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ABSTRACT

This qualitative study explored the perceptions of 14 adults (ages 21 to 37) with learning disabilities (including 7 enrolled in college) regarding their K-12 school experiences. Personal interviews were used to elicit those dimensions of the school experience perceived as most positive or most negative. The critical incident technique was used to ask about best and worst teachers. Analysis of interviews identified eight major themes: (1) the best teacher was the teacher who cared; (2) the worst teacher was the teacher who was demeaning; (3) the system failed some of these students by assigning them inadequate teachers, by giving them labels, and by making them feel that they were just a number; (4) many of the students displayed a strong will to succeed; (5) education was viewed as necessary for success; (6) parents tried to be advocates for their children; (7) hands-on learning was preferred by most; and (8) math was the most difficult subject. Individual sections of this monograph present an introduction to the study, an extensive literature review, a description of the study's methodology, the study's findings, and a summary. Appendices include the interview guide, relevant letters and forms, and demographics of the students interviewed. (Contains approximately 125 references.) (DB)

The Pennsylvania State University

The Graduate School

THE PERCEPTIONS OF ADULTS WITH LEARNING DISABILITIES REGARDING THEIR LEARNING EXPERIENCES

A Thesis in

Adult Education

by

Donna K. Gresh

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Education

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ABSTRACT

This study explored the perceptions of adults with learning disabilities regarding their K-12 school experiences. The study tried to identify through face-to-face interviews those dimensions of the schooling experience that were perceived as most positive or most negative. The critical incident technique was used to ask specific questions about best and worst teachers. Some questions related to teacher effectiveness were asked, and aspirations for further learning were explored.

Participants were from 21 to 37 years of age, because these students would have been in school since the time that P.L. 94-142 was implemented. Participants were not newly evaluated for this study, rather inclusion in the sample depended on earlier identification as learning disabled. Many of the participants were identified by their schools, K-12. A few were identified during their college years. Half of the participants were adult students at a large northeastern research university. Half of the participants were adults not enrolled in college. The strategy behind using this sample was that different poles of the spectrum of the population with learning disabilities would

be covered -- the college students representing the more mildly handicapped and the noncollege likely to represent the more severely handicapped.

The questions asked in the interviews were standardized by the use of an interview guide. The interview guide was pilot tested with three adults with learning disabilities in order to check for clarity of questions. These three adults were not included as part of the research sample.

The data was divided and categorized into themes, major and minor. The decision whether a theme was a major or minor one was based on the number of people in the study who mentioned it. Themes that seemed to be mentioned in almost all interviews were considered major themes. Themes that seemed salient, yet were only mentioned by several of the participants, were discussed as minor themes. The major themes were **The Best Teacher, The Worst Teacher, The System Failed Me, Confronting the Challenge, Education Is Important, Parents as Advocates, Learning Preferences, and Areas of Difficulty.** The minor themes were **Structure, Choice Over Methods, Small Groups, and Self-Image.**

TABLE OF CONTENTS

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Chapter 1

INTRODUCTION

The study of learning disabilities as we know it today can be said to begin with the work of Samuel Orton and Alfred Strauss. In 1928, Samuel Orton rejected contemporary theories of learning difficulties. Instead, Orton emphasized cerebral dominance as the pivotal factor in learning difficulties. He theorized that when this dominance was lacking, problems in speech and reading resulted from a twisting of symbols (strephosymbolia) in the cortex. In the 1940s, Alfred Strauss, a German physician, came to the United States and did much to focus attention on brain-injured children and to establish education programs for brain-injured children.

During the late 1940s special education programs for the handicapped were expanded within the public and private school systems of the United States. Organized classes were created for the mentally retarded, the deaf, the blind, the physically handicapped, those with speech and language impairments, and emotionally disturbed children. At that time, no category for children now referred to as learning

disabled (LD) was formed. Once these special education classes became an accepted part of the school system, researchers and authorities noticed that a great number of children did not learn using ordinary instructional methods and could not be classified as deaf, blind, or mentally retarded. Their learning difficulties caused their parents considerable anxiety because the children appeared to be severely handicapped, yet did not fit into existing categories of handicapped children. Consequently, parents' groups advocated for the creation of special classes for these children under a variety of headings, most of which implied brain damage.

In 1963, Samuel Kirk coined the phrase "learning disability" in a speech to parents of children with learning disabilities; thus, he is credited with establishing the term. In 1964, educators, parents, and others, concerned with the educational and behavioral implications of such disorders, formed a national organization, the Association for Children and Adults with Learning Disabilities.

The exact causes of learning disabilities have remained the subject of continuing discussion and dispute. Neurological studies have aimed at verifying the organic sources of learning problems but are inconclusive to date

(Coles, 1987). This is one reason medical terms such as "brain injury" have been replaced by "learning disabilities," a more behaviorally oriented term.

The neurological model is only one theory of learning disabilities. There are other theories regarding the origins of learning disabilities, such as dietary and social-environmental causation. An assumption of dietary causation is evident in the one popular megavitamin treatment, or Feingold Diet. Those subscribing to a social-environmental theory of learning disabilities base their assumptions on Skinner's stimulus-response model. Stimuli are said to provoke inappropriate responses for the learning disabled individual.

Despite all the theory development, research, and improvements in our educational system over the years, an increasing number of children and, more recently, adults have been identified by schools and other human service agencies as being LD. In 1991-92, 2,234,000 children, 3 to 21 years old, with learning disabilities were served, 5.31% of the total school enrollment. This was 45.1% of the total number of students receiving special education services in the United States (Office of Special Education and Rehabilitative Services, 1992). In 1993, 52% of the total

number of students receiving special education services had learning disabilities (Office of Special Education and Rehabilitative Services, 1993).

Research indicates that adults continue to be plagued by childhood learning disabilities (Bruck, 1985; Spreen, 1988). The original "Strauss syndrome" children from 1947 would today be considered middle- to old-aged. Those children who were in the primary grades when Kirk suggested use of the term "learning disability" are now in their thirties. Individuals with learning disabilities have become adults, and many of them have not been "cured" of their learning disability. As adults they continue to exhibit problems in areas such as reading, spelling, and math. It is difficult to estimate the number of individuals with learning disabilities in the adult population. A way to estimate the number of individuals with learning disabilities in the adult population is to extrapolate the most recent figures on LD among school children. Therefore, if using recent figures on LD among school children, the estimate of adults with learning disabilities would be 5.31% of the adult population. Using the most recent number of adults in the United States, based statistics from the United States Bureau of the Census, the estimate of adults with learning disabilities would be 10,209,000. Recently,

according to the Pennsylvania State Adult Literacy Survey, 18% of the adult population do not have basic reading and math skills. Nationally, 22% of the population do not have basic reading and math skills (Pennsylvania Department of Education, 1995). Obviously, such problems impede achievement.

Learning Disabled Students in School

What enables learning disabled students to achieve in school? Conclusions from a number of research studies state that the teacher is an important factor in learning (Bond & Dykstra, 1967; Chall & Feldman, 1966). Regardless of materials or methods, children in certain classrooms do better than children in other classrooms. This is true even if variables such as intelligence and socioeconomic level are controlled. What seems to be of the utmost importance is not the materials or the methods, but the teacher (Bond & Dykstra, 1967; Chall & Feldman, 1966; Koppitz, 1973; Good, 1983; Billingsley & Tomchin, 1992).

While the teacher is a very important variable in student learning, more and more research points to student

perceptions as equally important. Schumm and Vaughn (1994) stated in their research that student perceptions are the mediating variable between what the teacher is teaching and what the student is learning. Too often student perceptions are either ignored or overlooked in the teaching-learning situation (Kokoszka, 1987, Schumm & Vaughn, 1994). Student perceptions need to be recognized as being as an important a variable as the teacher.

Even though the teacher is a key ingredient for successful remediation, research has not revealed precisely what qualities the successful teacher of the learning disabled possesses. Ysseldyke and Algozzine (1982) stated that we have not been able to clearly define the behavior of good special education teachers. Ysseldyke and Algozzine did a critical review of studies dealing with the competencies of effective special education teachers. Is it empathy, kindness, the ability to structure the class, enthusiasm, creativity, punctuality, ability to individualize instruction, consistency, knowledge of the field, love of children, diagnostic skills, familiarity with materials, competency in specific skills, clinical intuition, or possibly a combination of these qualities that make an effective teacher for students who are learning disabled? The research was inconclusive.

Koppitz (1973) did a five-year follow-up study of children with learning disabilities who attended special education classes. Her conclusions were that learning disabilities are not cured or corrected by any one specific method or technique. Teachers need to have a wide range of techniques and materials. They also need to be imaginative and flexible in adapting to meet the needs of specific children. Overdependence on one approach to remediation should be avoided. This is exemplified by the following fable:

> Once upon a time the animals decided they must do something educational to help their young meet the problems of the world. A school was organized where they adopted a curriculum consisting of running, climbing, and swimming. To make it easier to administer, all of the animals took all the subjects. Of course, the duck was excellent in swimming -- in fact he was better than the instructor; running, however, was a weak area for him. Therefore, he had to stay after school and drop swimming in order to practice running. Now, this was kept up until his webbed feet were badly worn and soon he became only average in swimming. However, average was an

> acceptable criterion in this school so no one was concerned about it -- except, of course, the duck. While the rabbit was good in running, he was not up to par in swimming and suffered a nervous breakdown because of the makeup work required to improve his swimming. By the end of the year, an abnormal eel that could swim exceedingly well and also run and climb had the overall highest average and was consequently named valedictorian of the class. (Lerner, 1981, p. 116)

Is this what happens to our children in school? Is average acceptable, even preferable to outstanding in one area and weak in another? More specifically, is this what happens to our learning disabled students, who by definition have areas of strength and weakness? In order to understand what they experience, students with learning disabilities need to be consulted. What are their perceptions of their schooling experience? What do they recall as the best and worst parts of their schooling experience? What are their current feelings on schooling? Without answering these questions, educators cannot have a complete picture of how effective they are or how good a job they are doing educating students with learning disabilities.

Statement of the Problem

Knowing that students with learning disabilities have areas of strength and weakness, how well do schools prepare them for the adult world? Do the children who have learning disabilities continue to face problems when they grow up? When the phenomenon of learning disabilities started to be treated in the 1960s, it was thought that a learning disability could be cured. Research has shown that learning disabilities are not cured, but still plague individuals as adults (Bruck, 1985; Spreen, 1988). The learning disability creates different problems for an adult as opposed to a youngster. For school-age children, the LD causes academic problems that sometimes lead to social problems. For adults, academic and social problems may persist, along with the addition of occupational and other problems specific to adult life.

Over the years, an increasing number of children and, more recently, adults have been identified by schools and other human service agencies as having learning disabilities. This leads to the question, Is there something that educators could be doing to help these individuals with learning disabilities function effectively as adults?

Kokoszka (1987) stated that student perceptions are an important source of information; however, student perceptions are frequently overlooked. He suggested that value can be gained from consulting students. Schumm and Vaughn (1994) said that students are interpreting what is happening in the classroom. They are not just passively receiving the teacher's instructional and behavioral practices. Student perceptions play an integral role. Students provide unique insights and should be given the opportunity to influence teaching practices. If students are to be held responsible for their learning, then their perceptions of teaching practices need to be considered. What are these former learning disabled students' perceptions of their kindergarten through twelfth grade learning experiences?

Cross (1981) stated that attitudes about education are the direct consequences of an individual's own past. Existential phenomenology also deals with an individual's past. This research philosophy is a direct investigation and description of phenomena as consciously experienced (Stanage, 1987). Existential phenomenology allows the researcher to see how a phenomena is perceived by the individuals. Phenomenology asserts that however an individual interprets his or her world constitutes reality.

Whether this reality is factual or not does not matter. What matters is that the individual believes his or her interpretation and it is therefore this individual's reality. A phenomenological approach presents the individual's perspective, his or her interpretation of the world.

In using a phenomenological approach, the researcher describes a particular phenomenon. Theories about causal explanation, preconceptions, and presuppositions are abandoned. In this particular research study, the phenomenon being described is past school experiences. By using phenomenology the researcher was able to explore the past school experiences of learning disabled adults. The goals of the researcher were to better understand how these adults viewed their past school experiences and to find out what are their current attitudes toward adult learning.

In order to understand the perceptions of the participants with learning disabilities, a qualitative research study was conducted. By doing a qualitative study, the researcher was able to explore the phenomenon of past school experiences. In this qualitative research study, the sample was a purposeful sample; that is, the sample was deliberately varied by age and level of education. In this

study there was a group of college and noncollege participants. This qualitative research study used in-depth, open-ended interviews as the means of data collection. The in-depth, open-ended interviews were transcribed into verbatim transcripts, and an inductive analysis was done. Themes emerged from the data and were organized into major and minor themes.

Purpose and Questions

The purpose of this research was to explore student perceptions. This research was intended to identify, through interviews with adults with LD, those dimensions of the school learning experience, kindergarten through grade 12, that were recalled and perceived as most positive or most negative; and also to determine to what extent these individuals are active learners today.

Therefore, this research was qualitative in nature since it explored the perceptions of students with learning disabilities who have now grown into adults. The research used in-depth, open-ended interviews as the means of data collection. The data consisted of direct quotations from

the participants about their experiences, opinions, feelings, and knowledge.

Five questions were addressed:

1. What past learning experiences do these adults with learning disabilities perceive as most positive?

2. What past learning experiences do these adults with learning disabilities perceive as most negative?

3. What are their current attitudes toward learning?

4. In what kind of formal or informal learning activities do they now participate?

5. What are their aspirations for further formal learning?

Definitions

For the purposes of this study, the participants had already been identified as having learning disabilities; many by the schools, others by the college that they attended, and some by a learning disabilities consultant in a job-training situation. So, it is important to look at educational definitions of learning disabilities. Current components of the accepted federal definition of learning disabilities for children include: (a) neurological dysfunction or brain impairment -- an organic etiology is presumed although it often cannot be verified; (b) difficulty in academic and learning tasks; (c) discrepancy between achievement and potential -- there is a significant discrepancy between what the person is potentially capable of learning and what in fact s/he learns; (d) inconsistencies in abilities -- in identification of the learning disabled population, emphasis is placed upon the irregular development of mental abilities; (e) definition by exclusion -- children under consideration do not fit into any other area of exceptionality; that is, children with learning disabilities are not primarily mentally retarded, emotionally disturbed, culturally deprived, or sensorily handicapped (Lerner, 1981).

In 1975, the Education for all Handicapped Children Act (P.L. 94-142) accepted the following definition of learning disabilities:

> The term "specific learning disabilities" means those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage. (Federal Register, 1977)

In the same year, the state of Pennsylvania accepted the following definition:

> Learning Disability - A deficiency in the acquisition of basic learning skills, including but not limited to, the ability to reason, think, read, write, spell or to do mathematical calculations, as identified by an educational and psychological evaluation. Persons who have learning disorders which are primarily the result of visual, hearing or other handicaps or mental retardation or emotional factors or of environmental disadvantage are not learning disabled. The term learning disability does not exclude the possibility that a learning disabled person may also exhibit such conditions as brain damage or minimal brain dysfunction. A person shall be assigned to a program for the learning disabled when the evaluation and Individualized Education Program indicate that such a program is appropriate, provided that the evaluation clearly indicates that the person can demonstrate average or above average intellectual functioning on an appropriate intelligence measure. The evaluation shall include an assessment of specific academic strengths and

weaknesses. (Pennsylvania State Register, 1977)

Most of the participants in this study had been identified as learning disabled during their primary or secondary school years. In addition, there were some who had not been identified in school (K-12), but were identified at the postsecondary level at college or through Vocational Rehabilitation Services or a similar agency . In this case, Vocational Rehabilitation Services generally used the following definition for adults with learning disabilities:

A disorder in one or more of the central nervous system involved in perceiving, understanding, and/or using concepts through verbal (spoken)or written language or nonverbal means. This disorder manifests itself with a deficit in one or more areas: attention, reasoning, processing, memory, communication, reading, spelling, writing, calculation, coordination, social competence, and emotional maturity. (Rehabilitation Services Administration, 1985)

For the purposes of this study, an adult with LD was defined as someone 21 to 37 years of age. The lower limit of 21 was used because this is the age at which P.L. 94-142 stops coverage. Age 21 is also commonly used to recognize

the start of adulthood, when one is legally recognized as an adult. The age of 37 was used as an upper limit to ensure that participants had been in school when P.L. 94-142 was in place. Prior to the passage of P.L. 94-142, identification and service to learning disabled students would have occurred at the discretion of the school.

Also, for the purposes of this study, learning was defined as the process of coming to know something by study or experience (Webster's New World Dictionary, 1974). Informal learning referred to the learning that took place outside of the school context. Formal learning referred to the learning that occurred within a school context, be it K-12, college, or adult education.

Assumptions

Research was predicated on the following assumptions:

1. Participants would have adequate recall of past school experiences to respond with reasonable accuracy to interview questions.

2. Participants would be open to sharing their perceptions with the investigator.

3. The schools, colleges, or adult education agencies have been accurate in identifying the individual as learning disabled.

Limitations

The first limitation was that it was beyond the scope and methodology of the study to draw a nationally or regionally representative sample. Thus the sample was not selected in such a fashion as to be nationally or regionally representative; rather, individuals with certain background variables were purposefully selected to typify the range of adults with learning disabilities.

Another limitation can be viewed as a function of the interview guide. There were fewer questions and less probing about informal learning than formal learning. This no doubt contributed to the tendency of respondents to focus more on formal learning in answering the interview questions.

Also, another limitation of the study was that questions were not asked about these individuals' parents. Parents were not the focus of this study, although in doing the data analysis several themes arose that dealt with parental issues. Since such questions were not asked in the interview guide, there was no way of knowing the level of literacy of these particular parents or identifying relationships between parental background.

Significance

This study was significant because it looked at past school experiences of the adult with learning disabilities. The study was unique in that these adults were approached from an adult education perspective; that is, with an assumption that learning is a lifelong experience. The study also involved student perceptions, though these students were adults. Kokoszka (1987) stated that student perceptions are an important source of information, but student perceptions are frequently overlooked. Kokoszka suggests that value can be gained from consulting students. Students are more likely to participate and to learn if they

view teacher's instructional practices in a positive light. If students are to be more responsible for their learning, then their perceptions of teaching practices need to be considered.

The study has practical applications for schools and the concept of lifelong learning. By identifying the dimensions of effective teaching-learning transactions as experienced by individuals with LD, the study has the potential to suggest modifications in teaching individuals with LD to minimize the impact of learning disabilities and maximize adult potential.

This study was also significant for adult education, especially from the perspective of lifelong learning. Adult educators are interested in providing positive educational experiences for all adults. This study was intended to provide new insights about adults with LD: what they themselves consider a positive learning experience and a negative learning experience, and what they consider to have helped them learn the most and the least.

Summary

In summary, this research project addressed the perceptions adults with learning disabilities had of their K-12 school experiences. It looked at learning from an adult education perspective, wherein learning is viewed as a lifelong process. Childhood learning disabilities are not cured; they still manifest themselves in adulthood. Several questions have been posed. Definitions used nationally and at the state level for identifying children and adults with learning disabilities have been offered. The assumptions, limitations, and significance of the study were discussed. An overview of the methodology used in this research was put forth.

The remaining chapters contain a literature review, a description of the methodology used in this research; the findings of this research; and the conclusions which contain a summary and a discussion with implications and recommendations. The literature review provides information on topics such as the origins of learning disabilities, adult development issues and the effects of learning disabilities in adulthood, school experiences of adults with LD, teacher effectiveness in dealing with individuals with

LD and student perceptions. The methodology section addresses the sample, data collection, instrumentation, and data analysis. The findings have been arranged into major and minor themes, and the themes are discussed in light of findings of recent literature. The implications of these research findings and recommendations for future research are discussed.

Chapter 2

LITERATURE REVIEW

The literature review will look first at the origins of learning disabilities as a field of study. It will go on to consider adult learning issues and the adult with learning disabilities. Next, a specific focus will be given to key aspects of adult life: transitions into adulthood, academic achievement, occupational achievement, follow-up studies pertaining to academic and occupational achievement and social and emotional adjustment. Motivational models that take into account early learning experience will be reviewed. The review will end with literature focused on teacher effectiveness with learning disabled students and some literature on student perceptions.

Origins of Learning Disabilities

Tremendous progress and changes have been made in the field of learning disabilities. These changes were due to the work of some of the pioneers in the field ,such as

Orton, Strauss, and Fernald. The changes were also due to the passage of Public Law 94-142, the Education of All Handicapped Children Act in 1975. This public law came into being because of various national organizations, both professional and parent groups. A brief look at some of the history behind P.L. 94-142 may be valuable here.

Most people in the field of learning disabilities (LD) would agree that pioneers such as Samuel Orton, Alfred Strauss, and Grace Fernald contributed greatly to the beginnings of the area of special education now called learning disabilities. Pioneer Dr. Samuel Orton, a professor of psychiatry, became involved in organizing an experimental mobile mental hygiene clinic in 1925. It was during one of these clinics that he came across an unusual 16-year-old boy he called M.P. This boy had never learned to read, despite normal intelligence. Orton found a significant number of other children with similar disabilities. In laboratory testing, it was discovered that a number of them had difficulty with reversals (e.g., reading saw for was), confusion of b and d, and other such confusion of visual symbols. His twisted-symbol hypothesis (strethosymbolism) still exists in the field of learning disabilities today; that is, educators of both adults and

children speak of reversals in diagnosing and teaching students with learning disabilities.

In 1947 Alfred Strauss worked with brain injured children. He and Laura Lehtinen, his partner, assumed that the actual damage could not be treated; therefore, they attempted to control the environment, the factors that tended to stimulate the child to actions inhibiting normal academic learning. After they manipulated and controlled the environment so as to reduce distractions and stimulation of hyperactive behavior, they were able to slowly teach the child to develop and exercise additional inner control. This capability was considered to be due in part to the ability of undamaged portions of the brain to substitute and compensate for damaged areas, [illegible] over many of their functions. This is the basic underlying rationale for what Strauss and Lehtinen referred to as the "therapeutic educational environment." Practitioners in the field of learning disabilities reduce distractions and teaching the child to develop additional inner control to this very day.

In summary, the field of learning disabilities has come a long way. Much of the credit for this goes to the pioneers in the field, like Orton, Strauss, Lehtinen, and Fernald to name just a few. The hallmark of change for

public education came with the passage of Public Law 94-142, the Education of All Handicapped Children Act, in 1975. Parents' groups had advocated for the creation of special classes for children with learning disabilities. Much of the credit for the passage of P.L. 94-142 must go to these parents. More recently P.L. 101-476, the Individuals with Disabilities Education Act (IDEA) became law in 1990. IDEA guaranteed children with disabilities the right to a free, appropriate education in the least restrictive environment.

Adult Learning Theory and the Learning Disabled Adult

Knowles (1980) made four assumptions about adult learners:

1. Learners progress from dependent to self-directed learning.
2. Learners progress from no experiential base to having a valuable experiential base.
3. Learners progress from society determined readiness to an individually determined readiness.
4. Learners progress from having an orientation toward

future application for learning to a present application for learning.

While Knowles's assumptions applied to adult learners in general, Travis (1985) suggested two more considerations to add to Knowles's assumptions when considering adults with learning disabilities: the kind of disability, and the age of the individual at the onset of the disability. Together, these six variables must be considered in assessing the education of an adult with special needs.

Travis further categorized adult disabled learners into four populations:

1. the developmentally disabled,
2. those who progress through public school special education programs,
3. those who become disabled after graduation from high school, and
4. those who become disabled in middle age or old age.

Travis asserted that there is a relationship between the age of onset and outcomes. A truly learning disabled person would always have the disability; however, it may not be diagnosed until the adult years. In terms of outcomes,

learning disabled adults could be showing up in adult basic education, basic literacy classes, and graduate degree and training programs, although never having been diagnosed. Since the passage of P.L. 94-142, one might assume that the more severe cases have been diagnosed and treated in schools.

Hamilton (1983) was also concerned about outcomes for adults with learning disabilities. He suggested that adults with LD play a role in the program planning process. Adults with learning disabilities need to be involved in all stages of program planning -- diagnosis, setting goals and objectives, specifying modalities and learning procedures, selecting materials and resources, and evaluation and decision making. Again, this comes back to Knowles's principles of a self-directed learner.

Patton and Polloway (1982) described adulthood as a time for striving to achieve personal, social, and occupational competence. For adults with a learning disability, as well as for any adult, obtaining this competence in the personal, social, and occupational arenas of life may be difficult. In a simplified sense, adjustment to adult life occurs in one of three ways: (a) by achieving a normal, successful life style; (b) by experiencing various

problems but dealing with them in a covert manner; or, (c) by encountering major difficulties with overt negative ramifications. Further research is needed to determine personal characteristics and social variables influencing successful adjustment to adult life.

In summary, the adult with a learning disability brings some unique concerns to adult education, be it diagnosis, program planning, or adjustment in adulthood. As Travis pointed out, there is a relationship between the diagnosis, age of onset, and outcomes. It is assumed since the passage of P.L. 94-142, that the persons with more severe learning disability will have been diagnosed in school with the persons who have less severe learning disability perhaps being diagnosed at college or in an adult education setting, such as OVR (Office of Vocational Rehabilitation). Adults need to play a role in the program planning process. Adults with a learning disability striving for adjustment and competence in the personal, social, and occupational arenas of their lives may find their adjustment more complicated because of their learning disability.

Adjustment to Adult Life

Transitions into Adulthood

Learning disabled youngsters are found and served under P.L. 94-142 and P.L. 101-476. Until recently the assumption was made that learning disabilities were a school-age problem and would be "fixed" in schools through special education programs. But as these children grew into adolescence, the special needs persisted beyond childhood and beyond K-12 schooling (Ross, 1990; Gerber, Ginsberg, & Reiff, 1992). This fact was addressed with the passage of P.L. 101-476, IDEA, in 1990. Transition plans now must be included within IEPs (Individualized Education Plans) by no later than age 16 and on an annual basis thereafter.

After twelfth grade, some young adults with learning disabilities go to college, some to vocational training, and some enter the work force. Some will remain unemployed and family-bound in their adult years (Chesler, 1982). Research is just emerging that tells how learning disabled individuals negotiate the transition from school into more adult roles (Gajar, Goodman, & McAfee, 1993). With the

passage of P.L. 94-142, a link was established between families and schools that provided a basis of support for not only learning disabled individuals but their families as well. But once children depart from school, they and their families are cut off from this basis of support, this long term resource. Many experience it as an abrupt cutoff (Johnson, Bruininks, & Thurlow, 1987). Zetlin and Hosseini (1989) suggested that transition help be given not only to students, but parents as well. Some common family problems in dealing with a learning disabled family member include lack of acceptance of the disability, communication difficulties, overprotectiveness, rigidity, inability to solve conflicts, detached or very devoted siblings, and parental ambivalence. Families who are successful in "letting go" of the learning disabled young adult are characterized by setting consistent limits, teaching independent skills, setting reasonable expectations, and demonstrating good communication skills (Goodman, 1988).

Clitheroe, Hoskings, and Salinas (1988) did a needs assessment using clients of a Rehabilitation Center for Brain Dysfunction, parents of clients, and professionals. Interestingly, the needs assessment indicated that vocational skills were the most important factor in the transition to adulthood by a child with LD. There was a

direct correlation between the age of an adult with learning disabilities and his/her perception of the importance of vocational skills. Parents thought that social skills were very important. The professionals did not believe that either social skills or independent living skills were important to success.

McCuller, McSweyn, Morgan, and Moore (1991) surveyed professionals about the transition from school to employment. One hundred and seventeen special education teachers were randomly selected to receive a mail survey. Over half indicated that their college education had no vocational transition course work, and 36% had received no in-service training upon transition. Twenty-eight percent indicated that transition planning was not applicable to their students. Teachers felt that the five most important transitional planning issues were teaching social skills, teaching job skills, matching skills to the job, parental involvement, and case management.

Zetlin and Hosseini (1989) did case study research on six young adults who were mildly learning handicapped, some of whom were mentally retarded and some moderately to severely learning disabled. All were followed one year after graduation from high school. All six went from job to

job or from class to class at a community college. They were discontented and frustrated with their situations in life, but were unable to plan realistically for the future.

In another case study, Posthill and Roffman (1990) found that students with learning disabilities who had money management difficulties could benefit from some specific interventions. These money management difficulties were preventing them from becoming financially responsible and keeping them from independent adulthood. For example, visual-perceptual weaknesses may lead the individual to reverse numbers and/or misalign columns in computation. Hoffman, et al. (1987) indicated that learning disabled adults ranked handling money and banking highest in the percentage of problems most often encountered in daily living. Again, this points out a need for help in the transition from K-12 schooling to adult roles for individuals with learning disabilities. Individuals with LD remain as such after their K-12 schooling, and the nature of an adult's needs differs from a child's.

To summarize, learning disabilities persist beyond the K-12 school experience. Recent legislation has now made it mandatory for transition plans to be included in IEPs. Research is beginning to address the whole issue of

transition. Learning disabilities can cause some problems in families. Both parents and professionals play a role in preparing these individuals for adulthood. Social skills, independent living skills, and occupational skills are necessary. Many times the perceptions about which of these skills are most important differ among the individual with a learning disability, the professionals who work with them, and the parents. One aspect of independent living, money management, appears to be an area of concern for many individuals with LD.

Academic Achievement

Adults with learning disabilities continue to exhibit problems in areas such as math, reading, and spelling. Obviously such problems would impede academic achievement. Low achievers are at risk for becoming high school dropouts. Children with learning disabilities, who sometimes are labeled low achievers, are therefore at risk (Spreen, 1981, 1982, 1984). For students with LD, dropping out of school seems to be influenced by peer dropouts. Other influences are absenteeism and grade point average (Cobb & Crump, 1987).

While absenteeism and grade point average are predictors of dropping out of school, socioeconomic status (SES) can also influence academic achievement. (Depending on what levels of SES were included in a study or if a cross section of SES was used, results differ.) Bruck (1985) investigated middle-class children with LD and had a sibling control group matched for age, sex, and social status. Interestingly enough, the participants with LD and siblings did not differ significantly on academic achievement. O'Connor and Spreen (1988) found that fathers' SES was the major contributing variable for academic achievement.

In a comparison of LD and LA (low-achieving) students, there was found to be no significant difference between the LD and LA groups in regard to academic achievement and SES (Warner, Alley, Schumaker, Deshler & Clark, 1980). Sigmon (1984) theorized that SES does affect IQ, aptitude, and specific school learning abilities. Sigmon concluded that SES, more than any other factor, predicts school success along with the number of years a child remains in school. Clearly, there are contradictory conclusions on SES and academic achievement. One possible explanation was proposed by O'Connor and Spreen (1988): SES is not a carefully controlled variable in outcome studies.

In summary, the academic achievement of students with learning disabilities is influenced by a variety of variables. Of major concern is dropping out of school, which is influenced by peer dropouts, absenteeism, and grade point average. SES may or may not influence academic achievement, depending upon which study is cited. A firm conclusion on SES and academic achievement has not been reached.

Occupational Achievement

Once a student with a learning disability is out of school, occupation and career adjustment become more significant concerns. Cobb and Crump (1987) found that past school experiences were related to income. There was a trend for those who had not been placed in an LD class to earn more money. Before blaming negative outcomes on the LD classes, it is important to recognize that nonplacement in an LD class could be due to less severe problems. In concurrence with Budd (1981), Cobb and Crump found that adults with learning disabilities generally held production-type jobs with low incomes. Obringer and Isonhood (1986)

found that individuals with LD were underemployed and somewhat dependent on family and close friends for decision making.

Minskoff Sautter, Hoffman, and Hawks (1987) examined a different type of decision making in the workplace. They studied employer attitudes and found employers had positive attitudes about making special allowances for handicapped workers as long as it did not involve reduced workloads or involvement in the worker's personal life. Less positive attitudes were expressed toward hiring learning disabled individuals than persons who were not learning disabled. Three possible reasons were suggested: (a) more positive attitudes toward hiring the physically handicapped than the cognitively handicapped, (b) A lack of experience with learning disabled workers (only 15% had hired a worker with a learning disability) (c) inaccurate knowledge regarding LD.

In another follow-up study of learning disabled hyperactive adolescents and young adults, employers did not rate these individuals as inferior on a behavioral and social adaptation questionnaire. Perhaps, even as the individuals with LD mature, distractibility remains a

problem for many, but their restlessness is expressed in less gross or disturbing ways (Beck, 1978).

Most studies reported that adults with a learning disability are somewhat successful in getting a job. Employment statistics range from a low of 36% (Hoffman, et al., 1987) to 87% (Cobb & Crump, 1984). Being employed typically means full- or part-time work. Wagner (1989) in a national study found that 38% of adults with a learning disability were working full time; a national study revealed that noncollege, high school graduates had an employment rate of 47% (William T. Grant Foundation, 1988).

Most studies indicated that the largest percentage of individuals with a learning disability find work in low-level service -- fast food worker, laborer, production worker, and helper occupations (White, 1992). Thus, underemployment is a problem. White, Schumaker, Warner, Alley, and Deshler (1980) in a comparison of an LD sample and a non-LD sample reported that the jobs that were held by the learning disabled adults had significantly less job status than the jobs held by the non-learning disabled adults. Also, many adults with LD were not satisfied with their jobs.

Siegel and Gaylord-Ross (1991), in a follow-up study, found that a job match must be made between individual characteristics and job demands. The study questioned learning disabled individuals, parents, and employers on vocationally related items. The data pointed to a relationship between vocational services and job success. The researchers saw a need for vocational assessments that could better place individuals in appropriate jobs and special services that could suggest accommodations that would vary in type and intensity based on the individual's disability. For example, individuals with severe disabilities may require more extensive services than an individual with a mild disability. Siegel and Gaylord-Ross pointed out that supportive employment services for adults with mild disabilities were virtually nonexistent. But supported employment is becoming statutory for severely disabled individuals.

In summary, occupational concerns become very significant once one leaves a formal educational setting, such as high school or college. For individuals with a learning disability, there are special concerns like low-level jobs and income. Studies generally find that while adults with LD are employed, they are underemployed. The question needs to be raised, Is there something that the

educational system could be doing to help students with learning disabilities get higher-level jobs?

Follow-Up Studies Pertaining to School Experiences and Academic or Vocational Outcomes of Learning Disabled Students

Various follow-up studies have produced a variety of sometimes conflicting results. Many of these conflicts are the result of methodological differences. A crucial point in methodology is what one chooses as an outcome variable. If one chooses tests of basic skill functioning as the measure of outcome, then adults with LD show deficits. If one chooses levels of educational/vocational attainment as an outcome variable, then adults with learning disabilities fare better.

Levin, Zigmond, and Birch (1985) looked at the progress of 52 adolescents with learning disabilities who entered special education in ninth grade. The findings indicated that excellent academic progress was made in the first year of special education. This growth spurt was reported by Betts (1946), Fernald (1943) and Koppitz (1973).

Goodman (1987) found that girls with learning disabilities recalled a more difficult, less enjoyable educational experience than their non-LD sisters. Self-concept test scores revealed no differences between the women with learning disabilities and their non-LD sisters. It seems that for this group's middle- to upper middle-class sample, the learning disabled girls who received appropriate intervention were not held back by the learning disability in regard to adult achievement.

In a study by Balow (1965), the key to progress was continued remedial instruction. Reading achievement test data was used in a follow-up study of 131 reading disabled students. They were reading three to four years below expectancy, the mean initial age was 11.2 years and the majority were lower middle class. They were given 10 weeks of two-hour instruction on a daily basis. The follow-up reading achievement test indicated progress in reading was related to continued remedial instruction.

Edington (1975) also found positive results with students who attended a special resource room. Edington made telephone calls or personal contact with parents and children who had attended a special resource room in the

public school for an average of 96 months. The sample was 25, white middle-class students. Results were that 48% had attended at least one summer school session, 88% had graduated or were still in school, and 48% had received special honors after the remedial help. Only two participants had been in serious trouble inside or out of school.

Rawson (1968) conducted personal or telephone interviews with 20 severely dyslexic, 16 mildly dyslexic, and 20 normal readers or relatives of the participants. All were white and generally middle SES. All attended a private elementary school that offered individualized help based on Orton's language-based, multisensory approach. Results showed that generally students had good vocational and educational outcomes. Many dyslexics reported persisting problems in the areas of reading and spelling. Perhaps one key to success with learning disabled individuals is early intervention as indicated by Robinson and Smith (1962). They conducted personal or phone interviews, and sent questionnaires to 44 clients seen at a reading clinic. Robinson and Smith found good educational and vocational outcomes. Some of the evidence associates early intervention with later avid reading.

Interestingly, Spreen (1988) found that the degree of academic deficit in adulthood is dependent on severity of learning disability at school age, intelligence, SES of parents, and presence or absence of neurological impairment. Intervention has not been clearly related to improved outcome, according to his research.

In support of Spreen, Abbott and Frank (1975) found that intervention did not necessarily improve outcome when they conducted telephone interviews with parents of students with learning disabilities. Although 73% of these learning disabled children were making academic progress after attending a special school, most were generally one year behind in grade placement. About one-third of the 139 sampled required tutoring in one or more subjects and about half had received psychological counseling.

Balow and Bloomquist (1966) did telephone interviews with 14 former remedial readers, ages 20 to 26, from lower middle to upper middle class. Nine more participants underwent psycho-educational testing. Those administered psycho-educational testing attained an average reading level, 84% graduated from high school, and 44% were in unskilled or semiskilled jobs. Eight of the nine tested had a personality deviance on the MMPI (Minnesota Multiphastic

Personality Inventory), most of a mild emotional disturbance of the neurotic type.

Cerney (1976) mailed questionnaires to approximately 125 parents and children in Czechoslovakia who had been diagnosed dyslexic. Almost all had developed a negative attitude toward reading and writing. Two-thirds had an aversion to all schoolwork, one-half had developed neurotic symptoms, and one-third developed truancy and gross behavior disorders. Some had suicidal tendencies. Thirty-nine had completed a nine year basic schooling.

Again, poor academic skill functioning was found by Frauenheim (1978). Frauenheim interviewed and gave standardized achievement tests to 40 diagnosed dyslexics. All had contact with special education services. The mean age at follow-up was 21 years and 10 months. Overall, as adults, these participants continued to experience a severe difficulty in reading, spelling, and math. Little progress had been made since childhood. The mean reading score was a 3.6 grade equivalent. The mean spelling score was a 2.9, and the mean math score was a 4.6.

Gottesman, Belmont, and Kaminer (1975) did a follow-up study of 58 disabled readers. Prior treatment of the

reading problem ranged from special schools for 26, special classes for 12, and remedial tutoring for 8; 12 received no treatment. To evaluate the disabled readers, researchers used the WRAT (Wide Range Achievement Test) and ABLE, which are standardized reading tests. As a group, disabled readers ranked 3.1 percentile points lower at follow-up than at pretest. Two children showed significant gains on reading measures. Overall they were relatively more retarded in reading three to five years later than when initially examined. Muehl and Forrell (1974) used the Iowa Tests of Educational Development to evaluate 43 disabled readers, who were at least three grades below level in reading. All had some contact with a reading clinic. Results showed that some gains were made, but participants remained low in reading ability. Only 4% were reading at average levels. Length of treatment was not correlated with good prognosis.

Werner and Smith (1979) used standardized achievement tests and records of contacts with community agencies to sample a group of 660 children born in 1955 in Hawaii. Twenty-two were diagnosed as in need of a class for the learning disabled at age 10. Results showed 80% of the 22 had continued academic underachievement, frequent absenteeism, truancy, and impulsive acting out, which led to

problems with the police for boys and sexual misconduct for girls. Learning disabled participants also showed significantly greater learning and behavioral problems at ages one and two as compared to matched normal controls.

In a study that showed more positive outcomes, Rogan and Hartman (1976) followed up on 91 adults who had received remedial education in a private school for learning disabilities. The average time spent in the private school was three years between the ages of 6 and 13. Approximately 60% were employed and 16% were in college. In regard to occupations, 33% were clerical workers, 23% unskilled laborers, and 13% professionals. Fifteen percent were married. About 15% were independent of any parental supervision. Six percent had incidences of delinquency and adult offenses. Sixty-nine percent had graduated from high school. Fifteen percent had completed public school programs for the educable mentally handicapped. Thirty-six percent had completed college. Eight percent had completed or were pursuing graduate study.

Koppitz (1973) did a follow-up study of 177 learning disabled students five years after they were placed in a special education class. By the end of the five-year study, one-fourth had returned to the regular class, one-fourth had

moved away or been withdrawn by parents, and one-half remained in special education. She found that brighter children often compensated for their problems on their own. Pupils with multiple problems made very little academic progress in the special classes, even though they had highly motivated, well trained, and experienced teachers. She concluded that some children with specific learning problems might never learn to read and could not deal successfully with written symbols. Koppitz felt that they should be given a meaningful curriculum so that they could function as self-supporting, contributing members of their communities. Time in special classes should not be spent on vain attempts to correct specific learning disabilities while neglecting the children's general education, according to Koppitz.

This philosophy was supported by Horn, O'Donnell, and Vitulano (1983). They believed that our school systems must work on achieving educational and vocational goals that are satisfactory and minimize emotional and behavioral difficulties. This is especially significant in light of what is happening in our public schools due to budgetary pressure. The mainstreaming philosophy of the seventies is being reevaluated. Students who are mildly and moderately learning disabled are remaining in the regular education

classroom. Teachers are being asked to modify content, presentation style, and student participation (Roddy, 1983).

In summary, there are many follow-up studies on students with learning disabilities. There are a variety of outcomes. The outcomes even seem to contradict one another. However, methodology is very important, must be controlled carefully, and must be considered in reviewing any study. Although tests of basic skill functioning generally indicate that adults with learning disabilities continue to exhibit deficits, outcomes in terms of educational attainment (graduating from high school or college, or vocational attainment, i.e., having a job) suggest that individuals with learning disabilities tend to fare better as adults than as children.

Social and Emotional Adjustment

In looking at research on adults with learning disabilities, one major concern prevails -- coping. Fingeret (1983) looked at social networks. She looked at illiterate adults, who may not have all been learning disabled, but nonetheless shared many similarities. She

found that illiterate adults utilized social networks in order to cope. They used these networks in order to be involved in the larger society. Similarly, Ross (1988) found adults with learning disabilities depended on others -- their family or immediate support system -- for help with a variety of reading or writing tasks. Lefebvre (1984) found that students with learning disabilities had two major patterns of coping: (a) high achievement orientation and creative, flexible problem solving; (b) depressive syndrome, low self-esteem, social isolation, and dependence on authority figures. Many showed a perfectionist tendency, were self-critical, and had a low tolerance for frustration. It was suggested that the latter group receive psychological intervention. Cobb and Crump (1987) theorized that coping skills are a predictive factor for placement versus nonplacement in an LD class. Those who cope better in the regular classroom are not placed in LD classes.

Newman (1991) also did research on youths with learning disabilities and the impact of social activities on academic performance. Data on 832 youths were examined to determine if social activities had an effect on academic performance. One-third of these high school youths reported that they saw friends outside of school 6 or 7 days a week. These students had higher absenteeism and grade failure than

students who were less actively involved with their peers outside of school. High absenteeism and grade failure were among the strongest predictors of dropping out of school. Students who were engaged in school or community groups had significantly lower school absenteeism and better grades. These findings suggested that learning disabled students who had a positive relationship with school and whose friendships did not compete with time needed to meet school responsibilities were better students and less likely to drop out. Learning disabled students need to be encouraged to have a positive relationship with school, and parents need to set guidelines for appropriate out-of-school social activities. As Cross (1981) pointed out in her model of participation in adult education, attitudes about education and the opinions of significant others about education are important in determining whether or not one participates in adult education.

In summary, research on individuals with learning disabilities points out that social and emotional adjustment should not be just the concern of the individual with a learning disability, but the concern of parents and school as well. Coping was discussed as a major issue. Dependence on family and friends for emotional support or reading and writing tasks happens in many cases. The whole issue of

dropping out of school was discussed. Both schools and parents need to take a proactive role in keeping students with learning disabilities involved in school in order to reduce the dropout rate.

Models of Motivation for Participation in Adult Learning and the Impact on Learning Disabled Adults

Two models of adult education participation that addressed early learning experiences were those of Cross and Darkenwald. Cross's chain-of-response model (1981) of motivation to participate in adult education was based on the premise that participation is the result of several responses. Her motivational-based theory described motivation to participate as a constantly flowing stream, rather than a series of discrete events. Forces for participation begin with the individual and move toward external conditions, though forces can flow in both directions. The seven key elements of Cross's theory are as follows:

1. self-evaluation
2. attitudes about education
3. importance of goals and expectations that participation will meet goals
4. life transitions
5. opportunities and barriers
6. information
7. participation

Self-evaluation, as defined by Cross, has to do with personal confidence and achievement motivation. Attitudes about education are formed directly from an individual's past educational experiences and indirectly from attitudes and experiences of significant others. For example, if a learning disabled individual has had negative experiences with learning in the past and the experiences and attitudes of significant others are also negative, then this individual would be less likely to participate in adult education. An individual who has had more positive than negative educational experiences and whose significant others have likewise had relatively positive educational experiences would be more likely to value education and participate in adult education. She theorized that there is a reinforcing action between self-evaluation and attitudes

about education. The interaction between the two will remain a rather stable characteristic toward learning.

Her emphasis on the importance of goals and expectations that the participation will meet goals was based on the expectancy-valence theory. Valence is the importance of the goal to the individual. The individual's judgment that the successful attainment of the goal will bring about the desired reward is the valence. There is an interaction between self-evaluation and expectancy. Cross suggested that people with high self-esteem expect success. The opposite, of course, is that people with low self-esteem expect failure. When learning disabled adults enter into adult education, are they entering with high self-esteem or low self-esteem? Do they expect success or failure?

Life transitions constitute the next element of Cross's model; reflecting a concern for adjustment to new phases of one's life. She felt that this element is closely related to a "teachable moment."

Motivation to participate interacts with opportunities and barriers to play an important role in the learning behavior of the individual with LD. If a prospective learner gets to this point in the model and has a strong

will to participate, he or she is likely to overcome minor barriers. Likewise, stronger barriers will probably exclude the more weakly motivated.

Information, the next step in her model, is concerned with getting accurate information about learning opportunities out to adults. If inaccurate or no information gets out to adults, barriers will appear greatly exaggerated or learning opportunities will not be discovered. All of these forces begin with the individual and move toward external conditions. The elements also interact with one another.

It is interesting to note that in Darkenwald's motivational theory for participation in adult education (Anderson & Darkenwald, 1979), he included prior schooling experiences, as did Cross, in attitudes about education. In a study based on data collected in 1975 by the United States Bureau of the Census for the National Center for Education Statistics, Darkenwald found that the most powerful predictor of participation in adult education was the amount of formal schooling. The second most powerful predictor of participation in adult education was age. Older adults were less likely to participate than younger adults. Though reasons for learning were related to personal

characteristics such as age, sex, race, and socioeconomic status, men were more likely than women to stress work related reasons for learning and women are more likely to stress reasons related to personal fulfillment, curiosity, religion, and escape from routine. Reasons for participation were usually multiple and interrelated in complex ways (Darkenwald & Merriam, 1982).

Although, Polloway, Smith, and Patton (1984) didn't specifically list reasons for participation in adult education, they did present an adult development model for adults with learning disabilities. They presented a life-span developmental view that provides a way for understanding the adjustment of adults with learning disabilities. They reviewed four basic assumptions of life-span development theory. First, all development is viewed as a lifelong process. The process takes place from birth until death. Second, development is an expression of biological and socialization processes. These processes are dependent on age and are modified by historical factors. Third, development is pluralistic and adulthood is multidirectional. This means that change is a basic element. Based on a life-span development model, adult development is a process of increments and decrements. The individual is influenced by biological and psychological

variables. Also, variables are tied to chronological age and historical events, such as war, economic depression, divorce, or job loss. Fourth, life-span development offers an integrative framework. It provides a base for combining developmental periods with life tasks and life challenges. These are then viewed from a life-span development context.

Relating this back to learning disabled adults, their problems can be viewed in a life-span perspective and at the same time focus on specific characteristics that an adult with a learning disability might have. Polloway et al. (1984) stressed the role of mediating variables. The four variables are biological/intellectual, personal/social, past experience, and locus of control (i.e., the perception of the degree of control that one has over life events). Examples of these first three variables would be physical health, attention, memory, social relationships, and using past experiences as a basis for responding to current events. Each of these variables has implications for the challenges that are faced during adulthood (i.e., vocational, financial, personal, and social).

To summarize, two models of participation in adult education were reviewed -- Cross's and Darkenwald's models. These two particular models were chosen because they

addressed early learning experiences and early learning experiences relate to this study. Polloway et al. (1984) reviewed four basic assumptions of life-span development theory. Life-span development theory provides a way for looking at the adjustments that adults with learning disabilities go through.

Teacher Effectiveness with Learning Disabled Students

As learning disabled students are mainstreamed, insight into what teaching methods are most effective for learning disabled students is invaluable. Englert (1983) found that the more effective special education teacher gave more learning trials and elicited more correct pupil responses. There was a high level of content coverage. Prompts or hints were more beneficial following errors than telling answers or calling on another for the correct answer. The effective special education teacher also actively involved pupils in the task. Lewis (1983), and Larrivee and Algina (1983) suggested that time on task provided academic gain for mainstreamed students. Ysseldyke, Christenson, and Thurlow (1987) considered time to be a necessary condition

for student achievement; but, it was what happened during the time allowed for learning that was important. Effective teachers used time wisely. They made frequent use of teacher questioning, limited the amount of independent seat-work, and especially limited the amount of silent reading. They allowed a certain amount of social interaction between them and their students. Also, more and less effective teachers could not be differentiated on amount of education or number of years of teaching experience (Sindelar, Espin, Smith, and Harriman, 1990).

Good (1983) stated that future classroom research must pay more attention to the quality of instruction. It is the quality more than the quantity of schooling that should be an educational and research focus. Quality of schooling includes not only time on task, but time well spent. It also includes time spent on teaching practices such as encouragement, corrective feedback with guidance, small group discussions, individualization, and students' involvement in their own education.

This whole concept of time on task would support the research on well-integrated classroom routines. Leinhardt, Weidman, and Hammond (1987) found that expert teachers had very well-integrated classroom routines. This research

supported what Brophy (1986) and Good (1983) found. Effective teachers made transitions that were brief and orderly. The more effective teacher, in an effort to provide an efficient learning environment, demonstrated management skills in a variety of other ways, including good preparation, use of rules, and lesson pacing.

Lesson pacing was part of what Sindelar, Smith, Harriman, Hale, and Wilson (1986) were talking about when they referred to an active, questioning teacher. Sindelar et al. (1986) found that an active, questioning teacher was most effective in special class programs for learning disabled elementary students. In their investigation of teachers' instructional behavior, they concluded that the degree to which the teacher was an active participant throughout the instructional period was highly related to reading achievement gain for handicapped students.

Larrivee (1986) found that three teaching behaviors in particular appeared to be required with greater frequency for special needs students, such as the learning disabled. These behaviors are (a) providing positive and encouraging feedback, (b) ensuring a high success rate, and (c) refraining from criticism. This refraining from criticism was what Koppitz (1973) was talking about in being able to

modify pupils' attitudes and self-concepts. Koppitz concluded that the greatest value in special classes was the ability to modify the pupils' attitudes and self-concepts. There was evidence that greater gain was made by the students with a better self-concept in remedial education (Brophy, 1986).

Thurlow and Ysseldyke (1982) also looked at remedial education. They took a national sample of 127 elementary and secondary teachers of students with learning disabilities to examine the beliefs held by these teachers and what constituted an effective instructional approach. It was found that there was little agreement on what worked in teaching students with LD, with one exception; there seemed to be agreement on the need for a modality approach, either the use of a multimodality approach or an approach emphasizing teaching to the student's strong modality.

Teachers, regardless of the number of years of teaching experience, attributed their knowledge of characteristics of students with LD and what works in teaching them to their experience. This was consistent with other studies of the teaching profession (Lortie, 1975). Teachers attributed their teaching abilities to trial-and-error learning in the classroom. Few differences were found in the beliefs of

teachers with one to two years of experience as compared to those teachers with ten or more years of experience regarding what works best for teaching reading and written language. More experienced teachers felt that specific programs and approaches worked better for math. Less experienced teachers felt that observations and working with the child gave more useful information for providing services to students with learning disabilities than did more experienced teachers (Lortie, 1975).

Billingsley and Tomchin (1992) did a yearlong study of the problems experienced by four first-year teachers of learning disabled students. They used the term "survival stage" to characterize the initial stage of teaching where the teacher focused on classroom control, being liked by the students, and being evaluated. How beginners coped with these early demands could determine the kind of teacher that they became and whether or not they decided to leave the profession. Bullough (1987) reported that 40% left the special education profession in the first two years. Billingsley and Tomchin (1992) concluded that even under the best of circumstances beginners were not prepared for some aspects of their jobs. College faculty needed to assess how well they were preparing their teachers by determining the extent to which teacher trainees could perform critical

skills, such as diagnosing student needs, planning appropriate objectives, and implementing effective instructional programs. Local education agencies needed to allow beginning teachers to focus on teaching and learning. Induction to teaching was characterized as "learning by doing," the beginning teacher assuming the dual roles of teacher and learner (Lortie, 1975). Administrators needed to reduce bureaucratic requirements to allow beginners to teach and learn (Billingsley & Tomchin, 1992).

Sutton, McKinney, and Hallahan (1992) also studied beginning learning disabilities teachers. The researchers wanted to see if learning disabilities teachers differed significantly across grade level and educational setting. Sixty-five beginning teachers of learning disabled students were sampled. The results of the study indicated that elementary and secondary special education teachers who taught in either a resource or self-contained setting were more similar in their behavior than different. It seemed that special education teachers were taught or adopted similar instructional strategies with respect to expectations, monitoring student performance, questioning, and praise.

But elementary and secondary learning disabilities teachers differed in their adaptation of curriculum. Elementary teachers emphasized basic skills. Secondary teachers emphasized subject matter content. Interestingly, teachers who taught in a self-contained classroom were more likely than resource room teachers to acknowledge inappropriate student behavior and attempt to manage it rather than ignore it. The attempt to manage student behavior could be due to the fact that teachers in a self-contained classroom had to deal with student misbehavior for a longer period of time each day than resource teachers. Crane and Iwanicki (1986) found that there were significantly higher levels of burnout among special education teachers in self-contained classrooms than resource classrooms.

Teachers' and Students' Perceptions

While higher levels of teacher burnout were found in the self-contained rooms versus resource rooms, another form of burnout needs to be addressed; that is, student burnout. Students burnout for any number of reasons, be they problems at home, academic problems, or communication problems

between teacher and student. Students are good judges of teachers' behavior (Vaughn, Schumm, Niarhos, & Gordon, 1993). Students' perceptions provide insights into teachers' behavior, especially behavior that centers around adaptations for exceptional students.

Students prefer that teachers make adaptations with the exception of three areas: tests, homework, and textbooks (Vaughn et al., 1993). Students prefer that the teacher not assign different homework for different students. This may have something to do with the social aspect of homework. If a student has different homework from everyone else, this precludes working together on homework or exchanging answers.

Schumm and Vaughn (1994) concluded from their study that teachers needed to make more adaptations for meeting the special learning needs of students. There were over 3,000 students involved. The study encompassed a range of grade levels: elementary school, middle school, and high school. There was a range of achievement levels and special groups, including youngsters with learning disabilities, low-achieving youngsters, and youngsters for whom English is a second language. The students in the Schumm and Vaughn study felt that adaptations helped not only those students

with learning and behavioral problems, but also other students in the class. Many adaptations that were identified as desirable by students were not made by teachers, such as a balance between textbook learning and direct experiences. Students wanted more hands-on, active learning experiences. Students desired flexible grouping practices that allowed them the opportunity to learn from their peers. Students in the Schumm and Vaughn study also advocated that the same tests be given to all students with adaptations made in the test administration procedures.

Just as in the Schumm and Vaughn study, many students recognize that some students have special learning needs (reading problems and learning disabilities). Students believe that teachers should make accommodations. But often teachers feel that the extra effort that it takes to concentrate on students with special needs steals from the average and high achievers' instruction. This is called the Robin Hood effect. It is frequently cited by teachers as the reason for not making adaptations in the regular classroom (Vaughn et al., 1993). Surprisingly, in the Vaughn et al. (1993) study, none of the students interviewed expressed concern about a Robin Hood effect. That is, they were not concerned that their needs or the needs of the

better-performing students would be sacrificed if accommodations were made for students with special needs. The Vaughn et al.(1993) study consisted of fourth, fifth, and sixth graders from a metropolitan area. These students appeared to be from regular heterogenous classrooms.

According to the Robin Hood effect, higher achievers would perceive adaptations as a chance to make work easier for the lower achievers. Adaptations would be inefficient when one considers the amount of class time consumed. It would not be fair to these higher-achieving students. The variables that may affect teachers' perceptions are training, experience with learners who have a learning disability, attitudes toward exceptional learners, and comparisons to other students in the class. Teachers contribute to the self-perceptions of students with learning disabilities. The attitudes and perceptions that teachers communicate to students with LD are a source of concern since these attitudes and perceptions can be used later by students in self-evaluations (Morrison, 1985). Having positive self-esteem is considered to be crucial to personal and social development. As cited earlier, there is evidence that students with higher self-esteem do better in remedial education (Brophy, 1986).

With this evidence on self-esteem and student perceptions, it seems that educators can no longer disregard what students think of a teacher. Their perceptions of teaching practices need to be considered. Students can provide insights, which are unique and valuable, into teaching practices. Even though education has not, for the most part, considered the perceptions of students as part of its assessment students are more likely to participate and therefore learn when they view their teacher's teaching practices in a positive light (Schumm & Vaughn, 1994).

In summary, effective teachers of students with learning disabilities have common characteristics. They give more learning trials and get more correct student responses. Students are made to feel successful. The teacher is active and asks questions. Time is spent on task. Interestingly, the effective teacher could not be differentiated by the number of years of teaching experience. Student perceptions are an integral part of the teacher-learner dynamic, yet are often overlooked by educators. Adaptations need to be made for students with special learning needs. Students have definite perceptions on adaptations and need to be consulted. A frequently cited reason for teachers not making adaptations is the Robin Hood effect; that is, the perception that teachers, by making

adaptations rob from the higher-achieving students to give to the lower-achieving students. In interviews with students across grade and achievement levels, this perception was not shared by the students. In fact, students viewed the better teacher as the one who did make accommodations for the students with special learning needs.

Summary

In summary, this literature review briefly discussed the origins of the study of learning disabilities in the United States, adult development issues, and the learning disabled adult with a focus on academic achievement, occupation, and social and emotional adjustment. Two motivational models of participation in adult education were highlighted because of their emphasis on early learning experiences. The connection between early learning experiences and the impact that they have on learning disabled adults' future learning was questioned. Limited research on school experiences of adults with learning disabilities and limited teacher effectiveness literature were reviewed. Several key points were made. The field of learning disabilities has developed tremendously in the

United States since its inception. Adult education theory brings a new perspective to understand learning disabled adults. Adjustments, transitions, and programs need to take into consideration that the individual with a learning disability is also an adult. Achievement takes on a different dimension for adults with learning disabilities. It can no longer be measured simply in terms of grade levels obtained on academic achievement tests, but the work place and family living must be considered. With this in mind, social and emotional adjustments are very significant. Coping with the demands of adult life is a concern for learning disabled adults. Continued learning is essential here, whether from postsecondary education or work place learning, for successful social adjustment for independent and family living. How schools and teachers can best prepare learning disabled students for their future seems to be linked to effective programs and effective teachers. Student perceptions are an integral part of planning effective programs. Student perceptions are usually overlooked in evaluating what is an effective teacher. But with the new emphasis on students being more responsible for their own learning, their perceptions of teaching practices need to be considered.

Chapter 3

METHODOLOGY

The Rationale for Qualitative Inquiry

This research study was a qualitative one. Its purpose was to explore the perceptions of students with learning disabilities who have now grown into adults. Patton (1990) identifies three primary kinds of data collection in qualitative research (a) in-depth, open-ended interviews; (b) direct observation; and (c) study of written documents. The current research study used in-depth, open-ended interviews as the means of data collection. The data consisted of direct quotations from participants about their experiences, opinions, feelings, and knowledge. In this particular case these were the perceptions of learning disabled adults regarding their schooling experiences.

Qualitative data collection begins as raw, descriptive information about programs and the people in these programs. The researcher makes firsthand contact with the programs and

the people, via observation or interviews. Records and documents may also be examined. Data from the observations, interviews, or documents are organized into major and minor themes, categories, and case examples by content analysis (Patton, 1990).

By using a qualitative method, the researcher is able to study selected issues and cases in depth and detail. The data collection is not constrained by predetermined categories of analysis, as in quantitative research. (Quantitative methods use standardized measures that fit various experiences into predetermined categories.) In qualitative research, validity does not hinge on the standardized measures but on the skill, competence, and rigor of the researcher (Patton, 1990).

The investigator is the primary instrument of data collection and analysis in qualitative research and grounded theory. Grounded theory is a methodology that was developed and refined by sociologists, Glasser and Strauss (1967). Its major purpose is the building of theory. The validity and reliability of qualitative data depend to a great extent on the methodological skill, sensitivity, and integrity of the researcher (Patton, 1990). The result of grounded theory is the building of theory that is "grounded" in the

data. Grounded theory is particularly suited to investigating problems for which little theory has been developed. In most grounded theory studies, data come from interviews and observations.

Grounded theory research goes on to form comparison groups to test the credibility of the theory generated. The aspect of grounded theory that this research project incorporated is "grounding" the theory in the research data from interviews to form categories of theory. Also, this research project was consistent with the aspect of grounded theory that says that the investigator is central to research.

Qualitative inquiry was the best fitting methodology for this research study. A qualitative design was vital to this research study. A participant's involvement is essential to qualitative research. In qualitative research, researchers personally interact with the people they study. Interaction, observation, interview, dialogue, and questions are the foundation of the methodology for gathering data in qualitative research (Goetz & LeCompte, 1984). Qualitative researchers view their role as being the primary instrument for data collection. Qualitative researchers place paramount importance on the meaning that participants attach to events

and phenomena A key characteristic of qualitative research is the researcher's reliance on his or her interpretations (Lincoln & Guba, 1985).

In this current research study, by using qualitative research, and the interview as the method of data collection, the researcher hoped to see the world from the perspective of the participants. The personal interaction, between the researcher and the participants, was essential for the researcher to understand how these participants thought and felt. Fontana and Frey (1994) stated, "Interviewing is one of the most common and most powerful ways we use to try to understand our fellow human beings." The purpose of qualitative interviewing is to view the world through the eyes of the participants. When the qualitative researcher understands how the participants think and feel about a phenomenon, the researcher begins to see the phenomenon in a new manner.

There is a strong phenomenological current in qualitative inquiry. In using a phenomenological approach the researcher describes a phenomenon. As the researcher investigates and comes to understand the phenomenon, s/he focuses on the essential entities of the phenomenon (Spiegelburg, 1975). Phenomenological research was the

best fit for this research study, because it allowed the researcher to have understanding and insight into the participants' perspective. It was essential to this research that the researcher personally interact with the participants, in order to study and interpret their views on their past learning experiences. This research would have little worth if the perceptions of these adults with learning disabilities were not explored and interpreted.

Restatement of the Research Questions

Five questions were addressed in this qualitative research study:

1. What past learning experiences do adults with learning disabilities perceive as most positive?

2. What past learning experiences do adults with learning disabilities perceive as most negative?

3. What are their current attitudes toward learning?

4. In what kind of formal or informal learning

activities do they now participate?

5. What are their aspirations for further formal learning?

These questions relate to the literature reviewed in Chapter 2. The questions especially relate to literature involving student perceptions. As Schumm and Vaughn (1994) found in their research, student perceptions are infrequently considered in education but are the link between what the teacher is teaching and the outcome of the teaching practices. Student perceptions are a contributing factor in what causes a teacher to be effective or ineffective. Learning is dependent on students' interpretations of the teachers' behaviors.

Questions one and two relate also to Larrivee (1986), who found that the effective special education teacher provided positive and encouraging feedback, ensured a high success rate, and refrained from criticism. Sindelar et al. (1986) and Larrivee (1986) found that active, questioning teachers were most effective in elementary LD programs. Leinhart et al.(1987) found that effective teachers had well-integrated classroom routines; that is, transitions

from one subject to another are smooth, students know what to do and what is expected of them.

Questions three, four, and five relate to the adult education literature. Questions three, four, and five relate directly to Cross's (1981) model of motivation to participate in adult education. The second element of the model attitudes about education directly relates to the research question, What are their current attitudes toward learning? Questions number four and five relate to Cross's next five elements: importance of goals and expectations that participation will meet goals, life transitions, opportunities and barriers, information, and participation.

Just as Cross sought explanations on why adults participate and why they do not participate in adult education, Tough (1968) interviewed adults to try to understand what motivates people to undertake and continue self-directed learning projects. He found that almost every learner had more than one reason for learning. Adult learners were motivated by a desire to use or apply the knowledge or skill. There were patterns in starting learning projects. The first reason for beginning a learning project might be the assignment of a task that required new learning or simply an awareness that they

wanted to do something. A second pattern started with curiosity about an issue that was important in the life of the learner. A third pattern started with the decision to spend extra time learning. Then the individual decided what to learn during that time. Tough found that most adult participants enjoyed learning and because they enjoyed learning, they continued their learning projects. Tough's research relates directly to the questions, What are their current attitudes toward learning? In what kind of formal or informal learning activities do they now participate? What are their aspirations for further formal learning?

Questions four and five also are relevant to Darkenwald's research on learning activities in which adults participate (Darkenwald & Merriam, 1982). Darkenwald found that the most powerful predictor of participation in education as an adult was the amount of formal schooling. The college sample in this study had more formal schooling than the noncollege sample. The second most powerful predictor of participation was age. Younger people were more likely to participate. In this research study all of the participants were young people; that is, they were all between 21 and 37 years old.

The Sample

The sampling strategy in this research study was purposeful in that the sample was deliberately varied by age and level of education. Purposeful sampling means that the sample was taken from selected groups, because the individuals in the groups possessed certain characteristics that were thought to be theoretically significant for the study. There were a greater proportion of men in this study. There were eight males and six females. This is justified in that more learning disabled students are male than female. (In the 1991-92 school year, across the state of Pennsylvania, there were 60,610 males and 25,424 females [Pennsylvania Department of Special Education, 1993]).

The sample consisted of young adults. The first criteria for being a young adult in this study was age. Participants were from 21 to 37 years of age, because these students would have been in school since the time that P.L. 94-142 was implemented. Some of the participants were graduates or returning adult students at a large northeastern research university with approximately 38,000 undergraduates. This location was chosen because the Learning Disabilities Program housed there provided for

access to a sizable sample with documented learning disabilities. Some participants have since discontinued enrollment in the program at this university. Study participants were recruited through a letter sent out by the university's Office of Student Disability Services. (See Appendix B.) Approximately 90 letters were sent. Eight individuals responded.

Numerous strategies were ultimately employed to identify adults with learning disabilities not enrolled in college. The State Office of Vocational Rehabilitation (OVR) was initially targeted as the primary source of contact with noncollege LD students. A contact person for several counties sent out over 40 letters to clients who met the criteria for this study. A letter from the researcher and a letter from OVR explaining the project were sent. (See Appendix C.) No one responded. OVR contact persons were apprised of this outcome; however, further assistance from these OVR contacts was not available. Efforts to have OVR personnel use personal contact to assist in participant identification and efforts to utilize the university counseling department as an access conduit to this population were also unsuccessful.

A considerable amount of time was spent making phone calls to locate individuals identified as LD and not participating in college. Literacy councils, local chapters of the Association of Learning Disabilities, and local ABE programs were telephoned. Two noncollege respondents were found through the school district in which the researcher is currently employed. (The school district's high school guidance counselor made the original contact with these learning disabled adults.) Two people were found through a local preemployment training program. It was also at this program that the researcher met a professional consultant on adult learning disabilities, who made the initial contact with three other participants.

Fourteen people were interviewed. (See Appendix E.) Six were females and eight were males. Seven were college students; seven were noncollege students. Of the college students, six were males and one was a female. Five noncollege participants were female and two were male. All participants were residents of Pennsylvania.

The study sample was intended to reflect varying levels of disability -- college LD students were presumed to represent milder handicaps; noncollege students were presumed to represent more severe handicaps. Sample

composition also minimized other potential sources of bias. For example, it was possible that the college learning disabled individuals (a) were motivated to further learning by their experiences in school, (b) had higher ability, (c) were motivated to attend the particular university because of the support services available, and (d) had the financial resources to attend the institution (i.e., higher SES). Thus, a sample composed solely of college students might not have adequately represented the general population of adults with learning disabilities. It was expected that a combination of college students and community referred individuals would yield a more complete picture than a sample limited to either a college or noncollege population alone.

Data Collection

The method used in this study to collect data was the open-ended interview. An interview is a face-to-face conversational exchange where one person elicits information from another (Denzin, 1970). According to Denzin there are a variety of types of open-ended interviews. One type is the scheduled or standardized interview, in which one set of

questions, placed in the same order, is given to all respondents. The assumption is that all questions can be worded and ordered in a way that will be understood by all respondents.

Another interview method is the nonscheduled standardized interview. The interviewer works with a fixed list of questions but alters that list for each respondent. Questions can be rephrased. This strategy has the benefit of eliciting common information grounded in the perspective of the interviewees.

The nonstandardized nonstructured interview has no fixed questions, no predetermined order for asking the questions. The interviewer simply has a sense of what information is needed for his/her theory and attempts to gather information (Denzin, 1970).

The interview in this study was a nonscheduled, or semistructured, standardized interview. It seemed important to the study that all interviewees be asked the same questions. Probes were used to clarify questions and get more in-depth answers. Some probes were skipped because they had already been answered. The sequencing of the questions was adjusted as appropriate within individual

interviews so as not to request information an interviewee might have supplied in response to an earlier question. The questions were written out in an interview guide to help the interviewer keep track that all questions were asked (See Appendix A.) The interview guide also served as a visual aid for several of the participants. Questions were reworded, at times, to clarify meaning to the respondent.

All participants signed an informed consent form consistent with guidelines from the Office of Regulatory Compliance at the investigator's university. Therefore, all participants agreed and had knowledge that the interviews were being taped. Participants were all assured of confidentiality. (See Appendix D.) Interviews were audiotaped and transcribed into a verbatim transcript. The verbatim transcript provided an accurate and complete record of the responses. Use of a verbatim transcript eliminated the need for researcher paraphrasing that may often mask, distort, or misrepresent the data (Goetz & LeCompte, 1984).

Instrumentation

Attitudes toward schooling experience and teacher effectiveness with learning disabled students were questioned. Questions were asked about the current learning of these learning disabled adults. The questions were derived from the literature on learning disabled adults, previous reports of past school experiences of learning disabled adults, and teacher effectiveness with learning disabled students. (See Appendix A.

The critical incident technique (Flanagan, 1953) is a way of looking at critical behaviors or determining what incident is critical to identify and analyze situations employing best and worst characteristics of the phenomenon under study. A concept borrowed from psycnology, the critical incident technique can identify effective performance by eliciting past incidents. In this particular study, the critical incident technique was used to determine what school experiences these adults with learning disabilities perceived as the most positive and what school experiences were perceived as the most negative. Gilbert (1958) used the critical incident technique at Pennsylvania

State University to study effective college instruction. Ross-Gordon (1991) used critical incidents to determine characteristics of teachers judged most and least effective by adult college students.

The interview guide was pilot tested with three adult respondents with LD in order to check clarity of the questions. These three adult respondents were not part of the sample. Two male respondents, ages 21 and 23, were found through a learning disabilities program at a local community college. Both were planning to pursue a four year degree upon graduation from the community college. The other respondent was a 35 year-old female, noncollege individual from the local community. She was married and had several children. She was identified as learning disabled through OVR.

During the pilot testing, several problems were identified and improvements in the interview procedure were made. The researcher asked the respondents the questions verbally and requested a verbal response. The teacher effectiveness questions, which were follow-up to the critical incident questions, were answered on a scale ranging from mild to moderate to severe. The respondents were asked to circle their responses on a questionnaire

provided to them, thus incorporating both listening and visual modalities. It was hoped that this would keep their interest.

One male respondent had no trouble following along and circling his response. The female had a great deal of trouble; she was busy listening and talking, and sometimes forgot to circle her response. Hence, she was sometimes on the wrong question. The third respondent, a male, suggested that a better approach might be to simply give respondents a copy of the questions. Then, if the respondents wanted to follow along, they could. If the respondents preferred to simply sit and listen, that would be acceptable as well. This suggestion of offering the respondents a copy of all the questions asked was incorporated in future interviewing.

Each interview took approximately one hour; some took a little less than an hour and some a little more, depending on how verbose the person was.

Data Analysis

The researcher began data analysis by reading through field notes. Field notes consisted of observations and analytical insights that occurred during the interviews. Then, following interviews, the researcher reviewed the audiotape to assure that there were no mechanical difficulties.

Once the interviews had been transcribed, the content analysis began. The verbatim transcripts were read. Each transcript was read several times. Comments and insights were written in the margins. Merriam (1988) has referred to this as level one of data analysis. It is the most basic level. Data are organized either chronologically or topically, then labeled descriptively and presented in a narrative form. Once the content analysis was completed, a cross-case analysis was started. A cross-case analysis groups together answers from different people to common questions. It is a means of analyzing different perspectives on central issues (Patton, 1990). Merriam (1984) called this level two analysis. It is moving from a concrete description of observable data to a somewhat more

abstract level and involves using concepts to describe phenomena rather than just a description of something. The categories describe the data, but they also interpret the data. Examples from the research would be, "They didn't do much with us cause they didn't know what to do with us, just stuck us in a classroom" (in reference to special education); "My school's K-12 were dismal at best"; "I don't remember learning anything in school." These are all examples of a description of a larger phenomena, such as The System Failed Me.

During level one and two analyses, the comments and insights comprised the beginning of data organization. According to Patton (1990), the best way to start analysis of this type is with individual case analysis. Each case was analyzed using key events to explore critical incidents, or major events, in order of importance. Data were also grouped together to focus on key issues related to the original research questions, such as, What are their aspirations for further formal learning?

Thus, an inductive analysis process was used. The patterns, themes, and categories emerged from the data rather than being imposed on the data prior to collection and analysis. Patton (1990) spoke of two ways to represent

inductive analysis -- indigenous concepts and sensitizing concepts. Indigenous concepts are articulated by the people studied, for example one respondent called her schools "traditional factory type schools" and other participants said, "I felt like I was just a number." Sensitizing concepts come from the researcher based on descriptions and patterns in the research. Examples of sensitizing concepts from the research were Confronting the Challenge and Parents as Advocates. The indigenous and sensitizing concepts served as the basis for theoretical propositions. The researcher's task was to report on how these adults with LD construed their world of experience.

Summary

The purpose of the research was theory building in nature, rather than theory proving. Since the study was exploratory, generalizations were not intended. Therefore, a purposeful sampling strategy was used. In this case, gender and age were deliberately varied. It was acceptable that there would be more males than females, because there are more learning disabled males than females in the case of school- identified samples. There were in fact more males

than females in this study, eight males to six females. The primary method of data collection was an interview with questions focused by an interview guide. The interview questions were based on the literature review and current educational issues. Data analysis was inductive. It centered around patterns, themes, and categories that emerged from the data. Data analysis started with an analysis of individual interviews and moved to cross-case analysis. Indigenous and sensitizing concepts (Patton 1990) were used to explain the data.

Chapter 4

FINDINGS

Major Themes

As discussed in the preceding chapter on methodology, inductive analysis of interview transcripts led to the identification of emergent themes. These themes are described here with supporting data. The names reported are pseudonyms to protect confidentiality of participants. The themes are divided into major and minor ones, with major themes being those found most universally across transcripts. Minor themes are seen as having likely significance for understanding and merit for future investigation, though they surfaced in a smaller proportion of interviews.

The Best Teacher: Those Who Cared

The first major theme centered around **The Best Teacher,** those who cared. The learning disabled adults in this study spoke of three variables that they considered their best teacher to have: empathy, high expectations, and individualized instruction (i.e., the teacher took the time to go over something with them on a one-to-one basis).

Stacy, a noncollege participant, who quit school in eighth grade and attended a resource room her whole school career, had this to say about the teacher she recalled as her best teacher:

> Actually my mind wasn't on my schoolwork cause I was in foster homes and a girls' home, so you have to know my total background. I really couldn't answer that. There was a lady I remember when I was younger. She use to set me off to the side and go over everything with me. It was a teacher, it was on a one to one basis. First or second grade. Her I remember because it seemed like she had the time to sit with me. Felt real good. It took me awhile to

> understand what she was trying to tell me. But it was just the fact that she was there made me feel better. It didn't make me learn any quicker, it was just the fact knowing she cared.

This teacher showed Stacy empathy and caring, and also spent time individually instructing her.

John, another noncollege respondent, who completed high school and attended a resource room from seventh to twelfth grade, also spoke of a teacher helping him individually.

> The best teacher I ever had would have to be Ms._____, Introduction to Business. It was the eleventh grade. I decided to try something real different. Academic support teachers supported me to try this class because they thought that they would be there to help me with this class. She did everything she possibly could to work with me on an individual basis whenever I had a problem. She was real good at reading tests, she explained the lessons in a way that everybody could understand. Her procedures were real strict but in the long run really helped me for what I'm doing now in the grocery store. I'm working with

sale vendors, marketing techniques, how much to bring in from a sale, how much profit you make. She really explained all that to me. She helped me individually and prepared me fo what I do now. I felt real good about myself and I felt real optimistic about my future outside of school. Sometimes she would work on it during class and sometimes she would do it after class, whatever fit her schedule. She was the type that would make the time.

Scott, an undergraduate college student, also spoke of his best teacher helping him individually. The question was, Did this teacher spend time helping you individually? His response was, "All the time. It felt good. It was fun."

Victor, a college graduate, talked about his best teacher as helping him individually. This teacher was a high school teacher and also his football coach.

Gresh: Did this teacher spend time helping you individually, often, sometimes or never?

Victor: Academically, sometimes; and even socially, we

had a social relationship as well so, yeah, he spent quite a bit of time, you know, with not only me but with other students that needed help.

Gresh: And how did you feel when he would work with you individually?

Victor: Generally, that was on your own time or between classes. He would never come to you though and single you out in front of the class.

Seven other respondents also spoke of individual instruction as something positive that their best teacher did.

In regard to the empathy and caring that were mentioned earlier concerning **The Best Teacher**, Peter, an undergraduate student, mentioned an empathetic and caring third grade teacher. (Each of the quotes on individual instructi. either directly stated empathy and caring on the part of the teacher or strongly implied it.)

She told me what question I'd have to answer

before. We did another thing, when she would walk around when we were supposed to be reading something, we had like this signal if I didn't understand something she would calmly walk over and ask me quietly what was the problem and I would point to it and she helped me find it and go on and walk on past. Nobody in the class really knew it because I didn't raise my hand. She was in her forties, average middles; she knew the ropes.

She cooperated by not showing the students that something was wrong with me; she would tell me before class that we're gonna read today and I'm gonna ask you to answer number two. So, I could read ahead of time to find out the answer and it would make me feel good cause I could answer the questions in class and not say "I don't know" and spend 20 minutes trying to find it in front of the whole class.

When Peter was asked about how this teacher encouraged him, he responded:

She actually encouraged me to participate as

much as I could. I would raise my hand a lot if I knew the answer but she wouldn't call on me every time to single me out, she knew the other students.

Gresh: So you never really knew when she was gonna call on you?

Peter: Exactly; but if I had my hand up, she would try to call on me. Certain subjects like English or reading, if I had my hand up on a comprehension question, she would try to let me answer at least one, if it was the first one, fine. If I got one, I knew I was doing okay.

This teacher helped to protect Peter's self-esteem in front of his peers. She had a sense of when to call on him and when not to. She encouraged him to be a risk-taker and to self-monitor in that she encouraged him to raise his hand if he knew an answer. She had signals when he was stuck or having trouble. She was a very supportive teacher.

John, a noncollege respondent now a manager of a grocery store, also talked about a teacher who understood what it was like to struggle.

> She always gave you the benefit of the doubt to see if you knew what you were talking about. If she sees that you were really struggling with it, she would help you along, kinda give you a hint. But most times she would give you the benefit of the doubt. She would never call on another student. She always felt that that was insulting the other person's intelligence. Once again I felt real good about myself. It was a real positive atmosphere, I had no problem with it. I had the highest respect for her.

One other trait that many of these adults spoke of in regard to their best teacher was high expectations. In many of the examples already given, one can see that high expectations are implied in the teachers actions, for example, the time spent working individually with a student. It is unlikely that a teacher would spend this extra time and effort if he or she really thought that the student couldn't get it. There were other more explicit examples.

When asked, Is there anything from your school experiences that made you feel confident that you would be able to learn these things? Scott, a twenty-two-year-old

undergraduate student explained, "A couple of teachers would sit there and say, 'You can do it if you put your mind to it.' I think if you repeatedly say something to a person, it's gonna stick."

Victor told a story about his high school football coach that clearly shows an example of high expectations.

> I saw that man for at least three or four hours a day, you know. Six days a week I mean, he was a very big influence on my life. And I can remember one practice and I just couldn't get through, I couldn't run a particular like couldn't block this guy. And he came out right on the field, grabbed me by the face mask of my helmet, and said, "What are you doing?" He's shaking my head, screaming at me. And he said, "Why can't you block this man?" And I said, "I can't." He threw me down on the ground and he said, "Don't you ever tell me you can't." There's another big turning point, don't you ever tell me you can't; and I never did ever, from that point on. That's why I said, "That's why I say I can do anything I want to." It's just a whole, it has to be a whole, in my way of life that's the way I think.

In summary, **The Best Teacher** displayed characteristics of high expectations, caring, empathy, and individualized instruction. Coach had high expectations when he told Victor not to ever say that he can't do something. Though his technique of throwing Victor on the ground seems questionable, Victor saw this as contributing to his perception that he can do anything that he wants to do. Peter's third grade teacher displayed empathy for him when she came up with a signal if he didn't understand something. In those subjects that were hard for him, like English and reading, she would call on him only if he had his hand up. She would usually make sure that he got to answer at least one question. Stacy's teacher sat with her on a one-to-one basis and tried to help her understand her work. What Stacy remembers about this is that the teacher seemed to care for her. John's teacher, too, helped John individually. She would go over things with him either during class or after class. She had high expectations for John and expected him learn.

The Worst Teacher: Those Who Demeaned

John's best teacher had high expectations for him, but not all the teachers mentioned during the interviews had high expectations. For example, in another major theme that emerged, **The Worst Teacher**, the teachers humiliated or embarrassed these adults with learning disabilities. Some teachers abused these adults with learning disabilities.

Maria, a noncollege participant, who attended what appears to be self-contained and resource rooms her whole school career in Texas, gave the following example of humiliation and embarrassment. This happened in sixth grade.

> I remember it was in homeroom, I had her. I had a cousin in that room, too. It was a special ed class. I was at the door and she was talking to another teacher, and the other teacher was asking what kind of class is this and she said, "Oh, this is my homeroom students" and they talked and talked and I heard something about they're kinda retarded. My cousin, he was about two years

younger than I am. He heard that and he was mad. She came in cause the kids made a lot of noise. She said, "Okay kids, settle down." My cousin started talking back to her. He got very strong and he kicked her. He said, "You called me retarded" and kicked her. They had to transfer him to another school.

When Maria was asked about her worst teacher, she felt that her teacher was neither positive or negative, but neutral.

Neutral. Felt like she was a hypocrite. In the room she was real hateful. She didn't care. Sometimes, I felt it personally. She was frustrated and had problems. Sometimes when we had visitors from another school, or the principal, she would change her attitude.

Luke, an undergraduate college student, gave this scenario of humiliation when asked about what his teacher did when he didn't know an answer.

I'd just as soon he find somebody else. He'd call on another student. It didn't bother me, it took

> off the pressure. [What] I didn't like and still don't like, I will not and refuse to sit up in front of a class and have somebody ask me to write something on the board. I'll flunk before I let them do it to me.

Luke would rather flunk a class than be embarrassed and humiliated by a teacher.

Victor, a college graduate, spoke of humiliation in regard to the question, When you didn't know the answer to a question, your teacher?

> She would call on another student immediately and then she would ask you, "Why you didn't know that answer?" after somebody had answered it so it would be embarrassing and usually she started with the athletes on the first couple of questions she would pick out the wrestlers, the football players, the basketball players...1,2,3. You know, then she'd come back and then she'd start asking the people who knew the answers. You know, and they knew the answers by that point. They probably had 15 minutes to find it...or to figure it out, you know. And uh...then she'd come

back and say, "Why didn't you know that? What's wrong with you, didn't you study?"

Talking about the questioning style of the teacher he considered his worst teacher, Victor said, "There were always some questions and they were always very pointed and very embarrassing." It was this same teacher who threw 49 note cards at Victor in front of his class.

> She's the one that called me a failure for turning in 49 note cards instead of 50. She threw them at me. Threw them at me, in class, publicly humiliating me. In front of the whole class, she screamed at the top of her lungs. I mean, this was, you know, quite the scene. She told me that I was going to be a failure and would never amount to anything. And it was a regular class, you know, probably 35 kids, 35 of my peers, you know, we were all, at this point, we were all together, pretty much our class moved from room to room to different teachers. There were different sections but, you know, the majority of these people were with you the whole day. They were your peers. They were the kids that you ate lunch with, that you took home from school, you know, dated...your friends.

In describing the magnitude of his reaction to this incident, Victor said:

> I would've [hit her] if my mom wouldn't have stopped me. My mom made me stay home for two or three days from the school and just said that I was sick. And I was, I was mentally ill, I was mentally unfit to be near any other human being. I probably would have hit her. I probably would've hit her. I was at that point, just very pushed to the ends of all sanity. And I can never remember it ever being that close to just feeling like you were going to lose it. My mom almost put me in the hospital.

Gresh: It must have been an awful feeling.

Victor: It was terrible. It was terrible for my mom to see me like that...severe depression for days after that; and when I got everything together, you know, I carried that you'll-be-a-failure groove in me the next four and a half years of school. There were other mental games she used to play. You wouldn't

> graduate, she wouldn't pass you from high school if you didn't learn the first 18 lines of the Canterbury Tales.

Michael, a college graduate who attended Catholic schools K-12, wasn't really sure that he had a worst teacher. So, he spoke of a situation that he really didn't appreciate.

> I don't know if there really was a worst teacher. I can think of situations that certain teachers did that I didn't appreciate. It was fourth grade, one classroom. The way she conducted herself from a standpoint...one incident in particular, when I was reading a lot, I didn't know a basic word and we sat there for about 10 or 15 minutes and she would say to me, "I could go to first grade and find someone to tell me this word. We're gonna sit here until you figure this out." I was getting an attitude about it. I didn't think she should have done it. She was definitely being nasty. It was embarrassing and degrading. She shouldn't have done it.

Carol, a high school graduate, spoke of her worst teacher and an incident that happened to her.

> My history teacher in high school. Not letting me take notes. Between 15 to 20 kids in class. It was a regular history class. It was ninth or tenth grade. I got mad when he wouldn't let me take notes, so I told him I was leaving the room to go down to Mr. _____'s class [the resource room teacher]. I went down and told him and came back with Mr. _____. They walked out in the hall. The kids were laughing at me.

Gresh: Did you feel embarrassed?

Carol: No, cause it was something I needed to do because I needed to take notes to remember stuff.

Carol denied feeling embarrassed, but felt justified in her actions because she needed to take notes.

Other participants spoke of not only humiliation and embarrassment, but cases of what would appear to be abuse by teachers. The most poignant example was offered by Stacy.

When asked to think back to her worst teacher, at first she stated that she didn't dislike anyone. However, she added:

> No answer on that one. I overly liked her [the first grade teacher who helped her one-on-one], but there was never a dislike with anyone. One teacher in particular, she smacked me with a ruler. I believe that might have been second or third. That's the only thing I remember about her was that she hit me with a ruler and marked my back up and she used to make me sit in the hallway or in the closet. There was a big deal with her and my mom. She did it once or twice. I can't remember what triggered it off, but I also might have been acting up, too. That was the time I had to repeat two grade levels. One of those grades I had to repeat twice. That's the only thing bad that I ever remember. My reaction was being upset and not wanting to go back to school. I felt she was out of line with that. She did mark me up when she did that.

Stacy, as a child, spent time in foster homes because of abuse at home by her mother.

Dixie, who left school at sixteen, spoke of her worst incident at school.

> I didn't care. By then I didn't care to learn. I did schedule myself out in regular classes when I was in eighth grade in _____ _____ and when he [the worst teacher] found out, he pulled me out by my hair. Then I said that I didn't care anymore.

Michael also had an abusive situation in school with his fourth grade teacher. He was asked how encouraging this teacher was to him. Michael spoke of this fourth grade teacher as "somewhere in the middle; she had her good days. She would take her fingernail like this on your shoulder." (This was in reference to her bad days.)

Martha, too, had a teacher who might be interpreted as somewhat abusive, even though Martha said that she couldn't think of a bad teacher.

> I can't think of a bad teacher. They just didn't spend the time with us that we needed. And all of us still talk about that. It was the special ed class. It was history class, about 15 to 20 kids in sixth grade. I can't remember

anything he did, just that he was so big. He made me feel uncomfortable. He would take this long stick and hit it on the desk in front of you and scare me to death. That was enough to scare you. You're not gonna get me to do anything by scaring me. The other kids were more outgoing than me.

Clearly, characteristics that were common among **The Worst Teacher** were embarrassment and humiliation. Waiting for a student to come up with a word and telling the student that one could ask a first grader and the first grader would know this particular word was intended to be embarrassing and humiliating. Smacking a student with a ruler so hard that it left red marks on the student could be seen as constituting abuse by **The Worst Teacher.**

The System Failed Me

Some of these adults have already alluded to this major theme of **The System Failed Me** in their stories of their worst teachers. Some of these former learning disabled children, who have gone through the system, expressed a great deal of anger and frustration with teachers, labels,

and special education, and felt that they were just a number.

Anger and Frustration

Peter expressed his anger and frustration very well. When asked to think back to his worst teacher and a specific incident, he commented:

> I had a great experience from third grade on. All of my teachers were very cooperative, so in kindergarten I can't really tell, cause I could tie my shoe and stuff. So, I'd have to say either my first or second grade teacher and those are the only two teachers that I don't remember their names. I could tell you everyone else.

Gresh: Was there something specific that happened in first or second grade that you can remember?

Peter: That was a terrible age, I guess at the time I was really frustrated with school because I didn't understand it. I remember actually

> hating my teachers because they didn't seem to care. I guess they didn't understand that I was screwing around in class because I didn't understand it and they never really even looked into what was going on. They just assumed that I was just a pain in the you-know-what and that I didn't have any problems. Even now I still don't like those teachers. I mean, I don't know if they just weren't very schooled well in that area. I guess it's just that frustrating feeling not understanding everything while everybody else was going on and my teachers would say, "Oh well, you don't understand. We're going on to the next subject" and not worrying about trying to get me later to go back and learn.

Victor felt so much lingering hostility toward his worst teacher that he took his college diploma to her and threw it on her desk.

> And I walked into her room. Threw it on her desk and I said, "Look at that." I said, "There's your failure for you. "I never told you you were going to be a failure." I said, "Now you're lying." I said, "I have

> no time for you." I said, "You just remember who was here and if you ever tell any other child that they are a failure and I hear about it, now as an adult, I will be on you very quickly."

The anger that Victor felt is quite obvious. Just as Victor felt anger and frustration, Carol felt frustrated with her worst teacher in school also.

> It was frustrating when I didn't understand things. I would ask him, sometimes he would say he was busy and couldn't answer my question at that time at his desk with papers or something. If I asked to talk to him later, I had to make an appointment for after school. He never answered my question at that time. If I could, after school I would go to his room. Sometimes he was willing to help me, sometimes not.

Carol was frustrated with not understanding things. Chris too was frustrated. When asked about his worst teacher, he had this to say:

> The only teacher I could think of was a speech therapist which I despised. She'd push me too much. There was one time when she would keep

> pushing and pushing me. She would say, "You're not working hard enough, you're not doing enough." I got up and left. I told her to go to hell and I left.

Chris, Peter, Victor, and Carol all expressed anger or frustration with their worst teachers. Victor still has a lingering hostility toward his English teacher to this day. The System Failed all of these people in that these teachers were part of the system. The teachers failed to make appropriate instructional accommodations for these students.

Labels

Later in the interview, Peter was asked about his two worst teachers allowing small group work. He had this to say:

> Sometimes, I guess. In first and second grade everybody had reading groups. I think my reading group was me and two other kids, and one was my best friend and he ended up being diagnosed in second grade with dyslexia. Everyone else was like in the sparrows and

we were like the pigeon group or something like that. So that was basically my group and it wasn't a fun group at all cause the teacher would kind of sit there for 20 minutes, get frustrated, and bring up the next group that would sit up there for an hour.

Gresh: You didn't perceive that your first and second grade teachers were helping your reading group?

Peter: They tried. We had a different level book, a real easier book. They tried, but would get frustrated with it in 15 to 20 minutes and instead of pulling their hair out, they would send us back to continue on our own. Those books, you would read them, then answer the questions and move on to the next level book. Everyone would go through 20 of those a year and we would go through 5. I was in the pigeon group.

Peter expressed stigmatization over having different books or not going through as many books as the other students.

Peter expressed anger and frustration, because he perceived that his first and second grade teachers were

frustrated with him also. He also felt that he had been labeled. He kept referring to his group as the "pigeon group." Just as Peter felt labeled as a pigeon, Victor felt labeled as a jock by his high school English teacher. Victor had unpleasant memories in regard to his school experiences and labels.

> My schools K-12 were dismal at best. I was subjected to bias, because of my disabilities. At that time they were unknown disabilities, so I was labeled as an underachiever, as a jock, as person who really didn't want to succeed.

Just a Number

Also, The System Failed these learning disabled students when it left them feeling that they were just a number. John talked about this in regard to the large school district where he went.

> I started out going through the _____ school system where I went to _____ elementary from first to fifth grade; but for the real big school

where there were a lot of students attending, unfortunately I pretty much felt like I was just a number rather than an individual. I did the best I could.

Peter talked about being just a number in regard to misbehaving.

I was one of those kids because I didn't understand the work and lost interest in it and I'd get frustrated, so it resulted in that I was 1 out of 30 students who was not getting the attention, so I resulted in doing things to get the attention. I think the things you do, not beside saying you did something wrong, got me tested and found out. She was very supportive and she didn't set me out. [This is a reference to his third grade teacher who had him tested.]

Later in the interview, Peter spoke of feeling like he was just a number with regard to the first and second grade teachers helping him individually.

Exactly; it wasn't because they knew I had something wrong and needed help. It was

> because they took turns dealing with each student five minutes a day and it would just happen to be my time. It could have been in math or it could have been in reading. Sometimes it helped, sometimes it didn't help.

Scott also felt that he was just a number.

> The teacher should look at the kid's records, understand he might have a problem learning and be a little more understanding towards them. It just never seemed like she cared. The teachers cared, I guess, but I always just think you got 30 kids in your class, I'm number 18, number 18's a problem.

Likewise, Ann made a reference to being just a number. She had an interesting way of referring to her K-12 school system: "A very traditional factory-type school. We didn't do any small groups. It was all individual. It wasn't an option, this was a very traditional factory-type school. It was very individual. You were assessed individually."

Special Education

Along with being treated like a number or run through a production line, others felt as though the special education programs fell short of meeting their needs. Dixie spoke of this.

> There was a lot of playing when I went to school. If I would have had a teacher that would have taught me, maybe I wouldn't be going for what I am now. When I went to _____, my schooling then was playing Ping-Pong, cards, dice. Things that they taught us were things that we already knew. It was like seventh and eighth grade. I stayed in the elementary school until I went to the high school and when I went to high school that's all our schooling was, playing Ping-Pong.

Maria, like Dixie, thought that the education system did not do the right things with her as a language minority student. She also went on later in the interview to say that the education system was now failing her daughter, too.

When I started school, I was in first grade and seven years old. To me, they should have started me kindergarten. I was older and they wouldn't do it. They should of had bilingual or something like that, but they didn't. When I started school, they put me in special ed. In special ed, some teachers didn't know to deal with kids who had problems with their reading and writing and language. They should of had a bilingual teacher, but those times they didn't know how to deal with it. Through the years in special ed, the older I got, they passed me. Sometimes they passed me two years. One time I was ninth grade, they passed me to twelfth. I was older for the class. They should teach teachers how to handle two or three languages. I was behind and I couldn't understand why. Everyone thought it was because of my Spanish. If they had a teacher that taught other languages, and begin when you're earlier, you could start to get away from special ed. They need to start helping them when they start getting away from special ed. They're gonna need something like a little room. They call it a resource room, it's not like special ed. When you

> have problems you go to that room, the teacher talks about it and ask why you don't understand. But I wish now this school starts getting teachers to handle kids like that.

Maria, the mother of two students with learning disabilities, shared her feelings on current special education.

> I have a fifteen-year-old kid. Everybody is saying she's a very bright girl. She's having a problem with her reading and writing, but she needs special ed and that's why we're having problems with special ed cause they're trying to keep her in. She fights it. Me, I'm not done. They'll give her a fourth grade book and she doesn't get it. The more they keep them in the special ed, they should give them a test and if they pass that fourth grade test, they should start with another book, a higher book. They don't do that.

Patrick, too, felt as though the special education classes did not do all that they could have. He had some remembrances of special ed that were not so pleasant.

> They didn't do much with us cause they didn't know what to do with us, just stuck us in a classroom. We did reading and math. I don't remember learning anything in school. I met somebody here who was in my class about a year ago, and she went on and I didn't. She said that we learned more in junior high than what she learned in tenth to twelfth grade. It got worse. We were only in a special ed class. We had sections. We would be downstairs and the regular kids would be upstairs.

All of these adults with learning disabilities felt that The System Failed them in one way or another. For some, they felt unjustly labeled -- underachiever, jock, special ed. For some, the special education programs, which were set up to help special needs students, just weren't perceived as meeting their personal needs. Dixie felt that her special education class consisted of playing Ping-Pong or dice. The students were taught things that they already knew. Others felt they were just a number in the system and expressed anger and frustration at the teachers who were there to help them. Patrick felt that special education students were segregated. Special education students were downstairs and regular education students were upstairs. Maria felt that because she was in special education she was

just passed along because of her age. She was put into special education her first day of school. She felt that bilingual education should have been provided for her before she was placed into special education. Perhaps Maria has a very valid point in thinking that she was not ever given a chance to be in a regular classroom when she entered school. Maybe she was placed in special education on the basis of being a minority student and speaking Spanish. To Maria's credit, she did stay in school and was a high school graduate.

Confronting the Challenge

Even though the students felt that the system somehow didn't serve them properly, many of them displayed a strong will to succeed. This theme is referred to as **Confronting the Challenge.**

Maria spoke about **Confronting the Challenge** in reference to going to a local adult training program.

> When I start here I had a test and I did a low test. I took another test two or three days ago and I scored a

5.5. I picked up real good. I have a lot of problems that when I read I can't read good, but if I put it on a piece of paper I see it backwards or I just can't understand what it says. It's very hard the first year and a half, dyslexia. Some people don't understand what's that. They never heard of it. Sometimes they say, "She's weird." When I go to fill out an application, I can do it. When I feel like doing it, I can do it. If somebody's forcing me and saying, "Hey, you got to do it!" I can't. I can't remember my name.

Maria has some problems working under pressure, but pointed out that when she wants to learn or do something, she can. Maria spoke directly about liking a challenge.

When I graduated from high school, they gave me a diploma, but that diploma don't count on me because I'm a person that I want a challenge and I need that challenge to go to school because when I started school I was seven years old and I know no English, all Spanish.

Maria also showed her willingness to meet a challenge when asked to name something that she would never attempt to learn today. Maria's reply was, "Nothing." Michael, too,

spoke about meeting a challenge in regard to being tested by a psychologist and what the test results showed.

> The psychologist said that the field I was in was not one of my strong points. What his test predicted was one of my strong points. Marketing, clerical. He said that my strong points were in the mechanical or engineering field and it was all at the technical level and not the professional level. In the evaluation they said that due to the strong will to succeed or complete something that they'd leave me where I was at. I'm doing pretty much what I want to do.

When Michael was asked, How do you feel when you need to learn something new? He said:

> Depends on what it is. One of the challenging new learning experiences I had was I had an intern, which is something I battled with for a couple of years. I didn't feel ready to do an intern, what am I gonna do if there is a conflict? I had to learn and go there every day and have confidence in myself to produce quality work that I knew I had to do and not worry about what was coming next. I handled everything they gave me. One thing at a time.

Michael accepted the challenge of the internship. He had a strategy for handling everything. He handled everything "one thing at a time." Michael talked about his ability to work hard and persevere in regard to his education.

> It was a lot of dedication and hard work. From the standpoint of what others observed and from the standpoint of what I thought I was capable of doing, I didn't care what they had to say. Everyone underestimated me, counselors, etc. For example, when I entered college they gave me a sheet that said my entry level test scores and they were saying that students with these scores and the ratings they usually get, like 3% would get As, 2% would get Bs, most were in C and D range. So from the standpoint of the institution looking at me, they were saying I was gonna fail. I got through it because I wanted to do it, not because I was incapable of doing it.

So Michael had to rise to meet many challenges in the educational system. He had to overcome the belief by people in the system that he could not do it. He had to overcome

tests predicting he could not do it. He had to overcome his own lack of confidence.

Victor spoke to this issue of **Confronting the Challenge.** Just as Michael had to overcome obstacles from the system, so did Victor. Victor, a college participant, had to study long and work hard in order to meet his goals.

> My mom got me through the basics. One of the hardest things was plane geometry. I could not understand the theorems. I went through tenth grade plane geometry and never understood a theorem. I did not understand what theorem was and could not be approved. But I got through the class I just passed. I had to take calculus twice, because, you know, it took me that long to learn it. I had to study every day. Just no two ways about it.

Victor displayed this same attitude in his adult life. He had to work hard to become a chemist. It wasn't something that he was particularly trained to do. He persisted and took on the challenge.

> The attitude that I've always had is if I wanted to do something, I had to work for it. And I made myself.

> Usually you don't take a horticulturist and put them in a lab and say, "Go to work." Well, I was a horticulturist without a job, so I said, "What can I do?" Well, I had lab experience so I started mixing, you know, generally mixing chemicals together and, in a lab, I was following step-by-step procedures and got to the point where I would learn things from people doing an analysis and then I worked my way through to an analyst and that's where I'm at today. So, none of that training came from my higher education. That came from on- the-job learning it as you went.

When Victor was asked if there was anything that he would not attempt to learn, he said, "I don't think that there's anything that I wouldn't learn if I wanted to. There's things that I can say I would definitely stay away from just because I have no interest in those fields." Victor went on to talk about time, repetition, and perseverance in learning. He said, "I know it's going to take me longer so I have to plan on that. Don't rush me. Don't be behind in your schedule and make me rush because then I will definitely have problems."

Like Victor, Chris spoke of taking longer to learn something new. But Chris reported being frustrated that it

takes him longer to learn. He did not appear to be quite as accepting of his learning problem as Victor. When asked, How do you feel when you need to learn something new? Chris replied:

> It depends on the situation, if it's writing or reading or something like that. If it's English or history, I like to have a good teacher and I like the subject then, it doesn't seem so bad; but I know the time it takes, I try to avoid it. I like to learn new things, things that are like challenging in that sense. I get really frustrated cause I know it will take a long time.

When asked about something that he would never attempt to learn, Chris added:

> I don't think there's anything that I just wouldn't attempt, that I have a fear of. I know what gives me difficulties and I hate to learn, but I've gotten to the point now where I need to do these things. I need to memorize and it takes me twice as much time and I dread it. Now I'm at the point where I need to accept it or I had to accept it. Before, when I got out of high school, I didn't want to. But now I'm back into

school, I need to. So there's not too many things anymore.

Chris spoke about **Confronting the Challenge** when it came to learning new things in subjects that were hard for him. He also was meeting the challenge in his architectural career. He was asked, When was the last time that you made a deliberate effort to learn something or learn how to do something?

> Drawing. Within the last couple of days. I'm unable to draw very well for architecture. I can build models great, but I study everything in three dimensional. And now I've gotten to the point where I'm very frustrated because it's like a tool that I don't have. So within this past week, I just sat down and I said, "Okay, no more model building," and put away my knives, took off the parallel bar from my desk, put it away, and just started drawing. I did read books, but it got to the point where books weren't going to help me anymore. I just had to do it.

Almost every college participant spoke of having to persevere longer at learning, which for them was part of the

challenge of learning. Interestingly, three out of seven of the college sample had not been identified until they got to college. All the noncollege participants had been identified and placed in special education programs during their K-12 school years. This leads to the question, How is it that some students who have a learning disability are placed and others are not? Possibly it has to do with the severity of the learning disability, or perhaps it has to do with coping skills that enable some to go unnoticed.

In regard to coping skills, Scott was asked, How do you feel when you need to learn something new?

> Frustrating. If I'm learning something I can't comprehend it, it's very, very hard. Art's a weird thing, I realize art has problems with my learning disability cause there's a lot of shapes you have to learn and there's a lot of directions on how to do it and I never, ever thought about this. It's three in the morning and I'm doing it by myself, I thought it was great, but there's specific things you have to do, so it gets very frustrating. Every day, I sit down and say I can't do this. Six hours later I finally do one thing, which I believe another kid it takes 10 seconds. It takes me a longer time, but that's life.

Scott went on to talk about the necessity for perseverance in skateboarding when asked, When was the last time that you made a deliberate effort to learn something? He replied, "Skateboarding. I took a lot of falls. I practiced on my own; this was like three years ago."

Ann discussed having to work harder because of her learning disability. She seemed to be accepting of the fact that she was going to have to work harder.

> Well, I do have to work a lot harder. I have to work a lot harder. It wasn't until I got into the really rigorous environment with master's. I kinda skated through my undergrad. All of a sudden, I realized, "Oh my God!" I was put into a situation where there were people who were really bright; and the professors were very demanding and I almost drowned. I just have to work harder, but that's fine. If I want to be here, I know I have to go through these steps, so I do it.

Peter discussed task persistence several times in the interview. One time it had to do with his best teacher. "I did bad in school that somebody decided just to put three strikes up against me in the ball game before I even got

started and she finally showed me that it was just the first inning and to keep playing ball." Peter also expressed the following philosophy: "I don't quit on something till I get it so it; might not be today or tomorrow, but I made sure I did it."

Peter needed repetition in order to learn. Victor also felt strongly about repetition. He spoke of repetition and review with regard to his best teacher.

> He put you on the spot in a way that led you down the right, he led you down the right path. He brought you and he would review the things he did the day before, which always helped me because I had a tendency to almost forget overnight if I didn't study and study hard. It just fell out of my head somewhere until the next day.

Victor told another story about repetition that involved his dog and treating her the way he would like to be treated.

> You know, Cindy will tell you, if you don't spend time with your dog, they're never going to learn and Meg is probably more intelligent than most people I know and

she still needs repetition every night. You know, we do 50 fetches, we do 25 sits, 25 downs, we do, you know, whatever. Whatever is on the agenda. We do 20 minutes of heeling. You know, figure eights, turning circles, whatever we have to do, but we do it every night because I know consistently. On Saturdays I'm up at 6:30 because that's when I get up at quarter of 6:00 to go to work. My wife is usually in the shower so I take the dog out. Take the dog out and bring her in and feed her every morning at 6:00. On the weekends, I will usually sleep till 6:30 but by 6:30 I am up and take her out because she needs to have repetition in her life. She needs to have structure and I treat her the way I would want to be treated, with lots of love and lots of praise.

So there are several components to the theme of **Confronting the Challenge.** One component is being underestimated, another is having a strong will to succeed and a willingness to work harder and longer. This willingness to work longer and harder was especially evident in the interviews of the college sample. They spoke of a need for more time and repetition and a perseverance that many of their peers didn't need in order to learn.

Education Is Important

The learning disabled college students who were interviewed in this study also tended to have a philosophy that **Education Is Important.** Some of them felt that education was necessary for success. It was something that they needed in order to fulfill their dream. Others had parents who really wanted them to go to college.

Chris worked in construction for two years and came to the conclusion that construction was not for him.

> I worked for two years in construction and that was really good money, but it was just working all the time and it wasn't what I wanted. I wasn't going anywhere and I realized I'd have to get some sort of education if I wanted to do something I'd enjoy and not work 80 hours a week.

Luke talked about wanting to fulfill his dream and realizing that he needed more education in order to do that.

> Yea, I knew I was gonna go on to school but not for a while till I was ready. I knew as much as I hated school, eventually I'd have to go back on my terms. I knew I have intense curiosities and I wanted to do my dreams and you have to have the tools.

Just as Chris and Luke believed that an education was going to lead to success or a fulfillment of their dreams, Peter felt that he would qualify for a higher paycheck if he had more education.

> Yes, I want to get my doctorate in an aspect of death and dying education. There's two people who write the book on it and do the research on it, but it would be under health. You just qualify for a higher paycheck, I guess. I want to teach high school for five or six years while I'm working on a master's and then on to a university and teach at the university and earn my Ph.D. Also, my sister will have to call me doctor.

Michael, too, saw education as important for success. Like Chris, he worked with his hands for a living and made the decision that it wasn't for him.

> From a logical point of view, I knew that I wasn't gonna get ahead. One of the incentives was I loved when I came home and take a shower to eat dinner. Although I was good working with my hands, I didn't want to do it for a living. I knew if I wasn't educated, later on in life it would be hard. I'm the youngest of nine, so I had a lot of good examples. I knew they had made it, so I was able to make it.

Michael believed that life would be harder later on if he didn't have an education. He was encouraged to go on to college because he had siblings who made it through college. Scott talked about his family's encouragement to go to college also.

> I kept looking at these kids and they were talking about going to college and I sat down and said, "I'm gonna go to college too." My brother went to a private academy, then he went to college and got his masters there. My sister finally finished, but she is the assistant manager at a bank. I was brought up to keep going. My dad thinks you need education.

There seemed to be a shared value for education in these families, a family model or expectations of higher

education. Victor spoke of his mother encouraging him to go to college. Otherwise, he might not ever have had anything to do with school again. Peter declared that his father told him that he was going to college.

> My father told me I was going to college. I didn't want to, to tell the truth. I didn't want to at first. I took all the college prep courses, math analysis, in high school, because my father, he told me I didn't have to go to college but he wanted me to be able to if I did decide my senior year that I wanted to apply to college. But at the time, I didn't really want to until all my friends started to apply. I also came out here my junior year in high school for a spring break to visit my sister at college and I saw this school and saw what it was about, cause San Diego State was like a big college not like an old traditional school. And I saw this, and so near my end of my junior year I started considering college. And my senior year all my friends were talking about it, so I did apply, even though in ninth and tenth I didn't want to. It wasn't that I didn't think I could go, it's just that I didn't want to go; it was my career choice. I wanted to go to the fire academy and become a firefighter at the time.

But as things went on, it was just a phase from watching too much of "Emergency."

So, **Education Is Important** in the view of these college respondents. For some a college education was needed to fulfill a dream, for some education was viewed as necessary for success, and for others there was a strong family influence to go to college. Three participants in the college sample were college graduates. Two had aspirations for further formal learning. One wanted to become a CPA and the other wanted to get a master's degree as soon as his wife finished her nurse's training. The third was enrolled in a Ph.D. program at the time of the interview. She felt that she needed to work for a few years. All four of the other college participants expressed a desire to finish their bachelor's degrees. Three of these four wanted to attend graduate school. The fourth wanted to enter the Peace Corps, then possibly obtain a master's degree. It seemed that this group of college respondents had good attitudes toward learning. They set goals, but were realistic enough to realize that they might need to work hard to reach their goals.

The noncollege students in this study also felt that education was important. But that didn't necessarily

translate into goals for obtaining a four-year college degree. All seven of them were enrolled in some form of adult education or planned to be enrolled in adult education. Patrick attended classes with Literacy Volunteers of America and a private LD consultant. Dixie attended classes at an adult education center every day for four hours. Martha attended secretarial school and had this to say: "I went to a place called _____. I taught myself how to type word processing, but I'd like to improve it. I was thinking about going to vo-tech school. I tried secretarial work and it blew up in my face. I wasn't sure of it when I tried it. I'm gonna try it again." She was going to attempt to **Confront the Challenge** again.

Stacy aspired to further education in order to make a job change. She was a receptionist and wanted to become a nurse's aide. She had this to say about her plans for future education.

> Nurse's aide. Probably Red Cross. It's like $200. Work will pay for you to go if it's work related. Nurse's aide does not relate to office work. I figure with $200 that could be something I could do and pay for on my own. It's not a Licensed Practical Nurse. It's a nurse's aide. A lot of people just hire for a

> nurse's aide. I'm okay where I'm at; I'm not overly happy. I don't want to make receptionist a career. If I do something like that, it would be more fulfilling.

Like Stacy, Maria, Carol, and John all expressed an interest in continuing education. Maria, Carol, and John thought that the local community college would be a possibility, although their plans about what specifically they would get a degree or certification in were more vague than Stacy's plan to be a nurse's aide. Carol had a very interesting comment about why she did not go to college directly after high school.

> I don't know. I just felt very uncomfortable because of my learning disability and I didn't learn things as fast as the other kids. I didn't like school. That's why I didn't go to college.

It seemed that for many in this group of noncollege participants, their K-12 school experiences did not give them positive attitudes toward formal learning. When Stacy was asked if there was anything from her K-12 school experience that made her feel confident that she could learn, she had this to say: "No, not the schools I went to when I was younger." Maria said this: "Wnen I got out of

school, I got married and I thought to myself, well, if life's like that, that stinks." Dixie was asked if she predicted that she would participate in any kind of learning experience after she got out of high school. "No, because I had gotten pregnant and I thought I'm gonna be a mom now. I didn't need school."

For this group of noncollege participants, their positive attitudes toward learning tended to be due to their experiences with adult education. Six of them left high school predicting that they would never engage in formal learning experiences as an adult. For example, Stacy said, "The teachers in the learning center here, they're the ones who encouraged me that if I got my GED, you can do anything." Dixie too felt that it was an adult education program that gave her the confidence that she could learn. "The program that me and her[daughter] were in together [Family Literacy]. _____ said when I first went there I was shy and I didn't speak up or nothing. Now, I talk more and get things done. From 9:30 to 1:30, she was on one side and I was on the other. I learned how to help her[daughter]. We learned to cope with certain things. It also helped me with _____ [her older daughter]." Patrick also felt better about learning as an adult. "Yea, I guess I

learned to read and write a little bit and be a little more confident in myself. It was _____ [an LD consultant]."

In analyzing this group of adults with LD, regarding their more informal learning activities, there was a tendency for their informal learning activities to be hands-on. There did not seem to be a difference in the responses of the college versus the noncollege respondents. Three respondents said that they liked to draw when they had free time. Two said that they liked to read. The other responses ranged from playing pool to home maintenance to cooking and crocheting.

In summary, both groups tended to agree with the idea that Education Is Important, although this idea meant different things to each group. To the college group, a college education represented a dream, a way to be a success. Further education meant a master's degree or a Ph.D. The college group expressed interest in obtaining an advanced degree, though that goal would wait until later in life for some of them.

The noncollege sample in this study had goals for education also. For one, education meant learning to read. For another, attending classes was a stipulation for

receiving public assistance. Two expressed an interest in nurse's training, two expressed an interest in business; and one wanted to learn sign language at a college, so she could teach deaf students. The noncollege participants tended to express some disappointment with their K-12 school experiences in that the experiences did not instill confidence or a love of learning. Their confidence and love of learning tended to come from their adult education experiences.

Concerning this group's more informal learning activities, the activities tended to be hands-on activities, with the exception of reading. The fact that they spent their leisure time engaging in activities that were more hands-on may not be so unique. If one were to survey adults at large about what they spent their leisure time doing, one may find that many adults engage in hands-on activities in their leisure time.

Parents as Advocates

For this particular sample of learning disabled persons, the college participants tended to have parents who

acted as advocates for them. Some of the noncollege students had parents who were advocates also, but the advocacy tended to be in the form of clashing with the school system. Two clear examples of this were Patrick and Stacy. Patrick had this to say about his parents: "They were struggling as much as I was, I guess cause they didn't know what was going on either. They were back and forth fighting with the school and fighting with the teacher and principal. Nobody ever realized what was my problem." Stacy talked about her mother coming to school after the ruler incident. All Stacy said was, "There was a big deal with her and my mom." Clearly, these parents were trying to act as advocates for their children.

Parents as Advocates took several forms. In some cases, parents were supporters. In some cases, parents were teachers. In some cases, parents were motivators. They had high expectations for their learning disabled children. Examples were given under the theme **Education Is Important** of parents who either expected or directly told their children that they were going to college. Peter said, "My dad told me I was going to college." Scott said, "My dad thinks you need education." Victor spoke of his mother as giving him confidence. "Most of what I am today is because of her hard work at one time or another. And her fighting

tooth and nail to keep me in school, to keep me from just giving up. Mom thought college was important." He attributes getting to college and making it through four years of college to his mother's support.

Scott and Peter both spoke of their parents as being supportive. Peter said this about his dad: "Like my dad would write up a note for each one of my teachers and they would have a meeting within the first week in elementary and junior high; you know, when you have six teachers and each one would get a letter just like they do in college, and each one gets one explaining the problem and what things can be done to help compensate for it." Peter's parents were not just supporters during the school hours, but they were supporters on the home front as well. "So, I was at one extreme and she [his sister] was at the other extreme, and my parents really didn't try to compare, it seemed like opposite kids. She excelled at school in music where I would just excel in sports."

Scott related a scenario in which he felt his mother was very understanding and supportive.

> Sixth grade, in my math class. I didn't understand something, I couldn't comprehend it at all. I just

kept flunking and talking and my teacher sat down and said, "You're gonna have to stay after school because you don't understand it." I took the bus at that time and you have to give a 24 hour notice when you're not taking it and the teacher has to let you go that day and you have to come back the next day just because you take the bus. So radical me said, "No, I take the bus." So I got in trouble cause the teacher called my house and said that I didn't stay after school. I didn't like her at all. That was one of the first times that I stood up for my ground. My mom understood, she did, cause she understood how they work. So she wasn't really mad at all. My dad didn't really know.

Scott's mother made it okay for Scott to stand up for himself. He felt that his mother understood, and perhaps this incident was not shared with his father, who might not have understood.

There was just one other time in the interviews that the subject of **Parents as Advocates** was brought up. This was with Maria.

> Some kids are very bright, some catch it, some don't. Sometimes it's because of culture, or some parents teach their kids, they teach them their ABCs or numbers. Some parents don't have their education and just work and raise their kids. That's why there's a lot of problems with school. When they start at teenagers, it's gonna be hard to get their thoughts together because of how they were raised. They'll think, the teacher doesn't care, my parents don't care, I'm gonna do whatever I please. There's a lot of teenagers pregnant, I don't know why they get pregnant. They're like their parents.

Maria said quite a bit about parents in her response. She talked about parents who were successful and those who were unsuccessful. She spoke about expectations without using the word "expectations". She also talked about parents' literacy or lack of education making it impossible for them to help their children.

In summary, **Parents as Advocates** had several subthemes. There were parents as motivators; these parents had high expectations. Many were the parents of the college sample. Parents as supporters appeared across both college and

noncollege samples. One person mentioned parents as teachers.

Learning Preferences

Just as parents had high expectations and were supporters of their children, certain teaching procedures seemed to be more supportive of these learning disabled students than others. Some would call them learning by doing, or hands-on learning. Many of the participants spoke of this.

Luke recalled his best teacher as engaging in learning by doing.

> He did something I believe in still, is learn by doing. He went out of his way to bring in inner tubes and built shuttles and stuff like that to show the physics of anything, pressures; he just showed you by example. He made it entertaining. He didn't tell you, "The book says this." Every time he had something, it was a physical thing that you could grasp to get a good idea

of what was going on. It was no longer abstract in that sense, it was something you could relate to.

Peter talked about hands on learning.

When everybody else got to build, I was always good at that, everybody has their weaknesses and things like that. Things that I use my hands on, I would learn. Hands-on things I would learn more and it would be embedded in my mind cause I actually did it, so I liked it because when you're learning, it's not any more special than doing something else that I wasn't.

Scott, too, talked about using hands-on approaches to get learning embedded.

Like math, I think a person has to tell me, show me what, if I have a problem doing homework or even washing windows, I have to have someone show me how to do it and then it will be in my mind, so I can think of it when I'm doing it.

Scott was asked, But, if they just tell you? He replied, "It doesn't go as good. That's a major problem that I have."

Michael admitted that he, too, has a problem with listening.

> I've never been really good at listening to other people. A lot of the home maintenance I've done was I'd take it apart and see how it was put together and I teach myself how to put it together, or I talk to someone else who has the knowledge about it. I take my time and think through the project and decide what I'm gonna do.

So Michael at first stated that he was not good at listening. But he noted that later on when he had the background knowledge, he could gain knowledge by listening to an expert or more experienced person talk about how to fix something.

Victor communicated his feelings about working in a high school lab and using or making diagrams. "It was always very tactile. You know, a lot of pictures, a lot of diagrams. They were always good for me. You made diagrams, you made pictures, you made slides and that was always good."

Stacy discussed pictures as facilitating her learning.

> She brought in pictures a lot. That's basically the tools she worked with. It wasn't so much from a book, it was things that were in front of me, like different pictures, diagrams, that sort of thing. Math, like flashcards. It just wasn't book knowledge.

Dixie spoke, too, of math and learning when it wasn't just book knowledge. "I can remember beads and stuff like that. She did this a little. I understood then to learn math." Martha talked about pictures as helping her to learn. "She showed pictures a lot. It really didn't bother me. I think it helped me."

One person in the study did have an objection to hands-on learning. Maria said, "I didn't like them [referring to hands-on methods]. I felt like I was retarded. It just made me feel weird. Like to learn by listening or by hand. Didn't like the babyish."

In summary, the majority of participants in this study had positive things to say about hands-on learning. This seemed to be the most favored method of learning for both college and noncollege participants. Also, some spoke of

visual learning. Somehow, when presented with a picture, ideas became clearer to them.

Areas of Difficulty

Most of the participants felt that hands-on learning was a positive, helpful thing. Most of the participants also had definite opinions on what subjects were most difficult for them. Math led the list with 10 of the respondents saying that math was what was most difficult. Six thought English, spelling, or writing were difficult. Two said reading was difficult, and two thought foreign languages were difficult. One said that music was difficult.

Luke spoke twice of his math difficulty. Once when he was asked, What do you have difficulty doing? Luke said, "Counting change. Spelling. Actually trying to remember anything somebody tells me. If anyone gives me a list of groceries, I have to write it down cause I can't remember it." Later, Luke was asked about learning something new.

I have no problems with it. I like learning new

things. That is actually one of the things I do like. This is exactly the kind of problem why I'm searching out my degrees is because I always have to learn something new where I become extremely bored with life. Problem is, once again math gets involved in some of these aspects. But I like learning new things.

John spoke, too, about math.

I always had problems with math and I came close to failing class a couple of times. That's when my parents told me to try and get some special help. They realized I was doing well in these other subjects but in math I was lucky to even get a 70.

When asked her worst subject, Carol said, "Math...all math. I hate it. Doing the problems, counting money. I can do it. I just don't like it."

Just as Luke spoke of remembering as a problem, one other participant mentioned remembering as a difficulty. Chris explained what subjects were hardest for him. "English, histories. There was a lot of reading and memorization. Ideas and concepts I can remember, but not dates and details."

In summary, math seemed to stand out as the subject that still gave these adults with learning disabilities the most trouble. Along with math, several brought up remembering as something that was an area of weakness for them.

Minor Themes

Minor themes were distinguished from major themes in that fewer people mentioned these minor themes. Yet these themes seemed too important to just dismiss. The minor themes were **Structure,** both teacher structure and self-imposed structure; **Choice over Methods; Small Group Instruction;** and **Self-Image. Self-Image** was divided into two subthemes, I Was Just Like the Others and I Was Different.

Structure

Several of these learning disabled adults felt that a good teacher was structured. Such a teacher was described as having strict procedures. The teacher was an authoritarian figure who told the class what they were going to do.

Peter discussed his need for structure and the structure that this teacher provided.

> She made it a point to make sure I knew what was going on and what direction I had to go in. I liked it. I'm the type of person that needs structure, that needs something to build off of, and she always made sure I had the foundation and the right direction to go.

Luke talked about the control that his best teacher had over the class.

> I think he pretty much would tell you what you were gonna do. I felt indifferent. When I say never, it wasn't like he shoved it down your throat. I think he had enough control over the class and that's something

> that just didn't happen. You just didn't mess with him, cause he could have a temper but he had control with the class. He wouldn't do anything to the students. The class never got crazy. Like some classes I got away with anything I wanted to do and there was absolute chaos where I went to school and he managed to stop that chaos. I didn't mind.

Stacy and John both talked about their best teachers as being strict and ruling over the class. Stacy said, "I had a choice. It was like she ruled over everything, she gave me a little room to decide." John said, "Her procedures were real strict but in the long run really helped me for what I'm doing now in the grocery store."

There was also mention of structure that was self-imposed. Victor spoke of this in his dog story. "She needs to have structure and I treat her the way I would want to be treated." Ann spoke of this self-imposed structure.

> One of the best things I learned going through honors rehab was going to bed at the same time every night, getting up at the same time, eating breakfast, lunch, and dinner at the same time. Just being very structured about it. Made sure I ate good meals, the

whole nine yards. Getting basic exercise. It makes a huge difference. I notice a profound difference if I don't get enough sleep. I had a night class last semester where I was very pressed for time and sometimes I couldn't eat dinner before I went to class and about an hour into the class I would start stuttering all over the place. My friends would be like, "You didn't have time to eat did you?" It makes a profound difference.

To recap **Structure**, there tended to be two types -- structure from outside and structure from within the individual. The structure from outside in this case was the teacher. Four people in the interview viewed good teachers as providing them with structure. Two participants talked about the need for a self-imposed structure.

Choice Over Methods

Some participants mentioned liking teachers who gave them a choice in activities. Maria put it this way: "It felt wonderful cause I knew what I was gonna go in to, like a story or something." Others, when asked how they felt

about having a choice, used the phrase, "Felt good." Though there were a few participants who felt that the teacher had the control and it was okay for the teacher to make the choices about activities, it was almost as though they viewed this as the teacher's right, just part of being a teacher. John put it this way when asked about choice. "Pretty much his way. I tend to respect that. I tried to do the best I possibly could and unfortunately I had a lot of problems in this and they decided to put me in the support group." Victor had a strong opinion about not having a choice. "You never had a choice. I mean, it was just, this is what you're going to do today and just open your mouth. Here it comes." He was being force-fed. More than not, this group of learning disabled adults tended to like choice. Nine times choice was mentioned as something that was positive. In three instances not having any choice was something that was resented. In six instances, not having a choice was something that the respondents felt okay about; that is, there were no strong feelings of resentment or anger.

Small Groups

The learning disabled adults in this study tended to like small group work. Peter stated,

> She assigned me with a couple of people that she knew were not just smart, but also going to cooperate to make sure that I understood, too; and she never told them but dropped clues, 'Does everybody in the group understand?' She would make sure everybody answered a question; and if somebody was having trouble, you could help them to make sure they answered it.

John felt small groups would have helped him. "He never had us work in a small group. I think it would help. Maybe if I had a chance to work with my classmates, maybe they could have relayed it to me in a way that I could understand it a little bit better and tell me how they are able to get the hang of the lesson, maybe I could start to get some kind of an idea of what he was talking about."

Martha had this to say about small groups:

Often she would put four or five kids together. I didn't mind. Now that I'm grown, I don't like that. I just don't feel right. When I was in grade school, it was okay. All the kids were in my classroom, my friends and; we were learning together. I didn't start feeling that way till I got into junior high school. I felt dumb. I would get so upset sometimes I couldn't do my homework.

Stacy felt scared to work in a group.

She would let me work in a group. Felt scared, but I did it. I was used to being on one on one with someone, not in a big classroom. I would just sit there and be quiet. I kinda would be mentally in a corner. I wasn't sure, wasn't used to it. I felt like I was getting more attention the other way.

Victor felt small group instruction was an impossibility with his worst teacher; that is, if she allowed students to work in a group, she would be unable to single out individual students or individual student's work. Victor had this to say about being allowed to work in a small group situation: "Never. You were out there on your

own island, you were out there to be crucified. She couldn't crucify a group."

Most felt that small groups helped them learn and liked it. But a few participants didn't care for small groups, whether due to shyness or the way the groups were handled. It was not a positive thing for everyone.

Self-Image

Dixie brought up some problems with her self-image, or self-concept, when she talked about small group instruction. She said, "I felt dumb." There were two different subthemes that these learning disabled adults talked about. One was, I Was Just Like the Others and the other was, I Was Different.

"I was just like the others" came up several times in Peter's interview. He applied to college when all his friends applied to college. He liked being able to answer questions in class because it made him feel that he was just like the other students. "She would ask me a lot of questions in math to boost my confidence; and then in

reading where I was having my problems, she would ask me some questions that she knew I could answer and some that she knew ahead of time, she had me look up. I liked it cause I was just like the other students." Peter also spoke of being treated normally by this teacher.

> She treated me like a normal student. If I got to make a choice, she kind of geared me to certain choices over others and stuff like that so I wouldn't get frustrated, but I'd choose sometimes and it didn't bother me at the time.

It was important to Peter that he be like the others in his class.

Victor expressed this sentiment about being treated like the others when he said, "He expected it. He didn't want to give you any special treatment. You were just another person that could do it. He knew you could do it."

Ann went so far as to say that she thought everybody worked the way she did. "I knew I had somewhat of a problem. I didn't know what it was, I didn't care. I thought everybody worked this way."

Scott went so far as to not even tell his teacher that he had a learning disability. "My teacher, she loved me. I mean it was like at the end, she gave me the final exam and she sat there and said, 'You are the most influential kid in this class, you really have an eye for history.' I really didn't even like it, and then I realized I like the newer stuff, the modern stuff. She didn't even know I had a learning disability. Which was stupid on my part. I didn't think I had to. I like art."

The other side of this is the feeling "I was different." Some of the participants talked about this. Luke told of this feeling.

> No, I just managed to squeak by every year. I was like half a year behind. At least that's what my general feeling was. It seemed like every year at the beginning, the first half, I would finally understand what I was supposed to have learned the end of last year's class. I was just barely getting through math. I know I failed two years, but they passed me anyway. I knew my average. The one thing I could do was percentages and I knew what my percentages were and they were not passing at the end of the year, and they passed me.

Martha believed that her classes were different from the other students' classes.

> I don't remember very much because of the kids in the class, they were horrible behaviorwise. I was in special ed. When I was in _____, we had history, math, and different classes, cooking classes, gym class, study period. Our classes weren't like the other kids'. They were always moving from one class to another, we weren't.

Patrick and Maria both expressed feeling different. Maria said, "I understood more emotionally. I knew I wasn't learning like the other kids were." And Patrick had this to say about understanding the teacher's directions: "They were almost never clear. I felt like there was something wrong with me, that I wasn't getting it and everybody else was."

So there were those who felt "I was just like the others" and those who felt "I was different." Some just wanted to be treated like normal students and others knew that they were being treated differently. There was a sense of frustration in being treated differently but not knowing

what to do about it or being too young to realize that there was anything that could be done.

Summary

The data were divided and categorized into themes, major and minor. The decision whether a theme was a minor theme or a major theme was based on the number of people in the study who mentioned it. Themes that seemed to be mentioned throughout almost all the interviews were considered major themes. Themes that seemed important, yet were only mentioned by several of the respondents, were discussed as minor themes. The themes related back to the original research questions.

The major themes were **The Best Teacher**, **The Worst Teacher**, **The System Failed Me**, **Confronting the Challenge**, **Education Is Important**, **Parents as Advocates**, **Learning Preferences**, and **Areas of Difficulty**.

The Best Teacher tended to be empathetic with high expectations and gave individual instruction. **The Worst**

Teacher, on the other hand, somehow humiliated or embarrassed the student; and in some cases, there was abuse.

The System Failed Me was mixed with reactions of anger and frustration. Some of this anger and frustration still lingered years later. There were labels put on these students with LD. In some cases, respondents expressed concern about just being a number in the system. Some who were in special education programs felt that the special education program didn't serve them properly; that is , having them play games or teaching them things that they already knew.

In **Confronting the Challenge**, these adults with LD realized that they would need to work harder. It would take them longer to learn; and in some cases, those in the system underestimated what students could actually do.

Education Is Important to being successful was a theme for all the college students with learning disabilities. Some had parents who expected them to go to college. The noncollege participants spoke of getting further education, but this tended to be some time in the future. It was interesting to note that the noncollege group seemed to have had better experiences with education as an adult than

during their K-12 school experiences. Informal learning and leisure time activities were analyzed, and it seemed that for this group of adults they liked hands-on activities. This tied in with their **Learning Preferences**.

Parents as Advocates had several subthemes embedded in it. Some parents were motivators. They had high expectations for their children. Many of the parents who were motivators were the parents of the students in the college sample. Parents as supporters were evident in both the college and noncollege groups. Parents as teachers was mentioned by just one participant.

As far as **Learning Preferences** went, these learning disabled adults seemed to be saying that they preferred to learn by doing. "Show me how to do it, then it will be in my mind." "Things that I use my hands on I would learn."

Math was the most pervasive difficult subject in **Areas of Difficulty**, followed by English and writing. Interestingly, only two participants mentioned that reading continued to be an area of difficulty. Remembering was mentioned as a problem by several participants.

The minor themes were: **Structure, Choice Over Methods Small Groups**, and **Self-Image.**

The theme of **Structure** could be divided into teacher structure and self-imposed structure. Several of these learning disabled adults felt that structure was needed for them to learn, and structure was needed in their everyday lives.

Choice Over Methods tended to be viewed as a positive thing. One woman used the word "wonderful" to describe how it felt to have a choice. But one person did say that he felt it was the teacher's right and obligation to make choices for the class.

Small Groups tended to be viewed positively. The participants liked working with their peers, though a few people mentioned that they didn't like working in small groups.

Self-Image also had two components -- I Was Just Like the Others and I Was Different. Some of the participants wanted to fit in with the others; they didn't want special treatment. Others felt that there was something wrong with them, because they weren't learning like the others.

CHAPTER 5

SUMMARY, FINDINGS AND DISCUSSION, CONCLUSIONS, IMPLICATIONS FOR PRACTICE AND RECOMMENDATIONS FOR FUTURE RESEARCH

Summary

When the phenomenon of learning disabilities was first identified in the 1960s, it was thought that a person's learning disability could be cured. Over the years educators, researchers, and the learning disabled individuals themselves have found that they are not remediated. Learning disabilities still plague individuals as adults (Bruck, 1985; Spreen, 1988).

The learning disability causes different problems for a youngster than it does for an adult. For school-age children, their learning disability causes academic problems that sometimes lead to social problems. Adults with learning disabilities tend to face occupational problems as well as social problems. Academic problems become less

salient for adults with LD except for those who continue formal study.

Over the years, increasing numbers of children have been identified by schools as having learning disabilities. Is there something that educators could be doing to help these individuals with learning disabilities function more effectively as adults?

Student perceptions are a key variable in what the teacher is teaching and what the student is learning (Schumm & Vaughn, 1994). Student perceptions are frequently overlooked (Kokoszka, 1987; Schumm & Vaughn, 1994). In the classroom, students are actively interpreting what is happening, but are usually thought of as recipients of the teacher's instruction and many times passive recipients at that (Schumm & Vaughn, 1994). Much can be gained from consulting students to better understand their point of view.

This qualitative study sought to explore several questions from the perspectives of the individuals with learning disabilities. What are the perceptions adults with learning disabilities have of their K-12 teachers and learning experiences? What do they perceive as positive and

what do they perceive as negative? What are their current perceptions toward learning?

The purpose of this research was to explore perceptions about learning experiences as perceived by adults who are learning disabled. The individual participants in this study were young adults. Participants who were 21 to 37 years old were purposefully chosen. Because of their ages, they would have been students in the K-12 system after P.L. 94-142 had been enacted. It was assumed they would have had an opportunity to benefit from the passage of P.L. 94-142, unlike older adults. The majority of the participants attended public schools; a few attended private schools. Seven of them either attended or graduated from college. Seven of them have not had the opportunity to attend college, as of the present time. Three of this latter group did not finish high school. By using this combination of both a college and a noncollege sample, it was intended the results would yield a more complete picture of the phenomenon than by using either group alone.

The method of data collection used in this study was a face-to-face interview. The questions were standardized by an interview guide. Within the interview, the critical incident technique was employed to identify and analyze

situations using best and worst characteristics of the phenomenon under study (Flanagan, 1953). The interview guide was pilot tested with three adults in order to check for clarity of questions. These three adults were not included as part of the research sample.

The interviews were taped and verbatim transcripts were made. As the first step in analysis, each transcript was read carefully, with attention to possible categories within the data. Comments and insights were written in the margins. Merriam (1988) referred to this as level one of data analysis. Data was organized either chronologically or topically, then labeled descriptively. Once the content analysis was completed, a cross-case analysis was started. A cross-case analysis groups together like answers from different people to the same questions. Cross-case analysis is a means of analyzing different perspectives on central issues (Patton, 1990).

Merriam (1988) called moving from a concrete description of observable data to a more abstract description vel two analysis. It involves using concepts to describe phenomena rather than just a description.

The categories described the data, but they also interpreted the data. Examples from the research were, "They didn't do much with us cause they didn't know what to do with us, just stuck us in a classroom" (in reference to special education); "My school's K-12 were dismal at best"; "I don't remember learning anything in school." These statements described a larger phenomena labeled The System Failed Me.

The findings were reported by themes, with major themes being those found most universally across the interviews. Minor themes were seen as having likely significance for understanding and merit for future investigation. They surfaced in a smaller proportion of the interviews than the major themes.

Findings and Discussion

The data suggested eight major themes: (a) The best teacher was the teacher who cared; (b) The worst teacher was the teacher who was demeaning; (c) The system failed some of these learning disabled students by assigning them to inadequate teachers, by giving them labels, and by making

them feel that they were just a number; (d) Many learning disabled students in this study displayed a strong will to succeed; (e) Education was viewed as necessary for success; (f) The parents tried to be advocates for their children; (g) Hands-on learning was preferred by most; and (h) Math was the most difficult subject.

Theme I: The best teacher was the teacher who cared. The teacher had empathy for his or her students.

One participant expressed this when she spoke of her first or second grade teacher, who went over things on a one-to-one basis with her. "It took me awhile to understand what she was trying to tell me. But it was just the fact that she was there that made me feel better. It didn't make me learn any quicker, it was just the fact knowing she cared."

The teacher who cared tended to work on a one-to-one basis with these students who had learning disabilities. Seven participants spoke of individual instruction as something positive that their best teacher did. One man talked about his eleventh grade business teacher. "She did everything she possibly could to work with me on an

individual basis whenever I had a problem. She was real good at reading tests... She helped me individually and prepared me for what I do now... Sometimes she would do it during class and sometimes she would do it after class, whatever fit her schedule. She was the type that would make the time."

The best teacher, the teacher who cared, also had high expectations for these learning disabled students. While the term "high expectations" was not used by the interviewees, the concept emerged across the interviews as a pattern. For example, one young man talked about his third grade teacher who had him read ahead of time the question that he would be asked. "She would tell me before class that we're gonna read today and I'm gonna ask you to answer number two. So, I could read ahead of time to find out the answer and it would make me feel good cause I could answer the questions in class and not say 'I don't know' and spend 20 minutes trying to find it in front of the whole class."

His teacher made accommodations for his learning disability, but still expected him to learn what the other students were learning. He did not get a watered-down curriculum. Adjustments were made so that he could learn what the other students in the room were learning.

What this young man and others said was congruent with the findings of recent research on student perceptions. Schumm and Vaughn (1994) found that students with LD at all grade levels did not like having textbooks and materials different from their peers. Having different textbooks and materials signaled being lower or higher than the others in the class and stigmatized. What the students liked the best was textbook adaptations. One clear message was communicated by the 3,000 students in Schumm and Vaughn's study: Teachers who made appropriate adaptations to help students learn were preferred over teachers who did not. The message was consistent across grades, achievement levels, and special groups.

As was true in the research by Schumm and Vaughn (1994), it was found in this study that the best teacher was the one who gave the student the extra help to learn. The teacher was flexible enough to adapt to the learning needs of the student. If it meant giving individualized instruction during or after class, he or she did it. If it meant calling on a student when success was likely, the teacher did this. If it meant secret signals or telling a student ahead of time which question would be theirs, it was done. Koppitz (1973) found that when given extra time and

some help, students with LD could do well academically. The keys were the extra time and the extra help, like the extra time and the extra help given to the participants in this study by their best teacher. Also, the best teacher had high expectations for these students with learning disabilities.

High teacher expectations were addressed in April 1991, when the president and secretary of education announced America 2000. This is a nine year strategy to achieve six goals, such as all children in the United States will start school ready to learn and the high school graduation rate will increase to 90%. Research was reviewed on private schools in the hope that these characteristics could be also incorporated into public schools. The traits of an effective school or classroom include: (a) high expectations for students, (b) a strong positive ethos, and (c) an orderly learning environment (McPhee, 1992).

Theme II: The worst teacher was the teacher who was demeaning. Such teachers in some way humiliated or embarrassed these learning disabled students.

One woman spoke of her homogeneously grouped homeroom. The teacher was talking to another teacher at the door. The

other teacher inquired about the homeroom class. The class overheard the teacher say, "Oh, this is my homeroom... They're kinda retarded."

When asked about her attitude toward this teacher, she stated, "She was a hypocrite. In the room, she was real hateful. She didn't care...She was frustrated and had problems. Sometimes when we had visitors from another school, or the principal, she would change her attitude."

Other interviewees also spoke of humiliation. "[What] I didn't like and still don't like, I will not and refuse to sit up in front of a class and have somebody ask me to write something on the board. I'll flunk before I let them do it to me." Another recounted: "One incident in particular, when I was reading a lot, I didn't know a basic word and we sat there for about 10 or 15 minutes and she would say to me, 'I could go to first grade and find someone to tell me this word. We're gonna sit here until you figure this out'."

In a few cases, the circumstances went beyond humiliation and embarrassment to what some might consider abuse. One woman flunked one of the primary grades and had to have the same teacher twice. "One teacher in particular,

she smacked me with a ruler...That's the only thing I remember about her was that she hit me with a ruler and marked my back up and she used to make me sit in the hallway or in the closet."

Wilson and Sapir (1982) didn't address the issue of abuse by teachers, but they did talk about special educators and in particular learning disability specialists. They maintained that teacher training institutions have an obligation to screen out unsuitable teachers of children with special needs before they can do great harm. Wilson and Sapir suggested the teacher of learning disabilities must be something between teacher and therapist. These teachers need insight and empathy. Compulsive people with the need for things to be done right do not have the forbearance, flexibility, and compassion that are necessary in working with special needs children. Often, these children experience education as frustrating and are fraught with failure.

Applying Wilson and Sapir's concerns to the evidence from this study on learning disabled adults, it is possible that some of these teachers were not suitable for learning disabled children. Perhaps some of them should have been screened out by the teacher training institutions. Some of

them indeed seemed to be compulsive and to need to have things done right. Some of them seemed to lack the empathy and insight that students with learning disabilities need. Teachers of students with learning disabilities need to be keenly aware that these students do not follow the typical learning curve. The learning of a student with an learning disability is dominated by plateaus, if not regressions for long periods of time (Wilson and Sapir, 1982).

Perhaps, as Wilson and Sapir suggested, teacher training institutions will screen more carefully their special education teachers. Also, in light of the current trend towards mainstreaming, it is possible that all teachers will at some point be expected to be a teacher of a student with a learning disability. For teachers who are already in the field, staff development needs to keep them current with the field of learning disabilities. The teachers of students with learning disabilities need to understand how these students learn. One must wonder: will all teachers have the empathy, insight and flexibility to deal with these special students in a positive and productive manner?

Theme III: The system failed these learning disabled students through the teachers that they had, labels that

they were given, or by treating them as if they were just a number in the system.

One man expressed his frustration with his first and second grade teachers. "I remember actually hating my teachers because they didn't seem to care. I guess they didn't understand that I was screwing around in class because I didn't understand it and they never really even looked into what was going on. They just assumed that I was a pain in the you know what and that I didn't have any problems."

What Lavorie (1990) told teachers about teaching learning disabled students was that what is fair for one student isn't always what is fair for all students. Fair doesn't mean equal. He went on to tell a story about 25 adults being locked in a room and one adult having a heart attack. Now, if he were going to be fair, he would not administer CPR to the adult who had a heart attack because the other 24 would not receive CPR. It would not be fair to give one person something and not all the others. The correlation to a student with a learning disability is obvious. What is fair for the student with LD may be something very different from what is fair for the other learners in the class. But just as one wouldn't deny CPR to

a person who needs it, one shouldn't deny a student with LD the accommodations that he or she needs in order to learn.

The system failed these students with learning disabilities not only by not being fair and accommodating their needs, but by providing them with inadequate teachers. Wilson and Sapir (1982) cited qualities essential for a teacher of students with learning disabilities. The first characteristic that they spoke of was someone who experiences pleasure in working with children. "To enter a field where the majority of one's time is spent with people one does not enjoy seems wasteful." They cited optimism, resilience, and assertiveness as necessary characteristics. But they did state that training cannot create these characteristics, they are more intrinsic. The researchers cited internal power as an essential characteristic, referring to the ability to get a reluctant learner to try without making the reluctant learner give up.

Wilson and Sapir spoke of ego strength as a characteristic and specifically listed what they meant by ego strength. The teacher needs a low level of anxiety (i.e., it is okay to be human and make mistakes). The ability to be firm without being punitive is part of ego strength, as is the ability to tolerate frustration (i.e.,

to put aside stress caused by personal crises and not overreact or treat a child unfairly, especially a child who may have already had negative, unfair experiences). Poorly organized people probably cannot provide the kind of structure, order, and coherence that children with learning disabilities require. Lastly, two of the most important qualities of special educators are insight and empathy.

The system failed in another way by the labels that these students were given. One label was "special education". One participant spoke of this: "They didn't do much with us cause they didn't know what to do with us, just stuck us in a classroom...We were only in a special ed class. We would be downstairs and the regular kids would be upstairs."

James Tucker, former state director of special education in Pennsylvania, had some thoughts on labels and special education. IDEA calls for individualized, specially designed instruction to each individual child with a disability. Tucker suggested that had educators done this from the start, there would be no need for exclusion from the mainstream and integration. "Clean up the mainstream and apply the principles of good teaching to all children in a single education system," said Tucker (Behrmann, 1993).

The system failed these students by allowing them to be labeled. Again, the system failed when it left students with learning disabilities feeling as if they were just a number. As one male put it, "They took turns dealing with each student five minutes a day and it would just happen to be my time. It could have been in math or it could have been in reading. Sometimes it helped, sometimes it didn't help." Another male expressed a similar sentiment: "I always just think you got 30 kids in your class, I'm number 18, number 18's a problem."

Additional evidence of the failure of the system for some individuals with LD was found in the work of Lichenstein (1993). He did in-depth, structured interviews over a two-year period with adults who had dropped out of high school and had been identified as LD. Interestingly, these students left school because they felt that further academic efforts would only provoke anxiety and humiliation. Perhaps they were made to feel that they were different when they were in school, as some of the participants in this research did. They felt different because of labels or events that affected their self-esteem.

Lichenstein's study suggested that poor grades were not the primary reason for dropping out, but there were some other problems, which may have been the cause of poor grades, that led to dropping out of school. Problems at school, personal problems, and family and social concerns interacted and produced poor grades and low self-esteem. Many of the participants in this research had problems at school, some had personal and family problems as well, though only three out of the fourteen participants dropped out of high school.

Theme IV: Only a few of the participants in this study dropped out of high school, and many of the learning disabled students in this study displayed a strong will to succeed. This was especially prominent in the college sample. This theme is referred to as confronting the challenge.

One young man talked about confronting the challenge of college. "It was a lot of dedication and hard work. From the standpoint of what others observed and from the standpoint of what I thought I was capable of doing, I didn't care what they had to say. Everyone underestimated me, counselors, etc."

Another college subject spoke of the challenge of learning. It wasn't that the people underestimated him, but the hard work and time involved in learning were the challenge. "I don't think there's anything that I just wouldn't attempt, that I have a fear of. I know what gives me difficulties and I hate to learn, but I've gotten to the point now where I need to do these things. I need to memorize and it takes me twice as much time and I dread it."

One woman didn't feel that the schools challenged her enough. "When I graduated from high school, they gave me a diploma, but that diploma don't count on me because I'm a person that I want a challenge and I need that challenge to go to school because when I started school I was seven years old and I know no English, all Spanish."

The students with LD in this study felt underestimated. They felt they had to have a willingness to work longer and harder than their peers. They also needed more time and repetition than their peers in order to learn.

Likewise, Gerber et al.(1992), in their study of successful adults with learning disabilities, found that the adult with an LD must want to succeed. Their respondents described a desire that was burning. They maintained a goal

orientation. They were capable of reframing; that is, they were able to reinterpret their learning disability in a more productive manner. They saw that the problem was not the learning disability but the challenges they encountered as they learned to live with it and overcome it. The researchers specifically cited persistence as a characteristic that successful learning disabled adults possessed. They were willing to do whatever was necessary to accomplish something. Oftentimes this meant working harder than anyone else they knew. The adults with LD in this study had this persistence, especially the ones who attended college.

Theme V: Many of these adults with learning disabilities felt that education was important. Many students in the college sample felt that education was necessary for success.

One male from the college sample talked about education. "I wasn't going anywhere and I realized I'd have to get some sort of education if I wanted to do something I'd enjoy and not work 80 hours a week."

Another participant from the college sample saw education as a means of getting ahead. "From a logical point

of view I knew that I wasn't gonna get ahead...Although I was good working with my hands, I didn't want to do it for a living. I knew if I wasn't educated, later on in life it would be hard."

Some of the participants who didn't go to college also expressed a desire for more education. Some wanted to look into a local community college. One expressed a desire to become a nurse's aide. One had an interesting comment as to why she didn't go on to attend college. "I just felt very uncomfortable because of my learning disability and I didn't learn things as fast as the other kids. I didn't like school. That's why I didn't go to college." This group of participants who did not attend college seemed to be saying that participation in adult education gave them a more positive attitude toward learning than their schooling experiences did. Six of them left their K-12 school experience not expecting to have anything to do with a formal education system ever again.

Like the participants in this study who either went to college, were going to college, or intended to go to college, Gerber et al. (1992) found that successful learning disabled adults were willing to work hard. They specifically cited persistence as a characteristic that

succe ful learning disabled adults possessed. The adults in this study repeatedly said that they were willing to do whatever was necessary to accomplish something. Oftentimes this meant working harder and longer than anyone else that they knew. This was what the college sample in this study referred to when talking about the perseverance that they had that many of their peers didn't need. Similar persistence seemed to be a characteristic of the noncollege sample.

Theme VI: The parents of these learning disabled students tried to act as advocates for their children, especially the parents of the college participants. Some parents were supporters and some were motivators.

One young man clearly gives his mother credit for support and motivation. "Most of what I am today is because of her hard work at one time or another. And her fighting tooth and nail to keep me in school, to keep me from just giving up. Mom thought college was important."

Another college student had this to say about his dad. "Like my dad would write up a note for each one of my teachers and they would have a meeting within the first week in elementary and junior high; you know, when you have six

teachers and each one gets a letter explaining the problem and what things can be done to help compensate for it."

There seemed to be a difference between the advocacy efforts of the parents of the college and noncollege participants in this research study. Parents of the college participants were more likely to be successful advocates for their children. For example, one participant's father would write letters to all of his teachers at the beginning of the year and sit down with all of his teachers during the first week of school. This advocacy seemed to have paid off; this respondent was in his freshman year of college. He was even talking about becoming a teacher himself!

A few examples of parents as advocates came up in interviews with the participants who have not gone to college. "They were struggling as much as I was, I guess cause they didn't know what was going on either. They were back and forth fighting with the school and fighting with the teacher and principal," said one young man who was a participant in the noncollege group. Another participant from the noncollege sample talked about a fight between her mom and a teacher.

This difference in advocacy skills could be due to the educational levels or the SES of the parents. But no data was gathered on either of these variables. There was also the possibility that it was a gender difference. Six of the seven college participants were male. Five of the seven noncollege sample were female. There was a possibility that the college parents were better advocates because they were advocating for their sons. There could have been higher expectations for their sons, such as sons were expected to go to college because they would eventually need to be breadwinners for their families.

Lichtenstein (1993) found in analyzing his data on case studies of adults with learning disabilities who dropped out of school that the parents of these people were not well informed about special education law. They allowed the schools a great deal of leeway in designing and implementing IEPs (Individualized Education Plans). The parents perceived problems, but they didn't seek support or challenge the system. Perhaps they were lacking the skills to be advocates for their children. It is possible that some of the parents in this current study were likewise lacking the skills needed to be advocates for their children. This could be due to the educational level of the parents or SES,

although no data was collected that would enable assessment of differences in parental background.

Goodman (1988) talked about parents who were successful in raising children with learning disabilities. There was good communication. There were reasonable expectations. Parents in Goodman's study were successful fostering independence and a sense of well-being in their children who are learning disabled. Just as Goodman brought up the idea of parents of LD children needing to adjust expectations and having good communication with their children in order to foster well-being and independence, Werner (1989) found that helpful and emotional support from parents led to successful children with learning disabilities. Werner not only talked about parents as mentors and role models, but also grandparents, relatives, neighbors, teachers, and friends.

Theme VII: Active teaching or learning methods were preferred by these students with learning disabilities. Certain teaching procedures seemed to help them learn better than others. Some would call these procedures learning by doing or hands-on learning.

Both the college and noncollege participants talked about learning by doing. "Things that I use my hands on, I would learn. Hands-on things I would learn more and it would be embedded in my mind cause I actually did it."

Another participant stated, "If I have a problem doing homework or even washing windows, I have to have someone show me how to do it and then it will be in my mind, so I can think of it when I'm doing it."

In reference to his best teacher, one man stated, "He did something I believe in still, is learn by doing. He went out of his way to bring in inner tubes and build stuff like that to show the physics of anything. He just showed you by example. Every time he had something, it was a physical thing that you could grasp to get a good idea of what was going on."

Interestingly, Schumm and Vaughn (1994) supported this finding in their report on student perceptions of teaching practices. One of their themes stated, "Students find textbook learning difficult and boring. While students do not call for the abandonment of textbooks, they do request a balance between textbook learning and direct experiences and adaptations that would facilitate their learning from

textbooks." They found active learning beneficial. Yet there was a gap between these student reports of preference for hands-on learning and their report of the teachers use of these practices in their classrooms. The students called for more hands-on, active learning opportunities, not unlike what the adults with learning disabilities in this study were saying.

Theme VIII: Most of the participants in this study had definite perceptions on what subjects were most difficult for them. Math led the list, with 10 of the 14 participants saying that it was their most difficult subject. Six thought English, spelling, or writing was difficult and two thought that reading was difficult. Several mentioned remembering as difficult.

One young man talked about his difficulty with math. "I always had problems with math and I came close to failing class a couple of times. That's when my parents told me to try and get some special help. They realized I was doing well in these other subjects but in math I was lucky to even get a 70."

A young woman had this to say about math, "I hate it. Doing the problems, counting money. I can do it. I just don't like it."

It was interesting that math led the list as the most difficult subject. The subject of remedial math has received much less attention than other areas of remedial education (Lerner, 1981). Many students with a severe reading disability are quite strong in math skills. Yet for some students with a learning disability, math is the specific area of difficulty. Students with a math disability have been observed to have trouble with activities that require visual perception and visual-motor association. Interestingly, according to Lerner (1981), parents reported that students with learning disabilities in math had not enjoyed or played with blocks, puzzles, models, or construction-type toys. These activities aid the development of space, sequence, and order.

Minor themes were mentioned in the interviews, but not as consistently as the major themes, though the minor themes were thought significant, possibly for future research. The minor themes were: Structure, Choice Over Methods, Self-Image, and Small Groups.

Minor Theme I: Structure emerged as a minor theme in one of two ways. Structure was either something that came from outside the individual or structure was self-imposed. Four people in the study spoke of a good teacher as providing structure. Two people talked about the need for a self-imposed structure.

Schumm and Vaughn (1994) reported that some students felt that it was the teacher's job to make certain that the students understood, (i.e., it's the teacher's responsibility to make sure that everyone learns). This supported the concept that the teacher provided structure (i.e. the teacher controls the class and guides them in what they need to learn). There should be nothing haphazard about it.

From the elementary to high school students, there was a consistent finding in the Schumm and Vaughn study. Students appreciated the teacher who was aware that some students were having problems understanding. They appreciated the teachers who changed their instructional techniques and slowed down to help students learn the material.

While the Schumm and Vaughn study talked about teacher-imposed structure, Gerber et al. (1992) spoke about self-imposed structure, though labeling the observation differently. The key to success was the ability to lay down a plan, a blueprint for success. They saw control as the key to success for adults with learning disabilities. Control meant making conscious decisions to take charge of one's life. Also, control meant the ability to adapt and shape oneself in order to move ahead. In this current study, a respondent spoke of her self-imposed structure. "One of the best things I learned going through honors rehab was going to bed at the same time every night, getting up at the same time, eating breakfast, lunch and dinner at the same time. Just being very structured about it. Made sure I ate good meals, the whole nine yards."

Minor Theme II: Just as some participants liked teachers who provided them with structure, others liked a choice over methods. Choice was mentioned, in total, 18 times throughout the interviews. Nine times choice was mentioned as something that was positive. In three instances, not having any choice was something that was resented. In six instances, not having a choice was something that the respondents felt okay about.

Minor Theme III: The participants interviewed tended to like working in a small group. Small groups helped them learn.

Schumm and Vaughn (1994) found that students liked flexible grouping practices. Lower-achieving students reported lower acceptance of homogeneous grouping than higher-achieving students. Students across the grade levels generally preferred flexible grouping. Elementary students liked mixing groups so that they could get to know all students. Middle and high school students liked the different points of view provided by mixing groups. Permanent groups for middle school and high school students led to permanent roles; for example, loafers versus workers. The majority of middle school and high school students preferred to work with one other student. Some preferred to work alone.

Minor Theme IV: Just as some students wanted to work together and some students wanted to work alone in the Schumm and Vaughn study, some participants wanted to be just like the others and some participants felt different in this current study. These feelings tied in closely with self-image. Self-image surfaced as a minor theme in the findings. At times some of these learning disabled students

felt different, such as when they were just a number, and a number with a problem at that. They expressed this in different ways, "I understood more emotionally. I knew I wasn't learning like the other kids were." And one man talked about not understanding the teacher's directions. "They were almost never clear. I felt like there was something wrong with me, that I wasn't getting it and everybody else was."

At times, some of these learning disabled students wanted to fit in and be just like everybody else. As one participant put it, "She would ask me some questions that she knew I could answer and some that she knew ahead of time, she had me look up. I liked it cause I was just like the other students...She treated me like a normal student."

Beck (1978) did a follow-up study of learning disabled young adults. On a behavioral and social adaptation questionnaire, both their teachers and they themselves rated the adults with LD as inferior in the area of self-esteem. Interestingly, their employers did not rate them as inferior to controls in the area of self-esteem.

Vogel, Hruby, and Adelman (1993) discussed this whole issue of self-esteem. They believed that teachers support

and praise could have a powerful effect on self-esteem. Praise needed to be given to work that was well done, even if the accomplishment was modest. Teachers, therapists, and other professionals could reduce the risk factors of students with learning disabilities if they assisted them in understanding their LD. Vogel et al.(1993), found that most college students with learning disabilities entered with limited self-understanding. With better self-understanding, these students were able to self-advocate both in a college setting and an employment environment later on.

In summary, the minor themes were Structure, Choice Over Methods, Small Groups, and Self-Image. These themes were mentioned by fewer people than the major themes. Yet the minor themes seemed too important to neglect. Each seemed worthy of future investigation.

Conclusions

The adults with learning disabilities in this study had definite perceptions of what constituted a good teacher. Their best teacher was a teacher who cared. This teacher cared about whether they learned the material or not. This

teacher worked with them on a one-to-one basis to help them learn the material.

In contrast, the worst teacher was the one who humiliated or demeaned them in some way. The perception that this teacher cared and wanted or expected them to learn the material was not there. There was more of a feeling of ambivalence toward the students: If they got it, fine; if they didn't get it, fine. The one-to-one instruction was lacking.

Perhaps, as Wilson and Sapir (1982) pointed out, there needs to be better screening of teachers when it comes to teaching special education students, in particular learning disabled students. They called for "rigorously" screening candidates to work with all children and in particular handicapped children. Candidates need to be screened before they enter training and have their programs structured such that fieldwork is included in their very first year of education.

For teaching staff already in the field, there needs to be further staff development in the areas of active, hands-on learning and classroom management so that working with students on a one-to-one basis is possible. With the

trend toward inclusion, there needs to be consideration given to one-to-one instruction. For example, by mainstreaming all the students with a learning disability into a single regular classroom, will there be the time to work with them individually? What kind of attitude does the regular classroom teacher have toward one-to-one instruction?

With the advent of IDEA, inclusion is becoming a reality. Students with a learning disability are not sent off to an LD resource room. Pennsylvania has mandated IST (Instructional Support Teams). By 1995, at least one elementary school in each school district across the state will have to have an IST. The whole idea behind IST is that the mild and moderately handicapped students will remain in the regular classroom with accommodations. Only when there is a great degree of need and the degree of need widens despite interventions will a student be tested and placed in special education. Therefore, there is the very real possibility that all teachers may at some point in their teaching career be asked to teach a student with a learning disability. Have all teachers been given the training and background to deal with the special needs of a learning disabled student? This is an issue that staff development days need to address, not only on a K-12 level, but on a

college and adult education level as well. As cited in this paper, the special needs of a learning disabled child do not disappear as s/he grows up; and as cited by some of these adults during their interviews, learning can be a challenge. Teachers at all levels need to be cognizant on how best to deal with learning disabled students in their classrooms.

This study also concluded that there were some differences between the college and noncollege samples. The college sample was from a large research university, either undergraduate, postgraduate, or having graduated. The noncollege participants were persons who had not attended college, though some of them indicated the desire to attend college. All participants were between 21 and 37. There appeared to be a greater self-understanding in the college sample, leading to an acceptance of the learning disability. They recognized how their learning disability affected them and were able and willing to compensate by persistence, repetition, and time. They knew that they would have to work harder than their normal peers in order to reach their goals, whether the goal be passing a test, writing a paper, or completing a project.

It is possible that these college students had a higher SES, higher parental expectations or parents with higher

levels of education than the noncollege group. Four out of the seven of them spoke of their parents hiring private tutors for them or sought out assistance beyond what was provided by the schools. None of the noncollege sample mentioned having a private tutor. Vogel et al.(1993) found that long-term tutoring was an intervention that distinguished successful college students with LD.

Most of the college sample also spoke of parental expectations in connection with going to college. There was parental support, both emotional and financial, to go to college.

In contrast, the noncollege group had three people who did not finish high school. One individual even stated that his parents supported him in his decision to quit school in ninth grade. Some of these noncollege participants had problems beyond just the academic school problems. In one case, there was child abuse.

All of the noncollege group had special education placements during their school years. It is possible that their learning disabilities were more severe than the college group's. As one interviewee stated in reference to school academics, "Somebody decided just to put three

strikes up against me in the ball game before I even got started." One goal in America 2000 is that all students will start school ready to learn. Did these noncollege participants start school ready to learn, or were there already three strikes against them? It is interesting that in analyzing the noncollege participants' predications about further formal schooling after high school, six of the seven said that when they left school they did not think that they would be involved in formal education ever again. Yet all of them have at some point been involved in adult education, be it job training, secretarial programs, or adult literacy programs. Several of them even stated that it was during these learning experiences as an adult that their attitudes toward learning changed. They came to view themselves and learning in a new light.

One other way that our schools may have failed these individuals with learning disabilities was by the teaching methods used in the system. The participants in this study tended to favor learning by doing; that is, using their hands. Schumm and Vaughn (1994) found that students wanted more hands-on learning, but were taught via a textbook. Hands-on, active learning takes more planning and effort than regular textbook teaching. Field trips and guest speakers are also added expenses. But by not having active

learning in the classrooms, what is it costing the students who are learning disabled?

Implications for Practice

One implication for practice would be more hands-on, active learning in our schools. This group of adults with LD seemed to be saying that hands-on learning was how they learned best. They understood better what was being taught. They remembered better what was taught. More hands-on learning is now done in our elementary schools than in the past, especially in the areas of math and science. But as students move through the system, students with LD included, learning becomes more and more auditory and abstract with some visuals (Hassentoab & Flarherty, 1991). These data suggest this may not be how students with LD learn best.

Another implication has to do with relationships between school and home. Some parents of children with LD, may need to learn advocacy skills -- how to be an advocate for their children, especially children with special needs. In this study, four out of the seven who attended college had parents who sought assistance beyond what was offered by

the schools. Six out of seven of the college respondents mentioned parental support at some time in the interview. Many of these individuals were from families that had the economic resources to afford tutors and that could afford to send their children to college. In contrast, only two of the seven noncollege participants spoke of their parents as advocates. In both instances, the advocacy was recalled as involving conflict. There was a fight with the principal or there was a fight with the teacher. This did not reflect a positive relationship between home and school. These fights could have been partly a function of school response to the parents. Maybe when these parents attempted to advocate, the schools were not receptive. Interestingly, both of these students dropped out of school.

Another implication for schools would be that more time and resources be devoted to math. Ten of the 14 participants felt that math was their worst subject currently as an adult. Since 95% of learning disabilities are in the reading-writing realm (Lerner, 1981), this is an interesting finding. In 1994, the Pennsylvania Department of Education reported that 74% of Chapter I funding goes to reading and 26% goes to math. (Chapter I is a federally sponsored program that provides remedial help to at-risk students in reading and math. Many students with a learning

disability are served by this program prior to being labeled LD. In some cases, they are still provided with Chapter I services even after being labeled LD.)

One possibility that would explain why math was cited as this group's worst subject is perhaps these participants did not play with blocks, puzzles, models, or construction-type toys as children. In this case, a recommendation would be more parental education. Parents may not see the value in these activities. Parents need to be educated that these are not just isolated childhood activities, but are skills that aid in learning concepts, such as up-down, over-under, and high-low. These activities aid in the development of space, sequence, and order -- all skills essential in mathematics. Children with disabilities in math have been observed to have difficulty with activities that require visual perception and visual-motor association (Lerner, 1981). Parents need to be educated on the merits of such activities.

Another possibility that would explain why math appeared to be this group's worst subject is that math was not taught in a way that would teach concepts as well as computation. In other words, the students were not taught with a hands-on approach in math. Manipulatives were not

used. Perhaps a hands-on approach would have made a difference in learning math. Maybe remediation needs to focus on math concepts and math learning strategies just as more frequently occurs with reading.

In regard to more Chapter I resources going to reading than math, this whole concept of resources and time was addressed in a recent report by the National Education Commission on Time and Learning (1994). It was stated that struggling students were forced to move with the class. They received less time than they needed to master the material. They were pushed on to the next task before they were ready. Thus, they fell further and further behind. They began to feel that they were a school failure. The report said that these struggling students, who would include those with LD, were "prisoners of time." They needed more than a 6-hour, 180-days-a-year school program. Perhaps what these struggling students need is a year-round school program where they can have the extra time and repetition that the individuals with LD in this study talked about and in which they could receive more individualized attention during periods when fewer students are in school.

Also, another recommendation for our schools would be more early intervention. As one interviewee stated in

reference to school academics, "Somebody decided just to put three strikes up against me in the ball game before I even got started." Research supports early intervention programs (Robinson & Smith, 1962; Clay, 1993). Eighty-five percent of Americans support the importance of preschool programs to help low-income and minority children get ready for school (National Educational Commission on Time and Learning, 1994). Interestingly, poor and impoverished school districts have a disproportionate number of students with learning disabilities (Lyons, 1994). The recommendation has already been made that Head Start be extended to begin at birth.

Other implications relate to training and staff development days for teachers of children with learning disabilities. Wilson and Sapir (1982) pointed out that teachers needed to demonstrate considerable flexibility in working with these students with learning disabilities. The teacher not only needed to be well trained in the field of LD, but needed to know how far he or she could stretch a student with a learning disability without frustrating the student. It seemed that teachers of students with LD needed to truly understand their students. This would mean staff development for those teachers already in the field, as well as for regular classroom teachers affected by a shift toward

greater inclusion of children with LD in the regular classroom. Perhaps they would need additional training in the area of learning disabilities. Teachers may need staff development in classroom management techniques for working with the students with learning disabilities, as well as in instructional strategies, such as instruction on learning styles and more diverse teaching strategies. Topics such as individual instruction, hands-on learning, small group instruction, structure, and student choice in methods should be covered.

It is possible as Morrison (1985) suggested that a Robin Hood effect is real and existing in our schools. She suggested teachers were rejecting the idea of spending extra time helping the lower-achieving students because this would take time away from the average and high achievers. The teacher would be robbing the rich students to give to the poor students. To these teachers' way of thinking, it just wouldn't be fair. If this is the case, teachers currently in the profession need to be aware of this flawed philosophy. As Schumm and Vaughn (1994) found in their interviews, students perceived the teacher who made accommodations for the lower students as the better teacher. There are also implications for supervisors and administrators in the school system. Supervisors and

administrators need to be conscious of this perceived Robin Hood effect, both in their observations and their interactions with teachers and its impact on teachers' willingness to implement educational adaptation.

Recommendations for Future Research

An area for future research is low self-esteem and special education placement. Brophy (1986) found that students with higher self-esteem did better in remedial programs. In this particular study, the noncollege participants, who were all placed in special education programs, seemed to have lower self-esteem than the college participants. But which came first, the low self-esteem or the special education placement?

More research needs to be done regarding the effectiveness of hands-on learning for students with LD and the fit between learning styles and teaching styles. The participants in this study appeared to be saying that hands-on learning is what works best for them. Do other students with LD feel the same way? What are their

perceptions? Does hands-on learning actually produce better learning and achievement?

More research needs to be done related to teaching. With the reality of inclusion, research needs to be done on teachers' attitudes toward students with learning disabilities. What factors influence teachers' attitudes toward students with learning disabilities? Is class size a variable? Is knowledge about the field of LD a variable? Does preservice experience with students who are learning disabled influence attitudes? How do teachers' attitudes influence their classroom behavior with the learning disabled?

Parts of this research focusing on the best and worst teacher point out the importance of teacher expectations. The best teachers expected these students to learn and communicated this expectation to them. The worst teachers seemed to have an attitude of neutrality. Somehow, they did not seem to feel it was a reflection on their teaching if these students didn't learn. It was the teacher's job to present the material and whoever got it, got it. It was not the teacher's responsibility to reteach or spend extra time with struggling students. The teachers lacked empathy for these students with learning disabilities. Is there a way

to help teachers change their expectations and improve their practices with students who have learning disabilities? If so, what ways are most effective? This needs to be an area for future research, especially with the current movement of inclusion.

In the future when research is done with a sample of adults with learning disabilities, such as in this study, it would be valuable to gather data on the parents. Some areas for data gathering would be the literacy level of the parents and the educational level of the parents.

Another area for future research is math and learning disabilities. What exactly causes learning disabilities in math? Is it childhood playtime activities? Does educating parents about children's playtime activities make a difference? Do schools actually spend more time and resources on reading? Also, was this just a random occurrence that 10 out of 14 adults with learning disabilities found math difficult in adulthood? What do other groups of adults with learning disabilities find difficult as adult learners?

This research study relates to some recent studies in the field of LD. Tur-Kaspa and Bryan (1995) examined

teachers' judgments of students' social competence and school adjustment. Their purpose was to see if there was a difference between LD, low-achieving (LA), and average-achieving students. Teachers rated the elementary LD and LA students as having significantly lower social competence than their average-achieving peers. But teachers' ratings did not discriminate between LD, LA, and average-achieving students who were in the upper grade levels. It appeared to be the perception of the noncollege participants, in this current study, that when they were in formal education as adults, they were more accepted and bolstered by their teachers. One respondent said, "The teachers in the learning center here, they're the ones who encouraged me that if I got my GED, you can do anything." It appeared that as adults, some of these noncollege participants changed their attitudes toward school and learning. Did this change have anything to do with the attitudes that teachers have toward older students with LD?

In another recent study on teachers' attitudes, Bender, Vail, and Scott (1995) found that regular classroom teachers with less than positive attitudes toward mainstreaming were not willing to utilize strategies that would facilitate achievement for children with LD. These strategies included self-monitoring, behavioral contracts and token economies.

As in this research study, teachers with less than positive attitudes were not willing to make the modifications necessary for students with LD. The worst teachers in this study did not modify their classrooms or use strategies to facilitate achievement for these students with LD. In this current study, the best teachers made modifications and encouraged achievement. The one participant was encouraged to self-monitor. He was encouraged to raise his hand when he knew the answer and he had a signal that only he and his teacher knew when he didn't understand something.

Additional research is needed not only on teachers' attitudes toward students with LD, but also on students with learning disabilities' perceptions of their teachers. Students' perceptions are an important part of learning.

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Appendix A

INTERVIEW GUIDE

Rapport/Initial Questions

1. What type of work do you do?

2. How old are you?

3. Do you live alone or with someone else? Who?

4. What was the last grade you completed in school?

5. Describe your schools (K-12).

6. When did you first become aware that you have problems learning?

7. When did you first get any sort of special help in school, e.g., tutorial help or a special class? In what grades did you receive these services? Describe the services. Was it a:

_____ special class

_____ resource room

_____ speech and language services

_____ reading teacher?

8. What school subjects have you done best in?

9. What school subjects were hardest for you?

10. What do you do well?

11. What do you have difficulty doing?

Critical Incident Question

Think back to the best teacher that you ever had K-12. Describe that teacher. Think of something specific that they did. Describe that incident. [Was it a regular classroom or a special class? About how many students did that classroom have? What subject was the class? What grade was this?] How did you react?

Follow-up Questions to Determine Teacher Effectiveness with Learning Disabled Students

In the following questions, which scenario is most like the instruction that you received with the teacher that you recalled as being your best teacher?

1. When you didn't know the answer to a question, your teacher (a) called on another student, (b) gave you a prompt or hint, or (c) waited until you came up with the answer on your own. How did you feel about this?

2. Do you remember this teacher as asking (a) a lot of questions, (b) some questions, or (c) a few questions. How did you feel about this?

3. When you were in school, did this teacher seem mostly (a) positive and encouraging, (b) negative and critical, or (c) somewhere in the middle -- neutral. How did you feel about this?

4. When you went to this teacher's class, were the teacher's directions (a) clear to you, (b) sometimes clear to you, (c) almost never clear to you? How did you feel about this?

5. Did this teacher give you (a) a lot of chances to learn something, (b) a couple of chances to learn something, (c) one chance to learn something. How did you feel about this?

6. Did this teacher ever allow you to work in a small group (a) often, (b) sometimes, (c) never? How did you feel about this?

7. Did this teacher spend time helping you individually (a) often, (b) sometimes, (c) never? How did you feel about this?

8. Did this teacher ever you let you have a choice in the activities you did (a) often, (b) sometimes, (c) never? How did you feel about this?

9 Did this teacher teach you in more than one way? For example did they have pictures? Did they teach you using pictures (a) a little, (b) a lot, (c) never? How did you feel about this?

10. Did this teacher allow you to make or build things? (a) a little, (b) a lot, (c) never? How did you feel about this?

11. Did this teacher give you explanations and encourage you to talk? (a) a little, (b) a lot, (c) never? How did you feel about this?

Critical Incident Question

Think back to the worst teacher that you ever had K-12. Describe that teacher. Think of something specific that they did. Describe that incident. [Was it a regular classroom or a special class? About how many students did that classroom have? What subject was the class? What grade was this?] How did you react?

Follow-up Questions to Determine Teacher Effectiveness with Learning Disabled Students

In the following questions, which scenario is most like the instruction that you received with the teacher that you recall as your worst teacher?

1. When you didn't know the answer to a question, your teacher (a) called on another student, (b) gave you a prompt or hint, or (c) waited until you came up with the answer on your own. How did you feel about this?

2. Do you remember this teacher as asking (a) a lot of questions, (b) some questions, or (c) a few questions. How did you feel about this?

3. When you were in school, did this teacher seem mostly (a) positive and encouraging, (b) negative and critical, or (c) somewhere in the middle -- neutral. How did you feel about this?

4. When you went to this teacher's class, were the teacher's directions (a) clear to you, (b) sometimes clear to you, (c) almost never clear to you? How did you feel about this?

5. Did this teacher give you (a) a lot of chances to learn something, (b) a couple of chances to learn something, (c) one chance to learn something. How did you feel about this?

6. Did this teacher ever allow you to work together in a small group (a) often, (b) sometimes, (c) never? How did you feel about this?

7. Did this teacher spend time helping you individually (a) often, (b) sometimes, (c) never? How did you feel about this?

8. Did this teacher ever you let you have a choice in the activities you did (a) often, (b) sometimes, (c) never? How did you feel about this?

9. Did this teacher teach you in more than one way? For example did they have pictures? Did they teach you using pictures (a) a little, (b) a lot, (c) never? How did you feel about this?

10. Did this teacher allow you to make or build things? (a) a little, (b) a lot, (c) never? How did you feel about this?

11. Did this teacher give you explanations and encourage you to talk? (a) a little, (b) a lot, (c) never? How did you feel about this?

Attitudes Toward Schooling Experience

1. When you left your high school experience would you have predicted that you would have participated in any kind of learning experience as an adult? Why or why not?

2. Consider your everyday life. Every day you learn something. What is something new you have learned to do recently? How did you know that you would be able to learn it? Was there anything from your school experiences that made you feel confident that you could learn it?

3. Think about your learning today. What is something that you would never attempt to learn today? Why? Did something happen to you as a child that keeps you from attempting this?

Current Learning

1. How do you feel when you need to learn something new?

2. When you have free time what do you like to do?

3. When was the last time that you made a deliberate effort to learn something or to learn how to do something? For example, have you tried to improve in a skill like cooking, typing, mechanics, music, or personal finance by reading a book, attending a lecture, or maybe watching a video tape?

4. In the past six months, have you attended any kind of class for adults (e.g. church, community center, or library)? How many sessions was the class?

5. Do you have plans for any further formal education (e.g. college, community college, vocational technical school)? If yes, what do you intend to study?

Appendix B

LETTER FROM OFFICE OF STUDENT DISABILITY SERVICES

109 Bungalow Rd.
Enola, PA 17025
October 21, 1992

Dear _____,

Brenda Hameister at Penn State University has been gracious enough to help me by sending out this letter.

First, let me tell you a little about myself. I am a doctoral student at Penn State University in adult education. I am also a teacher. My area of interest is learning disabilities.

I am contacting you because I am doing a study on learning disabled adults. This study is for my dissertation. What I want to find out is -- what adults with learning disabilities think of their kindergarten - 12th grade school experiences? My reasoning in using adults is that I think that adults will be able to better describe their learning experiences in ways that children cannot.

This study will have importance for LD programs in our schools. It will help us learn what is most effective in teaching our learning disabled students. This study has taken on greater importance recently, due to cuts in Pennsylvania's state education funding in the area of special education. The whole concept of special education is changing in our public schools.

Your valuable input will have an impact on how we view teaching learning disabled students. It could even change how we teach our learning disabled students. Please do your part and participate in this study!

If you are interested in being interviewed for this study, please contact me at 717-732-4132. If you need to call collect, please do. I will try to make the time and place of the interview as convenient for you as possible.

Thank you.

Sincerely,

Donna Gresh

Appendix C

LETTER FROM OFFICE OF VOCATIONAL REHABILITATION

109 Bungalow Rd.
Enola, PA 17025
October 21, 1992

Dear _____,

Terry Williard at the Office of Vocational Rehabilitation (OVR) has been gracious enough to help me by sending out this letter. Although OVR is sending this letter, your involvement with OVR is confidential until you decide you are interested in this study and contact me. Even then, your identity will remain confidential and will not be divulged to anyone nor will your individual responses to questions.

First, let me tell you a little about myself. I am a doctoral student at Penn State University in adult education. I am also a teacher. My area of interest is learning disabilities.

I am contacting you because I am doing a study on learning disabled adults. This study is for my dissertation. What I want to find out is -- what adults with learning disabilities think of their kindergarten - 12th grade school experiences? My reasoning in using adults is that I think that adults will be able to better describe their learning experiences in ways that children cannot.

This study will have importance for LD programs in our schools. It will help us learn what is most effective in teaching our learning disabled students. This study has taken on greater importance recently, due to cuts in Pennsylvania's state education funding in the area of special education. The whole concept of special education is changing in our public schools.

Your valuable input will have an impact on how we view teaching learning disabled students. It could even change how we teach our learning disabled students. Please do your part and participate in this study!

If you are interested in being interviewed for this study, please contact me at 717-732-4132. If you need to call collect, please do. I will try to make the time and place of the interview as convenient for you as possible.

Thank you.

Sincerely,

Donna Gresh

Appendix D

INFORMED CONSENT FORM

Title of Investigation: The Perceptions of Learning Disabled Adults Regarding Their Learning Experiences

Investigator: Donna K. Gresh
109 Bungalow Road
Enola, PA 17025
717-732-4132

Date:

Explanation of the Study:

This study will address the following questions: What makes a learning experience positive for a learning disabled (LD) student? What makes a learning experience negative? What helps an LD student learn the most effectively? These research questions have taken on greater importance recently, due to cuts in Pennsylvania's state education funding in the area of special education. Approximately fifteen LD young adults (age 21-35) at Penn State University (PSU), or who have attended PSU, and approximately fifteen LD young adults located through a Pennsylvania Office of Vocational Rehabilitation (OVR) will be interviewed. The participants will be asked to respond to a variety of questions about their K-12 school experiences and current learning experiences. The study will have practical applications for schools and the concept of lifelong learning. By identifying the dimensions of effective teaching-learning transactions as experienced by LD individuals, the study has the potential to suggest modifications in practice with LD individuals in schools. It may help minimize the impact of learning disabilities and maximize adult potential.

This is to certify that I,_____, agree to participate as a volunteer in this study as part of the education and research program of The Pennsylvania State University under the supervision of Dr. Jovita Ross-Gordon.

The investigation has been defined and fully explained to me by Donna K. Gresh, and I understand her explanation.

I have been given an opportunity to ask whatever questions I may have had and all questions and inquires have been answered to my satisfaction.

I understand that I am free to deny any answers to specific questions in the interview.

I understand that any answers to questions will remain confidential with regard to my identity.

I understand that my interview will be tape recorded.

I understand that in the event of injury resulting from this investigation neither financial compensation nor free medical treatment is provided for such an injury, and that further information on this policy is available from the Senior Vice President for Research and Dean of the Graduate School, 114 Kern Graduate Building, University Park, PA 16802-3300 (814-865-6331).

I FURTHER UNDERSTAND THAT I AM FREE TO WITHDRAW MY CONSENT AND TERMINATE MY PARTICIPATION AT ANY TIME.

_____ _____

Date Subject's Signature

_____ _____

Date Investigator's Signature

Appendix E

Demographics College Group

Name	Age	Occupation	Schools (K-12)	Age at Diagnosis	Last Grade Completed	Services Received
Ann	29	Graduate Student	Public	Graduate School	Ph.D. Student	Writing Help (Third Year of Graduate School For Masters Degree)
Peter	21	Undergraduate	Public	3rd Grade	1st semester Fresh.	Private Tutor (3-12)
Chris	24	Undergraduate student	Private: (1-4) Public: (5-12)	2nd Grade	2nd Year Architecture School	Private tutor: (2-4) Resource Room (5-12)
Victor	25	Chemist	Public	Undergraduate	Undergraduate Degree	Remedial Reading: (3-4) Time Extensions on Tests (College)
Scott	22	Undergraduate	Catholic (1-6) Public (7-8) School for LD (9-12)	6th Grade	Freshman Year	Resource Room (7-8) Special School for LD (9-12)
Luke	28	Undergraduate	Public (Switched School Districts Several Times)	2nd Semester Sophomore	Sophomore Year	Time Extensions on Tests (College)
Michael	22	Job Searching	Catholic (K-12)	Tested at Dusquene University (2nd Grade) Psychological Testing (Freshman)	Undergraduate Degree	Remedial Reading (2-4) I.U. Services (9-12) Time Extensions on Tests (College)

Appendix E Continued

Demographics Noncollege Group

Name	Age	Occupation	Schools (K-12)	Age at Diagnosis	Last Grade Completed	Services Received
John	22	Assistant Manager of a Supermarket	Public (Three School Districts)	7th Grade	12th Grade	Resource Room (7-12)
Carol	23	Claims Examiner	Public	2nd Grade	12th Grade	Resource Room (2-12)
Maria	35	Receptionist	Public	1st Grade	12th Grade	Special Ed. Classroom W/Some Mainstreaming (1-12)
Stacy	35	Receptionist	Public	1st Grade	8th Grade	Resource Room (1-8)
Martha	37	Housewife	Public (Two School Districts)	3rd Grade	12th Grade	Initially Self-Contained Room, Later on a Resource Room (3-12)
Dixie	35	Unemployed (Receives Public Assistance)	Public (Three School Districts)	1st Grade	Left School at Age 16	Initially Self-Contained Room, Later on a Resource room (1-Age 16)
Patrick	32	Construction Worker	Public (K-9)	4th Grade	Left School in 9th Grade	Special Education (4-9)