<td>HS/Not in VE N=15</td>
<td>VE/Not in HS N=6</td>
<td>Dropouts N=19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bank Services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>7</td>
<td>23.3</td>
<td>4</td>
<td>26.7</td>
<td>3</td>
<td>50.0</td>
<td>18</td>
<td>94.7</td>
<td>32</td>
</tr>
<tr>
<td>Savings Account</td>
<td>9</td>
<td>30.0</td>
<td>6</td>
<td>40.0</td>
<td>1</td>
<td>16.7</td>
<td>1</td>
<td>5.3</td>
<td>17</td>
</tr>
<tr>
<td>Checking Account</td>
<td>5</td>
<td>16.3</td>
<td>1</td>
<td>9.1</td>
<td>1</td>
<td>16.7</td>
<td>0</td>
<td>0.0</td>
<td>7</td>
</tr>
<tr>
<td>Credit Card</td>
<td>4</td>
<td>13.3</td>
<td>2</td>
<td>13.2</td>
<td>1</td>
<td>16.7</td>
<td>0</td>
<td>0.0</td>
<td>7</td>
</tr>
<tr>
<td>Credit Union</td>
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<td>16.7</td>
<td>2</td>
<td>13.2</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>7</td>
</tr>
<tr>
<td><strong>Insurance Policies</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>13.3</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>10.5</td>
<td>4</td>
</tr>
<tr>
<td>Life</td>
<td>9</td>
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<td>33.3</td>
<td>2</td>
<td>33.3</td>
<td>4</td>
<td>21.0</td>
<td>20</td>
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<td>Automobile</td>
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<td>13.3</td>
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<td>5.2</td>
<td>12</td>
</tr>
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<td>Disability</td>
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<td>0</td>
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<tr>
<td>Medical</td>
<td>9</td>
<td>30.0</td>
<td>5</td>
<td>33.3</td>
<td>2</td>
<td>33.3</td>
<td>7</td>
<td>31.5</td>
<td>23</td>
</tr>
<tr>
<td>Dental</td>
<td>2</td>
<td>6.6</td>
<td>1</td>
<td>6.7</td>
<td>1</td>
<td>16.7</td>
<td>5</td>
<td>26.3</td>
<td>9</td>
</tr>
<tr>
<td>Bill Payers</td>
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<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>16.7</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
</tbody>
</table>

HS = High school graduates  
VE = Vocational education graduates  
N = Sample size
government agencies and services since graduation. Of those who did use these services, the most frequent contact was to access job training and food stamps. The majority of respondents in Group C reported agency contacts, while all of the respondents in Group C reported numerous agency contacts. Respondents in Group D indicated more contact with government agencies and services than any other group. The most frequent contacts were for family and personal counseling and dental health. Dropouts (Group D) were more likely than any other group to access a variety of government services (see Table 12).

**Subsidized Income**

Respondents were asked if they received any subsidized income since high school and were asked to select all that applied. Subsidized included income from the community, general welfare, family and friends, and social security. Family members were the most frequent source of subsidized income across all groups. Government, social security, and general welfare were the next most frequent sources of subsidized income for all groups (see Table 13).
### Table 12

**Use of Government Agencies and Services**

<table>
<thead>
<tr>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=30</td>
<td>N=15</td>
<td>N=6</td>
<td>N=19</td>
</tr>
<tr>
<td>HS/VE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Family &amp; Personal</td>
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<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Counseling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health (Dental)</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Health (Medical)</td>
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<td>1</td>
<td>0</td>
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</tr>
<tr>
<td>Unemployment</td>
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<td></td>
<td></td>
<td></td>
</tr>
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<td>Compensation</td>
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<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Job Training</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Job Tryout</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Placement</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Program Model**

**Variable**

<table>
<thead>
<tr>
<th>Government &amp; Services</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>10</td>
<td>33.3</td>
<td>4</td>
<td>26.7</td>
<td>4</td>
<td>66.7</td>
<td>0</td>
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<td>18</td>
</tr>
<tr>
<td>Family &amp; Personal</td>
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<td>0.0</td>
<td>1</td>
<td>9.1</td>
<td>0</td>
<td>0.0</td>
<td>5</td>
<td>26.3</td>
<td>6</td>
</tr>
<tr>
<td>Counseling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health (Dental)</td>
<td>3</td>
<td>15.0</td>
<td>1</td>
<td>9.1</td>
<td>0</td>
<td>0.0</td>
<td>3</td>
<td>15.8</td>
<td>7</td>
</tr>
<tr>
<td>Health (Medical)</td>
<td>1</td>
<td>3.3</td>
<td>1</td>
<td>9.1</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>10.5</td>
<td>4</td>
</tr>
<tr>
<td>Unemployment</td>
<td>2</td>
<td>6.7</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>5.3</td>
<td>3</td>
</tr>
<tr>
<td>Compensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Training</td>
<td>8</td>
<td>26.7</td>
<td>4</td>
<td>36.4</td>
<td>1</td>
<td>16.6</td>
<td>2</td>
<td>10.5</td>
<td>15</td>
</tr>
<tr>
<td>Job Tryout</td>
<td>1</td>
<td>3.3</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>10.5</td>
<td>3</td>
</tr>
<tr>
<td>Placement</td>
<td>1</td>
<td>3.3</td>
<td>2</td>
<td>18.2</td>
<td>1</td>
<td>16.6</td>
<td>2</td>
<td>10.5</td>
<td>6</td>
</tr>
<tr>
<td>Food Stamps</td>
<td>4</td>
<td>13.3</td>
<td>1</td>
<td>9.1</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>10.5</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>9.1</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
</tbody>
</table>

HS = High school graduates
VE = Vocational education graduates
N = Sample size
Table 13

**Graduates and Dropouts Subsidized Income**

<table>
<thead>
<tr>
<th>Program Model</th>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=30</td>
<td>N=15</td>
<td>N=6</td>
<td>N=19</td>
<td></td>
</tr>
<tr>
<td>HS/VE in VE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subsidized Income</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>None</td>
<td>11</td>
<td>36.7</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Family</td>
<td>13</td>
<td>43.3</td>
<td>7</td>
<td>46.7</td>
<td>3</td>
</tr>
<tr>
<td>Government/Social Security</td>
<td>3</td>
<td>15.0</td>
<td>4</td>
<td>26.7</td>
<td>1</td>
</tr>
<tr>
<td>Community</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>General Welfare</td>
<td>3</td>
<td>15.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Friends</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>13.3</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>13.3</td>
<td>0</td>
</tr>
</tbody>
</table>

HS = High school graduates  
VE = Vocational education graduates  
N = Sample size
Post-Secondary School Employment Experiences

Patterns of post-school employment were assessed by identifying information about graduate and dropout experiences since exiting high school. Data were collected in three general areas: (a) Source of help finding employment and number of jobs since graduation, (b) current employment information, and (c) satisfaction with current job. The following information was examined in order to identify post-school employment.

Source of Help Finding Employment and Number of Jobs After Graduation

Respondents in all four groups were asked to report their sources of help finding employment and the number of jobs held since graduation.

About one-fifth of respondents in Group A indicated they obtained their first job after high school most frequently through applying for a job themselves or by referral from teachers or friends. About one-fourth of respondents in Group B relied on teachers, direct application, and family and friends. The respondents in Groups C and D did not prefer method of job seeking over another, except one-quarter of respondents in Group D obtained employment through their families (see Table 14).

Respondents were asked to report the number of jobs they held since graduation. More than half of the respondents in Group A had one job. Two third in Group B
Table 14

Sources of Help Finding Employment and Number of Jobs Since High School

<table>
<thead>
<tr>
<th>Program Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Locating First Job After Graduation</td>
</tr>
<tr>
<td>Family</td>
</tr>
<tr>
<td>Friends</td>
</tr>
<tr>
<td>Teacher</td>
</tr>
<tr>
<td>Direct Application</td>
</tr>
<tr>
<td>Placement Services</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Number of Jobs Since Graduation</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3 or more</td>
</tr>
</tbody>
</table>

HS = High school graduates
VE = Vocational education graduates
N  = Sample size
reported they had one job, while one-half of Group C reported they had one job.

Although all groups had from two to three jobs or more they experienced levels of unemployment except for group C. Furthermore, dropouts in Group D reported a higher unemployment rate than any other group (see Table 15).

**Current Employment Information**

Respondents were asked to provide information concerning their current status which included (a) full or part-time employment, (b) job classification, (c) employment description, (d) hours worked per week, (e) frequency of payment, (f) wages before tax deduction, (g) job benefits, and (h) satisfaction with current job.

More than half of the respondents in Groups A, B, and C were employed at the time of this survey. Only one-tenth of respondents in Group D were employed. Respondents in all groups were working in competitive employment in a variety of positions. The most mentioned positions for Groups A and C were child care and barbershop, while Group B respondents were employed mainly in custodial and maintenance work. Group C were employed in business and maintenance, while Group D were employed as food service and maintenance workers. Group A was more likely to have a higher level of jobs than Group B, C, or D (see Table 16).
Table 15

Number of Graduates and Dropouts by Current Employment Status

<table>
<thead>
<tr>
<th>Program Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>HS/VE N=30</td>
<td>HS/Not in VE N=15</td>
<td>VE/Not in HS N=6</td>
<td>Dropouts N=19</td>
</tr>
<tr>
<td>Employed</td>
<td>16 53.0</td>
<td>8 53.3</td>
<td>4 66.7</td>
<td>2 10.5</td>
</tr>
<tr>
<td>Unemployed (Looking)</td>
<td>14 47.0</td>
<td>6 40.0</td>
<td>2 33.3</td>
<td>13 68.4</td>
</tr>
<tr>
<td>Sick (Unable to Work)</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>1 5.3</td>
</tr>
<tr>
<td>Unemployed (Not Looking for Work)</td>
<td>0 0.0</td>
<td>1 6.7</td>
<td>0 0.0</td>
<td>3 15.8</td>
</tr>
</tbody>
</table>

HS = High school graduates  
VE = Vocational education graduates  
N = Sample size
Table 16

Number of Graduates and Dropouts by Occupational Titles

<table>
<thead>
<tr>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>HS/Not in VE</td>
<td>VE/Not in HS</td>
<td>Dropouts</td>
</tr>
<tr>
<td>N = 30</td>
<td>N = 15</td>
<td>N = 6</td>
<td>N = 19</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Title</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cashier</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Clerk</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Custodian</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Day Care Aide</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Electric Estimator</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Barber Apprentice</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pharmacist Assistant</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Teacher’s Aide</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stock Clerk</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>UPS Mail Handler</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maid</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Escort</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Data Entry</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Check Processor</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Cafeteria Worker</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Maintenance Repair</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Maintenance</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Unit Secretary</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Child Care Teacher</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

HS = High school graduates  
VE = Vocational education graduates  
N = Sample size
All four groups were employed both full-time and part-time in and outside the occupation they were trained. It was more likely that Group A respondents would be employed full-time in the occupation trained than Groups B, C, or D (see Table 17).

The majority in all groups were paid bi-weekly. Groups A and B had similar salary ranges. Group C had slight higher wages before tax deductions. Group D, dropouts, had lower wages than Group C, vocational education completers (see Table 18). The most frequent benefit for graduates in Group A was health, and a few reported bonuses or meals as benefits. Vacation and health benefits were reported by Group B respondents. Vocational completers, Group C, reported that no benefits were received. Respondents who dropped out of both programs, Group D, received only vacation benefits. Group A received more benefits than Groups B, C, and D, especially health benefits (see Table 19).

Satisfaction with Current Job

More than one-third of Group A, more than one-fourth of Group B, one-third of Group C, and one-tenth of Group D were very much satisfied with their current jobs. Group A respondents were satisfied than the other groups. More than half of respondents across groups did not respond to this survey question (see Table 20).
Table 17

Description of Graduate’s and Dropout’s Field of Employment

<table>
<thead>
<tr>
<th>Program Model</th>
<th>A (HS/VE)</th>
<th>B (HS/Not in VE)</th>
<th>C (VE/Not in HS)</th>
<th>D (Dropouts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>N=16</td>
<td>N=8</td>
<td>N=4</td>
<td>N=2</td>
</tr>
<tr>
<td>Employment Description</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>Employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained</td>
<td>6 35.3</td>
<td>1 6.4</td>
<td>1 16.7</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained</td>
<td>3 10.0</td>
<td>0 0.0</td>
<td>1 16.7</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained</td>
<td>4 13.3</td>
<td>6 40.0</td>
<td>1 16.7</td>
<td>2 10.5</td>
</tr>
<tr>
<td>Employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained</td>
<td>3 10.0</td>
<td>1 6.4</td>
<td>1 16.7</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Total</td>
<td>16 53.3</td>
<td>8 52.8</td>
<td>4 66.8</td>
<td>2 10.5</td>
</tr>
</tbody>
</table>

HS = High school graduates  VE = Vocational education graduates  N = Sample size
Table 18

Number of Graduates and Dropouts by Current Employment Status

<table>
<thead>
<tr>
<th>Program Model</th>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>N = 16</td>
<td>HS/Not in VE</td>
<td>N = 8</td>
<td>VE/Not in HS</td>
</tr>
<tr>
<td>Employment Status Variable</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Number of Hours Employed Full-Time (40 Hours)</td>
<td>10</td>
<td>62.5</td>
<td>6</td>
<td>80.0</td>
<td>2</td>
</tr>
<tr>
<td>Employed Part-Time (39 and Less Hours)</td>
<td>6</td>
<td>37.5</td>
<td>2</td>
<td>20.0</td>
<td>2</td>
</tr>
<tr>
<td>Frequency of Payment</td>
<td>2</td>
<td>12.5</td>
<td>2</td>
<td>12.5</td>
<td>0</td>
</tr>
<tr>
<td>Daily</td>
<td>2</td>
<td>12.5</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>Weekly</td>
<td>12</td>
<td>75.0</td>
<td>7</td>
<td>87.5</td>
<td>4</td>
</tr>
<tr>
<td>Bi-weekly</td>
<td>6</td>
<td>300-499</td>
<td>6</td>
<td>300-499</td>
<td>4</td>
</tr>
<tr>
<td>Fill-Time</td>
<td>4</td>
<td>300-499</td>
<td>2</td>
<td>300-499</td>
<td>0</td>
</tr>
<tr>
<td>$100-299</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>$300-499</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>$500-699</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>$700-799</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Part-Time</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>$100-299</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>$300-499</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>HS = High school graduates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VE = Vocational education graduates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N = Sample size</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 19

Job Benefits Received by Employed Individuals

<table>
<thead>
<tr>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>HS/Not in VE</td>
<td>VE/Not in HS</td>
<td>Dropouts</td>
<td></td>
</tr>
<tr>
<td>Bonus</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Pay Raise</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Promotions</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sick Leave</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Health Benefits</td>
<td>13</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Meals</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Vacation Leave</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Profit Sharing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Promotion</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

HS = High school graduates
VE = Vocational education graduates

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Table 20

Feelings Held by Graduates and Dropouts About Their Current Jobs

<table>
<thead>
<tr>
<th>Program Model</th>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>HS/Not in VE</td>
<td>VE/Not in HS</td>
<td>Dropouts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N = 16</td>
<td>N = 8</td>
<td>N = 4</td>
<td>N = 2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feelings About Present Job Variable</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Much</td>
<td>11</td>
<td>36.7</td>
<td>4</td>
<td>26.7</td>
<td>2</td>
<td>33.3</td>
<td>2</td>
<td>10.5</td>
<td>19</td>
</tr>
<tr>
<td>Somewhat</td>
<td>3</td>
<td>10.0</td>
<td>4</td>
<td>26.7</td>
<td>1</td>
<td>16.7</td>
<td>0</td>
<td>0.0</td>
<td>9</td>
</tr>
<tr>
<td>Not At All</td>
<td>2</td>
<td>6.7</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>16.7</td>
<td>0</td>
<td>0.0</td>
<td>3</td>
</tr>
<tr>
<td>No Response</td>
<td>14</td>
<td>46.7</td>
<td>7</td>
<td>46.7</td>
<td>2</td>
<td>33.3</td>
<td>17</td>
<td>89.5</td>
<td>39</td>
</tr>
</tbody>
</table>

HS = High school graduates
VE = Vocational education graduates
N = Sample size
Research Question 2

What are students' reported perceptions of the impact of vocational education on graduates and dropouts with learning disabilities?

Students' perceptions of the impact of vocational education and career centers were explored during the interview. Two questions consisted of five statements each, one dealing with help in preparing for job-related services, and the other concerning help in preparing for financial activities. The third question assessed students' perception of how often vocational skills and knowledge were used on their current jobs. A Likert scale was used to record responses to answer all three questions.

Help in Preparing for Job-Related Activities

Respondents were asked to respond to five variables concerning help received in preparing them for job-related activities which included: (a) finding a job, (b) keeping a job, (c) dealing with personal problems, (d) reading want ads/newspaper, and (e) getting job information. Respondents were equally divided on helpfulness of variables, while the majority of Groups B, C, and D indicated that the variables were not helpful. Mean scores revealed that Group A had a higher average than the other groups (see Table 21).
Table 21
Post-Secondary Job Related Education and Training

<table>
<thead>
<tr>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>in VE</td>
<td>VE/Not</td>
<td>Dropouts</td>
</tr>
<tr>
<td></td>
<td>N=30</td>
<td>N=15</td>
<td>N=6</td>
<td>N=19</td>
</tr>
<tr>
<td>Career Center In Preparing Variable</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>Find a Job</td>
<td>Total</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Very Helpful</td>
<td>9</td>
<td>30.0</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>8</td>
<td>26.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>13</td>
<td>43.3</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td>1.84</td>
<td>1.40</td>
<td>1.66</td>
</tr>
<tr>
<td>Keep a Job</td>
<td>Total</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Very Helpful</td>
<td>6</td>
<td>20.7</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>9</td>
<td>31.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>15</td>
<td>50.0</td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td>1.70</td>
<td>1.36</td>
<td>1.50</td>
</tr>
<tr>
<td>Deal with Personal Problems</td>
<td>Total</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Very Helpful</td>
<td>4</td>
<td>13.4</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>10</td>
<td>33.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>16</td>
<td>53.3</td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td>1.60</td>
<td>1.36</td>
<td>1.33</td>
</tr>
<tr>
<td>Read Want Ads/Newspaper</td>
<td>Total</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Very Helpful</td>
<td>6</td>
<td>20.0</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>10</td>
<td>33.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>14</td>
<td>46.7</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td>1.40</td>
<td>1.36</td>
<td>1.33</td>
</tr>
<tr>
<td>Get Job Information</td>
<td>Total</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Very Helpful</td>
<td>9</td>
<td>30.0</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>7</td>
<td>23.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>14</td>
<td>46.7</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td>1.83</td>
<td>1.36</td>
<td>1.33</td>
</tr>
<tr>
<td>HS=High school graduates</td>
<td>VE=Vocational education graduates</td>
<td>N=Sample size</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Help in Preparing for Financial Activities

Respondents were asked to address five variables concerning help they received in preparing for financial activities which included: (a) budgeting money, (b) saving money, (c) understanding taxes, (d) getting insurance, and (e) doing domestic chores. The majority of respondents in Groups A, B, and C indicated that preparation in financial activities was not helpful in all categories. Group D indicated extremely negative responses in all categories. The average score were similar for Groups A and C (see Table 22).

How Often Knowledge and Skills Used on Current Job

Respondents were asked to determine how often they use their knowledge and skills on their current job. About one-half of the vocational education completers indicated they used skills, and were more likely than non-completers to use these skills. Over half of dropouts did not respond to the question, but those in vocational education programs indicated skills were sometimes or always helpful (see Table 23).
Table 22
Post-Secondary Financial Education and Training

<table>
<thead>
<tr>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>in VE</td>
<td>VE/Not</td>
<td>Dropout</td>
</tr>
<tr>
<td></td>
<td>N=30</td>
<td>N=15</td>
<td>N=6</td>
<td>N=19</td>
</tr>
<tr>
<td>Career Center In Preparing</td>
<td>Variable</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Budget Money</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Helpful</td>
<td>2</td>
<td>6.7</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>8</td>
<td>26.7</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>20</td>
<td>66.7</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Save Money</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Helpful</td>
<td>3</td>
<td>10.0</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>8</td>
<td>26.7</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>19</td>
<td>63.7</td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding Taxes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Helpful</td>
<td>3</td>
<td>6.7</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>8</td>
<td>26.7</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>20</td>
<td>66.6</td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Helpful</td>
<td>2</td>
<td>6.7</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>7</td>
<td>23.3</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>21</td>
<td>70.0</td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td>Mean Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do Domestic Chores</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Helpful</td>
<td>1</td>
<td>3.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Somewhat Helpful</td>
<td>7</td>
<td>23.3</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Not Helpful At All</td>
<td>22</td>
<td>73.3</td>
<td>14</td>
<td>93.3</td>
</tr>
<tr>
<td>Mean Score</td>
<td>1.30</td>
<td>1.06</td>
<td>1.50</td>
<td>1.00</td>
</tr>
</tbody>
</table>

HS = High school graduates  VE = Vocational education graduates  N = Sample size
Table 23

**How Often Were Skills Used**

<table>
<thead>
<tr>
<th>Program Model</th>
<th>A (HS/VE N=30)</th>
<th>B (HS/Not in VE N=15)</th>
<th>C (VE/Not in HS N=6)</th>
<th>D (Dropouts N=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Groups</strong></td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
<td>N %</td>
</tr>
<tr>
<td>All the Time</td>
<td>8 26.7</td>
<td>0 0.0</td>
<td>1 16.7</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Sometimes</td>
<td>4 13.3</td>
<td>1 6.6</td>
<td>2 33.3</td>
<td>1 5.3</td>
</tr>
<tr>
<td>Never</td>
<td>10 33.3</td>
<td>7 46.7</td>
<td>0 0.0</td>
<td>3 15.7</td>
</tr>
<tr>
<td>No Response</td>
<td>8 26.7</td>
<td>7 46.7</td>
<td>3 50.0</td>
<td>15 79.0</td>
</tr>
</tbody>
</table>

HS = High school graduates  
VE = Vocational education graduates  
N = Sample size
Research Question 3

What are the effects of mandated support services in post-school adjustment of graduates and dropouts with learning disabilities.

A series of statements relating to mandated support services were listed from student school record forms. Graduates and dropouts were asked to indicate their level of involvement in mandated support services which included (a) assessment, (b) placement, (c) on-the-job training, (d) employability skills, and (e) counseling.

As illustrated in Table 24, none of the respondents received a career assessment in Groups A, B, and C. More than half of the respondents in Groups A and C, vocational education completes, received on-the-job training, employability skills training, counseling and placement. Groups B and D used mandated support services to a lesser degree than vocational education completes. Group A had more use of mandated support services than any other group. Almost all of Group D dropouts did not receive support services because they dropped out of both programs before utilizing their service (see Table 24).

Student's Suggestions To Improve Vocational Programs

An open-ended question on the survey asked respondents in all four groups for suggestions to improve vocational education programs. The most frequently mentioned
Table 24

Mandated Support Services

<table>
<thead>
<tr>
<th>Groups</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HS/VE</td>
<td>HS/Not in VE</td>
<td>VE/Not in HS</td>
<td>Dropouts</td>
</tr>
<tr>
<td></td>
<td>N=30</td>
<td>N=15</td>
<td>N=6</td>
<td>N=19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>5.3</td>
<td>1</td>
</tr>
<tr>
<td>Placement</td>
<td>11</td>
<td>36.7</td>
<td>1</td>
<td>6.7</td>
<td>1</td>
<td>16.7</td>
<td>1</td>
<td>5.3</td>
<td>14</td>
</tr>
<tr>
<td>OJT</td>
<td>17</td>
<td>50.7</td>
<td>1</td>
<td>6.7</td>
<td>4</td>
<td>66.7</td>
<td>1</td>
<td>5.3</td>
<td>23</td>
</tr>
<tr>
<td>Employability</td>
<td>19</td>
<td>60.3</td>
<td>2</td>
<td>13.3</td>
<td>4</td>
<td>66.7</td>
<td>1</td>
<td>5.3</td>
<td>26</td>
</tr>
<tr>
<td>Skills</td>
<td>16</td>
<td>50.3</td>
<td>1</td>
<td>6.7</td>
<td>4</td>
<td>66.7</td>
<td>1</td>
<td>5.3</td>
<td>22</td>
</tr>
</tbody>
</table>

HS = High school graduates
VE = Vocational education graduates
N = Sample size

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suggestions were: (a) extend program, (b) typing training for recording information, (c) break down skills, (d) curriculum modification, and (e) make program less boring (see Table 25). All four Groups responded to this question.
Table 25

Students Suggestions to Improve Vocational Program

<table>
<thead>
<tr>
<th>Program Model</th>
<th>Times Mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=70</td>
<td></td>
</tr>
<tr>
<td>Program boring</td>
<td>10</td>
</tr>
<tr>
<td>Extend program</td>
<td>10</td>
</tr>
<tr>
<td>Typing training (for recording)</td>
<td>10</td>
</tr>
<tr>
<td>Break down skills</td>
<td>10</td>
</tr>
<tr>
<td>Curriculum modification</td>
<td>4</td>
</tr>
<tr>
<td>OJT-Placement</td>
<td>3</td>
</tr>
<tr>
<td>Hire more teachers</td>
<td>2</td>
</tr>
<tr>
<td>Immediate follow-up</td>
<td>2</td>
</tr>
<tr>
<td>Better theory and practice teaching</td>
<td>1</td>
</tr>
<tr>
<td>Computer training (for record keeping)</td>
<td>1</td>
</tr>
<tr>
<td>More &amp; better equipment (update)</td>
<td>1</td>
</tr>
<tr>
<td>Don’t show favoritism</td>
<td>1</td>
</tr>
<tr>
<td>Program too hard</td>
<td>1</td>
</tr>
</tbody>
</table>

N=Sample size
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents a summary and discussion of the data presented in this study. Based upon these data, a summary of the findings, conclusions, and recommendations are presented.

Summary of Results and Discussions

The transition of students with learning disabilities from school to post-high school life has become a focus of national attention and a priority of the United States Office of Special Education and Rehabilitation Services. During the time Public Law 94-142 was conceptualized, passed, and implemented, the literature was void of any follow-up studies. Although follow-up studies of individuals with disabilities first appeared in the 1930's, results of investigations didn't emerge until the 1960's. Early studies focused primarily on students with mental retardation. It was not until the 1980's that more than one category of subjects were included, which also included students with learning disabilities. Few studies on adult adjustment and work patterns were available for graduates and dropouts with learning disabilities. As these students graduated or aged
out of special education programs, two questions have emerged. These questions include: What type(s) of special education programs should have been provided to best prepare these students to be self-supporting members of society? and What support services are needed and are available to aid them in post-school adjustment? In order to identify the most effective programs, and to respond to transition needs, baseline data are needed on actual experiences of graduates and dropouts who participated in vocational education programs.

The purpose of the present follow-up study was to respond to the need for additional information by obtaining a detailed look at the patterns of further education and training, status of independent living, and work experiences of graduates and dropouts with learning disabilities.

This information can enhance delivery of services, improve planning efforts, and identify support needed for students exiting special education programs. To obtain the data necessary for identifying the patterns cited in the purpose of this study, graduates and dropouts from combined classes of 1989 and 1990 were selected. Seventy graduates and dropouts participated in the study. A personal survey and the availability of student's high school records and files were a major determinant in the selection of the target population. School records and survey were used to create a profile of the students’ levels, manner of exiting program, use of mandated support services, students perception of vocational education, and overall quality of life. Data were presented in a descriptive
format and were recorded during telephone, personal interview or by mail, upon request. Finding were compared to the results of statewide efforts to follow-up studies.

In spite of the varied methodological considerations and the range of the learning disabled population included in previous follow-up studies, the review of the literature identified some consistent findings. In comparison to those studies, this study presents a picture of adjustment of graduates and dropouts with learning disabilities after leaving high school.

Results of this study indicate that almost half of graduates and dropouts sought further education and training because they felt they needed more training in order to improve their job opportunities or income. Rehabilitation training and private training were the most frequent choices followed by four-year college or university training. This is consistent with Mithaug, et al. (1985) who reported that 46% of their subjects attended a post-school college program while Haring, et al. (1990) found only 9% attending college in their study.

All of the respondents in the current study were single except one. This finding was consistent across all groups regardless of reporting one to three dependents. This marriage rate is lower than those reported (20%) by Mithaug, et al. (1985) and Haring, et al. (1990). These results, however, could be attributed to the short length of time between graduation and the survey in the present study. Information on dependents has not been reported in any major studies in the literature; hence, the present findings remain without comparison.
At the time of the survey, 81.4% of the students were living with their parents. Of the remaining 18.6% only 14.2% reported living independently. Those respondents who had dropped out were more likely to live independently than graduates. Similar figures appear in other studies. In the statewide study in Colorado, Mithaug, et. al. (1985) and Haring, et. al. (1990) found that most respondents were living at home with their parents. Again, the large percentage of students living at home in the present study may be attributable to the short-length of time between graduation and the survey.

It was encouraging to note that all four groups were involved in at least one or more hobbies for leisure activities with sports, games, dancing and music being their first choice. In contrast, Mithaug, et. al. (1985) reported that 42% of their respondents were socially inactive. The difference in the results could be due to the differences in the rural and urban setting in which the two studies were conducted. The present study took place in a metropolitan area with many easily accessible recreational opportunities. The majority of respondents in this study owned personal possessions and were members of a church.

In the present study 44.2% of the respondents had banking accounts at the time they were surveyed, the most frequent type of account being a saving account. In addition, a few of the respondents had both a checking and savings account as well as credit cards. No other major studies have reported the banking status of their subjects.

After graduation, more than half of the respondents in the study reported having contact with outside agencies which, included dental and medical assistance, personal and
family counseling, job training, vocational rehabilitation, or job services. These results support Hasazi, et al. (1985) who reported that 65% of the respondents in a Vermont study utilized vocational rehabilitation or job services.

The majority of respondents received subsidized income from family members, community, and government agencies, which included general welfare and social security. The numbers were greater than those reported by Fourquerean and LaCourt (1990), who reported that 30% of their subjects received welfare and food stamps and 12% received help from adult services and from public assistance.

Graduates and dropouts did not use one method of job seeking over another. They experienced several jobs since leaving school. At the time they were surveyed, almost half of the respondents in the present study were employed in either full-time or part-time jobs. More dropouts were unemployed than graduates. In terms of earnings, the average wages before tax deductions ranged from $300 to $799 bi-weekly. Few received fringe benefits such as a bonus, a pay raise, or a promotion through their employment. The majority expressed high satisfaction with their current job and had not experienced any problems. The percentage of respondents reporting high satisfaction was not supported by Haring, et. al. (1990).

Although a lower percentage of respondents in the studies by Haring, et al., (1990) and Hasazi, et al., (1985) were employed compared to the present investigation, the percentage of employed respondents holding full-time jobs was similar across studies (67% vs. 63%). deBettencourt, et al., (1989) reported an employment rate of 80% among
learning disabled former students in Virginia this figure is somewhat higher than the 42.9% noted in the present study. Further, Mithaug, et. al. (1985) found that most of the respondents in their studies were employed at minimal levels. Thornton and Zigmund (1987) reported that one-third of their sample from a large urban school district was unemployed at the time of the study, and had been unemployed 50% of the time since they left high school. deBettencourt, et. al. (1989) interviewed ninth graders in a rural area and reported that 8% of their sample was employed compared to 74% of the non-disabled sample.

Examining the impact of vocational education on post-school adjustment for graduates and dropouts revealed that most respondents were not satisfied with their preparation and training received in vocational programs. The majority never used their jobs-related knowledge and skills and financial-related skills on their current jobs, except for job skills related to child care, barbering, and business. Almost all of the respondents received mandated support services except for an assessment to find out their potentials for vocational training. Consistent with this study, Schwartz and Tayman (1991) investigated the outcome of students with learning disabilities in regard to support services. Few of their respondents had experienced involvement in counseling (13%), employability skills, and career guidance services.

Graduates and dropouts were asked if they had any suggestions to improve vocational education programs. The most frequent suggestions made were, break down skills, modify curriculum, extend the program, and make the program less boring. The
majority of dropouts reported they were bored with their vocational education programs. This is reflected in the high dropout rate of respondents in this study (48.6%). Other respondents felt they completed the program with low vocational skills which prevented them from finding employment in their field of training. They needed more time to master skills. The vocational educational community should open their doors to those students and provide opportunities for them to do internships or apprenticeship in their field of study.

The value of any instructional program must be measured by the extent of positive outcome for its recipients. If vocational education training is to be considered an appropriate instructional option for students with learning disabilities, then it is necessary to substantiate its positive outcome. There is little evidence to date on the post-school advantage of participation in vocational education training programs for students with learning disabilities. What are the pay-offs for the investments of students’ time and educational resources? Is the instructor associated with successful employment and/or training experiences after high school?

Because a major purpose of vocational education training programs is to equip student with skills that will enhance post-school employment prospects, it is assumed that the post-school employment status of students with learning disabilities who completed vocational education programs would find employment especially in the field for which they were trained. The majority of respondents in this study could not get employment in
their fields of training because of low or incomplete skill training in their vocational programs.

According to a study by Fourqurean, Meigeier, Swank, and Williams (1991) the task of preparing students with learning disabilities for success in today's job market will present ever-growing challenges in the years to come. The increased emphasis on technical skills that require higher education and the vast reduction in relatively high-paying manufacturing jobs ensures that many young adults with learning disabilities will face grave difficulties in becoming financially independent. Educators who are charged with preparing these students for adult life must be flexible and innovative in both teaching the necessary job skills and fostering development of the personal initiative and motivation needed to compete for employment in the 1990's and beyond.

For the majority of students who are at risk of dropping out, few persist in school long enough to access vocational training, and for the few who do take advantage of vocational programs, there is little evidence to indicate that vocational education program enrollment serves to hold them in school. In fact, for the group of dropouts in this study, the majority left their vocational education program as well as their comprehensive school program. Based on the data from this study, it can be assumed that within the current service delivery model, the holding power of vocational education for students with learning disabilities is minimal, at best. The dropouts in this study reported they were bored with school and were not learning anything.
Conclusions

The results of this study suggest that the public school system studied should make specific efforts to insure that students with learning disabilities exit vocational education programs with useful work skills, that they experience employment while they are in high school, and that efforts are made to increase parental involvement.

Data showed that the majority of graduates and dropouts were not adjusting to their post-high school life, especially dropouts. Although almost half of the students who completed high school and vocational programs were working, a high percentage of dropouts were unemployed, few sought further education and training, and most were not providing their own support. Based on the data obtained in this study, the following conclusions have been drawn about the vocational education program received its impact on graduates’ and dropouts’ educational experiences, post high school employment, and level of independence.

And although vocational education programs prepared some of the students for post-high school employment, a significant percentage may not have been ready to leave their vocational programs. This is reflected in students not working in the field for which they were trained, not completing programs, or not having sufficient employability skills to get a job.

The majority of students who completed high school had a positive attitude toward education and viewed it as means of self-improvement, career development, or
increasing one's worth in the job market. This is based on the reasons graduates gave for seeking further education and training, which included private and rehabilitation training, adult education and training, or still attending school. The majority of graduates or their parents were not very knowledgeable about vocational rehabilitation or other government services. The majority of those receiving vocational rehabilitation training obtained it through private organizations, counselors, or other sources. Only a small percentage of students had ever received government assistance.

The question is: Did vocational education programs make a difference for these students? Based on data collected in this survey, the majority of students with learning disabilities were not faring too well at the time of this study. They reported not having enough training in their programs and not having experienced on-the-job training. Dropouts left the program before taking advantage of any training available to them. The majority of graduates and dropouts as well as their parents expressed sheer joy when I contacted them to participate in the study. It appeared they thought I was contacting them about jobs.

The special education department should develop a follow-up program to track students with learning disabilities at least for one year after exiting school. A broader range of work experiences is needed. During the high school years all students are not ready to complete vocational education programs or on-the-job-training and leave both programs with no experience. Increased involvement of parents should be emphasized both in preparation for the transition and during the transition process.
The majority of students who enter high school main interest is to earn a high school diploma after being mainstreamed in regular education in selected classes in the least restrictive environment. Vocational education should be included as a component of and part of the high school foundation. In addition to the academic instruction, vocational education is equally as important for preparing students for post high school life since all students with learning disabilities are not college bound. Therefore, success for these students is not solely a reflection of high school academic achievement or receiving a high school diploma. Better selection of high school education training option is needed.

Recommendations

Follow-up studies of graduates and dropouts with learning disabilities have not been conducted in this large urban public school system. There is a need for future research to be conducted on this population to see how consistent these results will be as students move away from their high school experience. More studies of this type are needed in order to compare and identify consistent patterns. Information provided in this study is valuable in making program modifications and adjustments.

Recommendations are as follows:
1. A broader range of vocational and work experiences is needed in high school for students who are not ready to leave.

2. Each student should be given a career assessment prior to enrolling in a vocational education program.

3. Increased involvement of parents in transition, planning, and knowledge of support services should be encouraged.

4. High schools should increase their involvement with business and industry employers, adult agencies and services, and collaborate within disciplines among community agencies.

5. Contracts between schools and adult providers should be developed to improve the quality of programming at each end.

6. Further study and research are needed of future graduates and dropouts to specify the skills that require development in unemployed and under-employed young adults with learning disabilities.
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Washington, DC.


Appendix A

Student Record Form
Career Center

School Record Information

Name ___________________________ DOB _______ Sex ________

Address ____________________________________________

Telephone Number __________________________ Date ____________

Name of Career Center __________________________

Year Graduated __________________________

Please obtain the following information from the student’s transcripts, twelfth grade IEP, and Career Assessment report.

1. Number of years in Career Center: __________________________

2. Date of Career Assessment: __________________________

3. Career Assessment recommendation for placement: __________________________

4. Reading level: __________________________

5. Math level: __________________________

6. Vocational Program completed: __________________________

7. Vocational Program not completed: __________________________

8. Participated in OJT/work experience: __________________________

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9. Participated in career counseling: ________________________________

10. Participated classes on employability skills: ______________________

11. Percent of the mainstreamed (Grade 12): _________________________

12. Level I or Level II: ________________________________
Appendix B

Survey Instrument
Personal Administered Survey

Instruction for Completion

The items in this survey is designed to find out what has been happening to you since you graduated or dropped out of a vocational program. I am interested in knowing about your further education and training, your status of independent living, and work history. I have been given permission by the Public School System to conduct this study. This information from this study is very import because it can be used to improve Vocational Programs for students with learning disabilities. Your name will not be used in any way that you can be identified. Please answer these questions honestly and to the best of your ability.

Part I - Education - You are asked to respond to information concerning your past and present education.

Current Education Training

1. What type of post secondary education/training have you been enrolled in?
   (select all that apply)
   _ A. none (skip to question 1a)
   _ B. four year college/university
   _ C. community college
   _ D. rehabilitation training
E. adult based education
F. apprenticeship
G. private training
H. military service
I. other (specify)

1a. If none, Why not?

1b. If you no longer enrolled, why did you quit?

If you are enrolled go to question 2.

2. Were you attending full-time or part-time?
   A. full-time
   B. part-time

3. Why did you seek further education/training? Explain

4. What program are/were you enrolled in? (select one)
   A. degree
   B. license
   C. trade
   D. other
5. When will you complete that program? Explain ____________________________

6. How helpful was the Career Center in preparing you to? (select all that applies using the appropriate number)

1 = Very Helpful  2 = Somewhat Helpful  3 = Not Helpful at All

_ A. find a job
_ B. keep a job
_ C. deal with personal problems
_ D. read want ads/newspaper
_ E. get job information

Part II - Independent Living - You are asked to respond to information concerning independent living

7. What is your marital status? (select one)

_ A. single _ D. divorced
_ B. married _ E. widowed
_ C. separated

8. How many dependents do you have? (select one)

_ A. 0 _ C. 3 - 4
_ B. 1 - 2 _ D. 5 or more
9. How would you describe your living arrangements? (select one)

- A. with parents/relative's home
- B. a friend's home
- C. renting own place
- D. group home/supervised apartment
- E. own home
- F. other (specify) ________________________________

10. Do you own any of the following? (select all that apply)

- A. car
- B. truck
- C. motorcycle
- D. home computer
- E. reference books
- F. bicycle
- G. telephone

11. Do you have any of the following banking or credit services? (select all that apply)

- A. saving account
- B. checking account
- C. credit cards
- D. credit union
- E. investments
- F. retirement plan

12. Do you have any of the following types of insurance policies? (select all that apply)

- A. life
- B. automobile
- F. bill payers
- G. home
C. disability
D. medical
E. dental

H. accident
I. burial
J. other (specify)

13. Do you receive any financial help beyond your income from work? (select all that apply)

A. family
B. government/social security
C. community

D. general welfare
E. friends
F. other (specify)

14. Have you ever applied to a government agency for any adult assistance? (select all that apply)

A. family and personal counseling
B. health (medical)
C. health (dental)

D. drug/alcohol compensation
E. unemployment compensation
F. workmen's compensation

G. job training
H. job/tryout
I. placement

J. food stamps
K. meals on wheels
L. other (specify) ________________________________

15. What are your hobbies? (such as reading, sports, needlework, and etc.)

16. Are you a member of any organization? (select all that apply)
   A. church     D. recreational
   B. unions     E. professional
   C. civic organizations F. other (specify)________

17. How helpful was the Career Center in preparing you to? (select all that applies using the appropriate number)
   1=Very Helpful   2=Somewhat Helpful   3=Not Helpful At All
   A. budget money D. get insurance
   B. save money   E. do domestic chores
   C. understand taxes F. other (specify)__________

Part III - Employment - You are asked to provide information concerning your employment status.

18. How did you locate your first job after graduation? (select all that apply)
   A. family   D. direct application to employer
   B. friends   E. placement services
   C. teacher   F. other (specify)______________

19. How many jobs have you had since graduation? (select one)
19a. If yes, go to question 20.

19b. If no, why? ________________________________

____________________________________

(skip to question 32)

Current Job Information

20. What is your employment status? (select one)

   _ A. employed
   _ B. unemployed - looking for a job
   _ C. sick - unable to work
   _ D. unemployed - not looking for a job

21. What is your position? ________________________________

22. How long have you been in your position?

   _ A. ___ months       _ B. ___ years

23. Which one of the following best describes you?

   _ A. employed full-time in the occupation that you were trained
   _ B. employed part-time in the occupation you were trained
   _ C. employed full-time outside the occupation you were trained
   _ D. employed part-time outside the occupation you were trained
24. How many hours per week do you work? (select one)
   _ A. full-time (40 hours)
   _ B. part-time
      1. 0 - 20 hours
      2. 21 - 39 hours

25. How often do you get paid? (select one)
   _ A. daily       _ C. bi-weekly
   _ B. weekly     _ D. monthly

26. How much was your salary each pay period before deductions? $__________

27. How many bonuses or pay raises you received since graduation?
   _ A. ___ bonuses     _ B. ___ pay raises

28. What changes have taken place in your job assignment and/or location in your employment? Explain ____________________________________________
    ____________________________________________
    ____________________________________________

29. What are the fringe benefits you receive from your job? (such as meals, vacation, and health benefits)______________________________
    ____________________________________________
    ____________________________________________
    ____________________________________________
30. Are you satisfied with your present job? (select one)
   _ A. very much
   _ B. somewhat
   _ C. not at all

31. What kind of problems have you encountered in the work place?
   Explain ____________________________________________________________
   ____________________________________________________________

32. How often do you use knowledge and skills you learned at the Career Centers in
    performing your current job? (select one)
   _ A. all the time
   _ B. sometimes
   _ C. never

33. What suggestions do you have to improve vocational programs?
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
Appendix C

The Public School System

Division of Vocational/Technical Education Program
The Public School Division of
Vocational/Technical Education Programs

The Public School’s programs in vocational education share a vision with all citizens. The vision is that every youth will be able to enter the world of work with the tools of business and industry. The approach to vocational programming is found upon the employment needs of the metropolitan area.

Vocational education programs are housed in Career Development Centers. The name was changed from Vocational Educational Centers in 1983 because of the stigma of vocational educational training. In the past, only students who were not academically successful enrolled in vocational education.

The Public School System vocational programs provides opportunities in which students are free to engage in those studies which meet the test of their interest and aptitudes with many of these endeavors occurring in a context that either simulates or is an actual job situation. Every effort is made to provide opportunities for the student to develop work ethics, salable entry skills, usable knowledge related to employment and leadership skills which result in personal fulfillment in employment in post-high school programs.

The Public School System offers a comprehensive setting which provides the articulation between general education and vocational education in order to develop each urban secondary student’s vocational potential to the fullest measures, and also provide students with sufficient academic education to meet college entrance requirements. It is
recognized that no single high school or vocational program can offer all programs, but through a geographical distribution it is possible commuting distance from the students home.

Vocational students enjoy a certain dignity that is associated with preparing for a saleable skill in the secondary school as well as providing an education program which prepares students for college. The approach to vocational education is intended to stimulate the students to do so.

The Public School System concept of continuity in education provides career awareness in the elementary school, career exploration in the middle school, and pre-vocational and career education at the secondary, and post-secondary school education is a continuous process and is available to all individuals without regards to sex, creed, race, religion or mental or physical handicaps. Vocational education is provided to every individuals who needs it, want it and can profit by it.

The student can enroll in a vocational program at grade 10. It is arranged that students can enter into specific skill programs leading to employment competencies in some areas. This is especially important for students readily identifiable as potential dropouts. The students receives 3 units form their home base school and 3 units from their vocational school.
Appendix D

Letter to the Superintendent of

Public School System
October 1, 1991

Dr. Franklin L. Smith
Superintendent of the District of Columbia
Public School System
415-12th Street, NW, Suite 1205
Washington, DC 20004

Dear Dr. Smith:

I have been employed as a Special Education Teacher since 1970, in the District of Columbia Public School System. Presently, I work at Dunbar Senior High School as a teacher of the learning disabled. I am a doctoral student at Virginia Polytechnic Institute and State University in Blacksburg, Virginia, and wish to do my dissertation on 1989-1990, graduates and dropouts with learning disabilities who were enrolled in Career Centers' Vocational Programs.

The purpose of this follow-up study will be to determine if vocational education made a difference in graduates and dropouts with learning disabilities, work patterns, living environment, employment opportunities, and further educational training.

Permission is requested to conduct a follow-up study on graduates and dropouts with learning disabilities who participated in vocational programs. The results of this study will be shared with the District of Columbia Public School System personnel to further assist them in compiling an accurate picture of our students with learning disabilities, according to Public Law 94-142. Additional benefits to be derived from this study includes: current relevant information to assist the Special Education Department, Career Centers, counselors, parents, and students, in providing services to our learning disabled population.

This collaboration will also enhance the Special Education Department working with the Career Centers personnel in assessing, planning, implementation, evaluation, and revision, as it relates to our learning disabled students curriculum. All data in the study will be kept confidential and used for aggregate study only.
I am enclosing an attached copy of my proposal and survey. It is my understanding that I need to contact the following persons:

Dr. Zollie Stevenson  
Director of Research and Evaluation Branch;

Dr. Thomas Harper  
Assistant Superintendent Senior High School Division; and

Dr. Leah Humphrey  
Supervising Director of Special Education.

Thank you for all consideration shown me in my request. If you have any questions, please feel free to contact me at (202) 332-2687. Awaiting your earliest response.

Sincerely Yours,
Mercedes M. Dickson

Enclosures
Appendix E

Acknowledgment

Letter from Superintendent
Office of the Superintendent
415 12th Street, N.W.
Washington, D.C. 20004
(202) 724-4222
FAX (202) 727-1316

July 31, 1991

Ms. Mercedes M. Dickson
Virginia Tech
Division of Vocational &
Technical Education
College of Education
Blacksburg, Virginia 24061-0254

Dear Ms. Dickson:

This is to acknowledge your recent letter concerning your request to conduct
a follow-up study on graduates and dropouts with learning disabilities for your
dissertation.

I have no objection to your study or collection of data, but is requested that
you refrain from using names of students, faculty, etc., in your follow-up study.

I am transmitting a copy of your letter and abstract to Dr. Zollie Stevenson,
Director of Research and Evaluation Branch; Dr. Thomas Harper, Assistant
Superintendent, Senior High Division; and Dr. Leah Humphrey, Supervising
Director of Special Education for their perusal and appropriate attention. Upon
contact with these persons, I am sure you will be given the assistance needed for
your study.

Your interest and concern in the Public Schools is appreciated.

Respectfully,

Franklin L. Smith
Superintendent of Schools
Chief State School Officer

FLS-99a
Appendix F

Letter to the Director of

Research and Evaluation Branch

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October 16, 1991

Dr. Zollie Stevens
Director of Research and Evaluation Branch
415-12th Street, NW
Washington, DC 20004

Dear Dr. Stevens:

I have been employed as a Special Education Teacher since 1970, in the District of Columbia Public School System. Presently, I work at Dunbar Senior High School as a teacher of the learning disabled. I am a doctoral student at Virginia Polytechnic Institute and State University in Blacksburg, Virginia, and wish to do my dissertation on 1989-1990, graduates and dropouts with learning disabilities who were enrolled in Career Centers’ Vocational Programs. The Superintendent, Dr. Franklin L. Smith, has given me his approval to contact you regarding the study.

The purpose of this follow-up study will be to determine if vocational education made a difference in graduates and dropouts with learning disabilities, work patterns, living environment, employment opportunities, and further educational training.

Permission is requested to conduct a follow-up study on graduates and dropouts with learning disabilities who participated in vocational programs. The results of this study will be shared with the District of Columbia Public School System personnel to further assist them in compiling an accurate picture of our students with learning disabilities, according to Public Law 94-142. Additional benefits to be derived from this study includes; current relevant information to assist the Special Education Department, Career Centers, counselors, parents, and students, in providing services to our learning disabled population.

This collaboration will also enhance the Special Education Department working with the Career Centers personnel in assessing, planning, implementation, evaluation, and
revision, as it relates to our learning disabled students curriculum. All data in the study will be kept confidential and used for aggregate study only.

If permission is granted, I will be collecting data on graduates and dropouts who participated in vocational programs for seven Career Development Centers in the Public School System, namely: Bell, Birdick, Chamberlain, Far Southeast, M.M. Washington, Penn/McKinley, and Phelps.

A permission letter will be mailed to parents of students with learning disabilities requesting their permission for their son/daughter to participate in the study which I am enclosing. I am also enclosing a copy of my permission letter from the Superintendent, my proposal, and the Students Information Form.

Thanks for all consideration shown me in my request. If you have any questions, please feel free to call me at work on (202) 673-7238, or at home on (202) 332-2687. Awaiting your earliest response.

Sincerely Yours,

Mercedes M. Dickson

Mercedes M. Dickson

Enclosures
Appendix G

Acknowledgment Letter from

Director of Research and Evaluation Branch
October 21, 1991

Mrs. Mercedes M. Dickson
1133 Columbia Road, N.W.
Washington, DC 20009

Dear Mrs. Dickson:

Reference is made to your letter dated 16 October 1991 requesting permission to collect data for the doctoral dissertation and the letter of prior approval from Superintendent Franklin L. Smith (dated 31 July 1991).

Approval is granted to proceed with the dissertation study subject to your agreement to observe the following:

- Participation in the study is voluntary on the part of school staff and is subject to existing ethical standards and guidelines,

- Participation of students in the study is voluntary but must be preceded by parental consent [minor students] and is subject to existing ethical standards and guidelines, and

- You must submit a copy of the completed dissertation study to the DCPS Director, Research and Evaluation Branch.

Approval gives permission to make contacts and to administer data collection instruments where principal and/or parental approval has also been granted. You may contact me at 724-8751 or 724-3636 if you have any questions.

Sincerely,

Zollie Stevenson, Jr., Ph.D.
Director
Research and Evaluation Branch

cc: Dr. Doris A. Woodson
Appendix H

Letter to Parents/Parents'

Permission Form
Dear Parent:

As a teacher in the Public School System, I would like to better serve students in Vocational Programs. I would like to ask questions concerning educational training, independent living and employment.

To accomplish this goal, I need your permission for your son or daughter to participate in the study. I assure you that the information provided will be held in the strictest confidence. Results reported will be used as group data and not individual data.

I will be contacting you in the near future to arrange an interview if permission is granted. Your permission will be greatly appreciated. If you have any questions, please feel free to call me at work on (202) 673-7238, or at home on (202) 332-2687. I am enclosing a stamped self addressed envelope for your reply. Please return permission page.

Sincerely Yours,

Mercedes M. Dickson

Enclosure
Date: ______________

I give permission for my son or daughter ____________________________ to participate in the study of the Public School Vocational Educational Program.

Furthermore, I understand that the results will be held in strictest confidence and data will be reported as group and not individual data. Please return permission page in the self addressed envelope enclosed.

Parent's Signature: ____________________________________________
VITA

Name                   Mercedes McNair Dickson
Address                1123 Columbia Road, N.W.
                                      Washington, D.C. 20009
Telephone              Home (202) 332-2687
                                      Work (202) 673-7233
Birthday               July 16, 1923
Marital Status         Widow
Children               Avon, Mary, Yolanda, Jerone, Vernard,
                                      Antjuan and Sherri
Siblings
Parents                Dow and Clara McNair
Brothers               Thomas, Damon and Pythais (twins), Alexandar,
                                      Willie James, and Joe Nathan
Sisters                Etta Mae, Nora, Mary, Mildred, and Margarette
Education Background:

  M.A.                   George Washington University, 1973
                                      Early Childhood, Special Education

  B.S.                   University of the District of Columbia
                                      Special Education

Professional Experience:

  1985-                   Resource Teacher, DCPS

  1970-84                 Teacher, DCPS

Mercedes McNair Dickson

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