Mainstreaming in vocational education: The socio-political context of including students with disabilities

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Mainstreaming in vocational education: The socio-political context of including students with disabilities

Abstract
This research explores the use of separate training for employment programs (STEP) in serving the needs of students with disabilities in the least restrictive environment in secondary vocational programs in New Hampshire relative to the effect of factors associated with the organization and culture of the school and demographic characteristics of the community.

Multiple and logistic regression analyses were used to estimate the effects of school size, sending/receiving school status, community wealth, and expenditures for education on the likelihood that students with disabilities will be placed in a mainstreamed or separate vocational setting. In addition, 24 face-to-face interviews were conducted with school personnel responsible for the administration and implementation of educational programs for students with disabilities at six school districts offering regional vocational programs.

Demographic factors found to be negatively associated with the mainstreaming of students with disabilities were: school size, sending school status, participation of students with disabilities in vocational education, and per student expenditures for both regular and special education. Community wealth was found to be positively associated with mainstreaming, but negatively associated with the participation of students with disabilities in vocational education. Organizational and cultural factors found to be positively associated with mainstreaming included: consistent implementation of policies and procedures for the provision of programs and services to students with disabilities; cooperation, coordination, and collaboration among key service providers; and; an organizational culture characterized by a shared sense of common purpose and goals relative to providing a wide range of instructional and educational program opportunities to a wide range of students.

In addition, this study also found that vocational education continues to be held in low esteem among many educators and parents and provides support for the sociological theories of social reproduction, deviance, stigma, and minority group status as they relate to the enrollment of students in vocational education and the placement of students with disabilities in these programs.

Keywords
Education, Sociology of, Education, Special, Education, Vocational

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Mainstreaming in vocational education: The socio-political context of including students with disabilities

Schwartz, Joan K., Ph.D.
University of New Hampshire, 1994

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MAINTREAMING IN VOCATIONAL EDUCATION:
THE SOCIO-POLITICAL CONTEXT OF
INCLUDING STUDENTS WITH DISABILITIES

BY

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B.A. University of Northern Colorado, 1981
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DISSERTATION

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the Requirements for the Degree of

Doctor of Philosophy

in

Sociology

December, 1994
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DEDICATION

This dissertation is dedicated to
Geoffrey G. Forester and our sons Zachary and Jacob
without whose love, support, PATIENCE, and understanding
I could never have accomplished this onerous feat.
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It is difficult to know where to begin in acknowledging all of the people who have touched my life in ways that influenced my journey into the dangerous and unpredictable landscape of higher education. There are many that will go unnamed, but who are nonetheless very much appreciated.

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There are many educators who influenced me throughout my college life in my study of philosophy and sociology. Most particularly I would like to thank James P. Marshall. Thank you, Jim, for sharing with me your love and passion for social theory and critical thought, for nurturing in me a faith in my own intellect and creativity, and for being a patient and understanding friend and colleague throughout the years. Without your support and encouragement I would never have believed that I had a contribution to make to the discipline and project of sociology. Thank you.

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ABSTRACT

MAINSTREAMING IN VOCATIONAL EDUCATION:
THE SOCIO-POLITICAL CONTEXT OF
INCLUDING STUDENTS WITH DISABILITIES

by

Joan K. Schwartz
University of New Hampshire, December, 1994

This research explores the use of separate training for employment programs (STEP) in serving the needs of students with disabilities in the least restrictive environment in secondary vocational programs in New Hampshire relative to the effect of factors associated with the organization and culture of the school and demographic characteristics of the community.

Multiple and logistic regression analyses were used to estimate the effects of school size, sending/receiving school status, community wealth, and expenditures for education on the likelihood that students with disabilities will be placed in a mainstreamed or separate vocational setting. In addition, 24 face-to-face interviews were conducted with school personnel responsible for the administration and implementation of educational programs for students with disabilities at six school districts offering regional vocational programs.

Demographic factors found to be negatively associated with the mainstreaming of students with disabilities were: school size, sending school status, participation of students with disabilities in vocational education, and per student expenditures for both regular and special education. Community wealth was found to be positively associated with mainstreaming, but negatively associated with the participation of students with disabilities in vocational education. Organizational and cultural factors found to be positively associated with mainstreaming included: consistent implementation of policies and procedures for the
provision of programs and services to students with disabilities; cooperation, coordination, and collaboration among key service providers, and; an organizational culture characterized by a shared sense of common purpose and goals relative to providing a wide range of instructional and educational program opportunities to a wide range of students.

In addition, this study also found that vocational education continues to be held in low esteem among many educators and parents and provides support for the sociological theories of social reproduction, deviance, stigma, and minority group status as they relate to the enrollment of students in vocational education and the placement of students with disabilities in these programs.
CHAPTER I

VOCATIONAL EDUCATION AND THE LEAST RESTRICTIVE ENVIRONMENT: THE MAINSTREAMING OF STUDENTS WITH DISABILITIES IN NEW HAMPSHIRE

Introduction

The primary concerns of this dissertation are to (1) explore the nature and extent to which special training for employment (STEP) programs\(^1\) may function as a barrier in meeting the federal mandate that students with disabilities be educated in the least restrictive environment (LRE); (2) better understand how the least restrictive environment (LRE) for serving students with disabilities in vocational education is defined by educators within the schools for purposes of determining a student’s placement; and (3) describe the more salient characteristics of the school and community in which the school is located -- characteristics that may help to explain how the requirements of LRE are implemented in the placement of students with disabilities in vocational education. As such, this study is not concerned with an evaluation of the quality or effectiveness of STEP programs, but rather with decisions to place students with disabilities in STEP as opposed to a mainstreamed vocational setting.

This work grows out of concerns issued in public testimony in 1991 by teachers, education administrators and educational researchers during the development of state policy related to vocational education in New Hampshire with regard to the implementation of the Carl D. Perkins Vocational and Applied Technology Act of 1990 (P.L. 101-392). Central to the concerns voiced by these parties was the claim that STEP programs in New Hampshire

\(^1\) STEP programs are separate vocational programs designed to serve the vocational education and training needs of students with disabilities whose needs cannot be met by regular vocational education programs.
were being used to deny students with disabilities access to vocational education in the least restrictive environment. It was further asserted that it was the responsibility of the state to develop and implement policy with regard to the use of STEP programs such to ensure the equal access and participation of students with disabilities in vocational education.

Federal legislation, directed toward protecting the rights of persons with disabilities, requires that students with disabilities be educated in the "least restrictive environment." Legislatively, LRE means "to the maximum extent appropriate," children with disabilities are to be "educated with children who are not disabled, and that special classes, separate schooling, or other removal of children with disabilities from the regular educational environment" is to occur "only when the nature or severity of the disability is such that education in regular classes with the use of supplemental aids and services cannot be achieved satisfactorily" [EHA:Section 612(5)(B), 1973; IDEA:20 USC sec.1412(B)(5), 1990]. This legislative mandate extends to the education of students with disabilities in vocational education, as reiterated in Section 118(3)(a) of the Carl D. Perkins Vocational and Applied Technology Act of 1990 [§403.190].

Sociologically, I would like to suggest that the conceptual framework for understanding the implementation of LRE in vocational education must be rooted in the study of the social reproduction of class, the social construction of deviance, stigma, and minority group status, and the organization of schools as complex social institutions wherein decisions regarding the placement of students with disabilities serve to reinforce the values and reproduce the social class system of American society. As such, this study attempts to describe how issues related to the integration of students with disabilities serves to expose the inherent contradiction that exists between the expressed values of equal educational opportunity in American education and the processed whereby students are sorted and
processes differently by schools in ways that serve to reproduce the existing class structure and relations of American society.

In this chapter, a description of the context of vocational education in New Hampshire is presented first. This is followed by an analysis of the federal legislation governing the provisions of LRE and the issues it gives rise to as they relate to its implementation, and an overview of the institutional processes whereby students with disabilities are identified by schools as having a disability and the processes where by a student's placement is determined. Finally, a description of the sociological perspective from which the research problem will be addressed, specifically the role of education in reproducing existing social class and group relations of society, is presented.

Vocational Education in New Hampshire

Vocational education in New Hampshire is delivered primarily through programs offered at 23 area vocational centers, and 3 vocational sub-centers across the state. These centers, which are attached to 26 comprehensive high schools, are located within 26 separate school districts across the state. Based upon a regional area delivery system, the purpose of these centers is to provide access to vocational educational opportunities to all students in New Hampshire. Initially constructed and equipped at the expense of the state, these centers become the property of the school district in which they are located upon the completion of construction. In exchange for the construction and equipping of these vocational facilities, these school districts agree to provide access to vocational program offerings in their center to high school students in their designated geographical region. School districts without

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2 Comprehensive high schools offer the full range of educational program offerings, academic and vocational.
vocational centers\(^3\) send their vocational students to the vocational center that has been designated for their region. If the program a student wishes to take is not available in the designated region, the student may access the desired program at any of the state’s vocational centers. To encourage the use of these centers, the state reimburses the sending district the full transportation cost, and 75 percent of the tuition costs incurred by each student enrolled in a vocational program at a regional center.

There are presently 42 different vocational programs offered in the areas of agriculture, business and office occupations, marketing, health occupations, home economics, and trades and industry at one or more of New Hampshire’s vocational centers or sub-centers. In 1992, the total enrollment of students in vocational education at these centers was 9928, which represents approximately 23 percent of the total high school population.

In 1992, of the 26 vocational centers or sub-centers in the state, 13 offered Separate Training for Employment programs (STEP) as a vocational placement option for students with disabilities. Conceived of in the late 1970s, in response to the increase in enrollments of students with disabilities in New Hampshire schools as a result of the widespread deinstitutionalization of persons with disabilities, STEP programs were designed to serve the vocational education and training needs of students with severe disabilities whose needs could not be served in a regular vocational program.

Questions regarding the possible misuse of STEP programs in providing equal access to vocational education for students with disabilities in New Hampshire were first raised in 1989 by researchers at the Institute on Disability in Durham, N.H. who found significant differences in program outcomes between students who received their vocational education in

\(^3\) School districts that send their students to a vocational center for vocational education are called "sending districts" or "sending schools."
STEP programs and those who completed regular vocational education programs. These researchers found that students enrolled in STEP programs not only reported less satisfaction with their vocational program than their peers who had completed regular vocational programs, they were also more likely to be unemployed or not continuing their education (Institute on Disability, 1990).

In 1991, issues surrounding the appropriate use of STEP programs was raised with vocational policy makers, this time during the state planning process in which state policies for the implementation of the Carl D. Perkins Vocational and Applied Technology Act of 1990, the primary source of federal support for vocational education, is determined. According to public testimony offered at one State Plan Committee meeting, STEP programs were being used to discriminate against students with disabilities in ways that violated the legislative mandate of LRE.

As a result of concerns generated by public testimony, the New Hampshire Department of Education decided that research regarding the use of STEP programs was necessary if the state was to consider changes in state policies related to the use of STEP programs in New Hampshire, including the conditions under which the utilization of federal vocational funds in STEP programs would be allowed. Among the questions to which policy makers were seeking answers were: 1) what specific disabled populations are being served by STEP programs?; 2) what criteria are being used in determining a student’s placement in a STEP program?; 3) how are placements in STEP justified in terms of meeting the requirement for the least restrictive environment?; and 4) how are the vocational needs of these populations being served by districts that do not offer STEP?.

In addition, educational policy makers, increasingly aware of the need to understand the context in which educational policies are implemented in local school districts, were
interested in identifying those characteristics of the school and the communities in which they are located, which serve to influence the rates at which students with disabilities are served by vocational education and the extent to which these students are mainstreamed⁴. For example, what are the administrative and organizational arrangements of those school districts that serve a high number of students with disabilities in the mainstreamed setting? Is there a relationship between the provisions of staff development opportunities and the rates at which students with disabilities are mainstreamed? What are the organizational or administrative issues or constraints that may create barriers to the mainstreaming of students with disabilities in vocational programs? Are barriers to mainstreaming the result of economic issues that might be explained by the relative wealth of the community and/or the ability or willingness of communities to invest economically in the education of students with disabilities?

**Least Restrictive Environment**

First introduced in the Education for all Handicapped Children Act (EHA) of 1974, federal legislation requires school districts to provide students with disabilities an education in the least restrictive environment:

Procedures to assure that, to the maximum extent appropriate, handicapped children, including children in public or private institutions or other care facilities, are educated with children who are not handicapped, and that special classes, separate schooling, or other removal of handicapped children from the regular educational environment occurs only when the nature or severity of the handicap is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily... U.S.C. 1412(5)(B).

This mandate is reiterated in the Carl D. Perkins Vocational and Applied Technology Act of 1990 (P.L. 101-392), which states:

Individuals who are members of special populations will be provided with equal access to the full range of vocational education programs available to individuals who are not member so special populations, ... and shall not be discriminated against on

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⁴ For purposes of this research, the term "mainstreamed" is used to refer to those students who are placed in classes along side their non-disabled peers.
the basis of their status as members of special populations [Section 118(a)(2)],

and

Vocational education programs and activities for individual with handicaps will be provided in the least restrictive environment in accordance with section 612(5)(B) of the Education of the Handicapped Act and will, whenever appropriate, be included as a component of the individualized program developed under section 614(a)(5) of such Act [Section 118(a)(3)].

Clearly, the legislative intent of LRE is to ensure that persons with disabilities, including those participating in vocational education, are not excluded from participating in the same classroom experiences as their non-disabled peers, and that every reasonable effort is made to provide the additional resources necessary for them to succeed in this setting.

The provision of LRE is among the many educational rights secured by the legislation, the most significant of which is the right of all children to a "free and appropriate education." This mandate, as voiced in the legislation, is based upon the philosophic acceptance of that persons with disabilities need to be provided with opportunities that allows for and encourages normalization (Hargrove, 1987). Normalization, a term popularized by the research of Wolfensberger (1972), refers to the need to provide access to opportunities and lifestyles that are most similar to those experienced by "normal" people such that their educational training leads to optimum personal independence and social integration. In addressing the needs of persons with disabilities, the term normalization as an objective is used to assert that the ideal educational and social environment for persons with disabilities is the one that is most similar to the environment in which they will be expected to live and function in as integrated and productive members of society; that is, along side their non-disabled peers (Hargrove, et al., 1987).

While the term "mainstreaming" is the term used historically to refer to the educational practice of integrating students with disabilities into the regular classroom
environment, mainstreaming has different meanings for different people and takes many different forms. For some, it is a code word for "dumping" students with disabilities into regular classes with no support services, no teacher preparation, and no special assistance to the non-disabled students on how to relate to their disabled peers (Bilken, 1985). At the other end of the continuum is the practice of "inclusion." Inclusion refers to both the philosophy and practice of including all students with disabilities in regular education such that they are integrated and valued members of the class and school community. Beyond the physical integration of these students, inclusion requires that adequate and appropriate support is provided to the teacher and students to ensure that the environment facilitates the learning of, and interaction between, all members of the class. As such, inclusion focuses not on students with disabilities as separate special cases, but rather on creating classroom and school environments that meet the needs of all students (Stainback & Stainback, 1990).

The educational environment in which a student will receive educational services is an essential component of each student's individual educational plan (IEP). The law requires that an IEP be developed for every student who has been identified as having a disability and that this plan be based upon an unbiased evaluation and assessment of the student's ability and needs in cooperation and consultation with teachers, special educators, and the student's parents. The law also requires that each plan is developed and reviewed annually and that all requirements for due process and procedural safeguards be met. The IEP contains the educational objectives to be met over the course of the plan, the environment in which instruction will occur, and the nature and extent of required services to be delivered in carrying out the plan. In selecting the least restrictive environment, consideration must also be given to any potential harmful effects on the child or on the quality of services he/she shall receive (Stone, 1983).
One of the problems with the LRE requirement is the lack of a clear definition and its reliance upon the process outlined in the legislation (Hargrove, et al. 1987), such that an appropriate education comes to be understood as "one that results from an individual planning conference, including specified participants, and is documented in an IEP, following a specified form," "in the belief that a fair process will produce an acceptable result" (Turnbull & Turnbull, 1978:116-117). While federal law requires that students receive an appropriate education in the least restrictive environment, the law offers no specific criteria for determining what is meant by this. In the absence of specific guidelines with regard to what is appropriate or for what constitutes the least restrictive environment, criteria for determining both are often left up to the school district or individual school. In the absence of administrative criteria at the district or school building level, these decisions are left to the judgement of individual IEP teams (Hargrove, 1983).

The classroom placement of a student with a disability is bound by the definitions of placement options available, which vary from school district to school district. In their research on decisions regarding the determination of LRE, Taylor, Biklen & Searl (1986) issued the following concerns: 1) LRE may be defined in terms of the placements that are available rather than the needs of the child; 2) LRE may be interpreted to mean that some sort of restriction is necessary, and that students will be placed in the more restrictive setting; 3) once initially placed, students are more likely to remain in a more restrictive environment rather than progress to a less restrictive environment; 4) separate, segregated settings do not prepare young people to function in integrated settings; and 5) the continuum concept of placement is based upon the assumption that some students are too handicapped to live and work in society.

Berman and McLaughlin (1975), in researching the implementation of a voluntary,
federally supported curriculum for students with disabilities, found that there is an important distinction to be made between compliance with the law and implementation, and that the key to implementation is to be found in the bureaucratic culture of the local school system and schools. School systems, they found, will vary greatly in their professional capacities to proceed with implementation. According to Bergman and McLaughlin, the capacity of a bureaucracy to implement legislative requirements may range from the predisposition and attitudes of personnel toward program objectives to the level of confusion and ignorance with regard to the requirements of the law.

While the interpretation of "appropriate" and "least restrictive environment" by an individual school district, school building administrator or members of a student's IEP team may be a subjective determination, once agreed upon the IEP becomes a legal document outlining the student's educational delivery plan for which the school district is liable for implementing. Both the process for developing a student's IEP and its implementation are protected by the provisions of due process. Concerns over compliance with the legislative mandates for these provisions have grown steadily as parents have become more familiar with the content of the law. As a result, the original intent of the law that students with disabilities be provided free, appropriate, and equal educational opportunities has come to be replaced by a focus of efforts on the part of educators and school administrators to comply with the letter of the law (Poll, 1992).

As E.C. Hargrove and his colleagues (1987) point out, "it is one thing to write an IEP for a child and use it for subsequent instruction and it is another thing to satisfy a bureaucratic requirement and ignore it" (Ibid:13). Researchers are finding that compliance, while necessary, is not sufficient for implementation (Poll, 1992; Taylor, Bilken & Searl, 1986; Sterns, Greene, David & Cooperstein, 1980). It is this gap between the requirements of the
law and the intention of the law that theoretical questions of implementation shift from issues of compliance to that of investigating the conditions "that reach beyond compliance and engage the organizational cultures of schools and school systems" (Hargrove, et al, 1987:15). This is also often true of concerns regarding the processes where by students are identified by school districts as having a disability, as school districts are bound by the legislative guidelines and bureaucratic criteria used in identifying students with disabilities.

**The Identification of and Placement of Students with Disabilities**

In order for a person to be considered eligible for services supported under P.L. 94-142, the individual must be identified as being educationally disabled in accordance with the definitions provided under the rules and regulations governing the legislation. Prior to the most recent federal legislation, there were 11 categories of disability under which a person could be identified\(^5\). These categories are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally impaired, orthopedically impaired, other health impaired, specific learning disability, deaf and blind, and multiply handicapped\(^6\).

Each category has a set of descriptive criteria (primarily, clinical criteria) for determining the disability category to which the student belongs. Bureaucratic administrative "codes," numbering 1 through 11, are attached to these definitions for reporting purposes - hence the popular use of the word "coded" in referring to a student who has been identified as having a disability. As Boggs (1988) points out, "there is a tendency in law to utilize binary classifications in defining who is eligible or ineligible for services, and while this reflects a

\(^5\) The categories used in this research reflect the disability categories used in the years prior to the most recent legislation, the source of which is the Federal Register, Vol. 42, No. 163, August 23, 1977.

\(^6\) Legislative definitions of the criteria used in determining the assignment of persons as belonging to each category of disability appear in Appendix A.
widespread use of legislation for purposes of enfranchising or disenfranchising certain groups, it also reflects an understanding that equal protection under the laws may require the recognition of inherent inequalities" (Ibid:443).

While the majority of the categories under which a student may be identified as disabled reflect a physical impairment, most students identified as having a disability fall into the three categories of specific learning disability (LD), severely emotionally disturbed (ED), and mental retardation (MR). In the Ninth Annual Report to Congress (1987), these three categories represented 67.1% of the total number of students identified as disabled and receiving related services (ages 3-21), with 42.8% having been identified as LD, 15.7% identified as MR, and 8.6% identified as ED (Executive Summary, 1987:xvi). In 1987 in New Hampshire, the three categories of LD, ED and MR represent a total of 92.5% of students identified as having a disability, ages 15-21. In 1992, these three categories represented a total of 88.1% of the high school student population identified by schools as having a disability.7

For persons of school age, disability is defined in relation to educational achievement and the need for special services in order to benefit from schooling (Bellem, Wilcox, Rose & McDonnell, 1985). Of interest here is how educational achievement and "the need for special services to benefit from schooling" come to be defined. Aside from persons with physical disabilities, who comes to be identified as having a disability is part and parcel of how the educational institution responds to certain behaviors and personal attributes of the individual within the cultural context of the school, and the community within which it exists. There is a tendency, for instance, for students who are of low income or racial minority to be identified

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7 Source: Special Education Information System (SPEDIS), New Hampshire Department of Education, 1993.
as having a disability (Percell, 1979; Oakes, 1985; Gartner & Lipsky, 1987). Concern regarding the over-representation of racial and income minority populations was issued as a result of the congressional findings presented at hearings for the re-authorization of P.L.92-142, and were cited directly in the legislation (IDEA 20 U.S.C. Section 1409).

While most of the diagnoses of students as having a disability are based on social and psychological criteria that rely heavily upon measurements of intelligence, academic ability, social behavior and adjustment, communication and language skills, the measuring criteria used for classifying these students as having a disability often lack reliability and validity (Persell, 1979; Wang, Reynolds & Walberg, 1986). Summarizing national data on the misidentification of students with specific learning disabilities, Shepard, Smith and Vajir (1983) concluded, "at least half of the learning disabled population could be more accurately described as slow learners, as children with second language backgrounds, as children who are naughty in class, as those who are absent more often or move from school to school, or as average learners in above average school systems" (Ibid:79).

School referrals for additional student testing for purposes of identifying students as disabled is most often initiated when "student behavior and academic progress varies from the school norm" (Walker, et al., 1988:105). That is, the suspicion that a student may be educationally disabled produces an institutional response that often results in additional testing and assessment of the student. While academic performance or school behavior may be the initial factor that gives rise to the suspicion of a disability, the actual identification of a disability may be the result of simply finding a test that produces the results that were being sought. This is accomplished by locating "evidence" of the disability on a particular test or assessment instrument, such that testing may continue until the suspicion of a disability is "verified" by any one of the assessment instruments administered (Gartner & Lipsky, 1987;
Denny, 1989).

Similarly, students identified as severely emotionally disturbed are most often identified on the basis of behavior that is deemed to be inappropriate or outside of the norm, relative to the context of the educational environment, and perhaps also to that of the community in general. Severe emotional disturbance is defined as the "inability to build and maintain satisfactory interpersonal relationships, inappropriate behavior, feelings of being below normal, general moods of depression and unhappiness, and development of physical symptoms of pain and fears associated with personal or school problems" (Stone, 1983:p.14).

The definitions and criteria used in diagnosing mental retardation suffer from much of the subjectivity found in the diagnosis of LD and ED students. As Richardson (1974) points out, the definitions and criteria used in identifying students as mentally retarded "have varied so much at different times and places and are so generally lacking in explicitness of definition and reliability of measurement that errors in diagnosis have not been uncommon," such that "one is reminded of the blind men describing the same elephant but differing in their descriptions depending on the part of the elephant they had felt" (Ibid:77). According to Richardson, there are three general criteria used in arriving at a clinical decision as to whether a student is mentally retarded. They are social competence, school performance, and IQ test results. And, while these assessments often involve an assessment by a school psychologist, school systems vary greatly in the criteria and procedures used in making the administrative decision to classify a student as MR (Richardson, 1974). However, the classification, once established, serves to define the individual as possessing intellectual impairment and a basic inability to reach some minimal level of expectation for functioning in society (Richardson, 1974), and by definition, as possessing "weaknesses and deficiencies" (Begab, 1974).
The identification of individuals with disabilities proceeds historically from a clinical perspective, and as Boggs (1974) points out, "administering bureaucracies are chronically best with a mismatch between classification systems designed and used by clinicians for clinical purposes, and the classification criteria designed to meet the purpose of legislation which is social rather than clinical" (Ibid:444). In order to receive additional financial and institutional support from the educational institution, an individual must first be identified as "eligible." Eligibility is in turn bound by the diagnostic criteria and procedures created and maintained by the system which provide for how "eligibility" comes to be defined.

This labeling system, which "serves as an entry point for any child receiving special education focuses precisely on an identification of the reason(s) why a child can’t learn - reasons that considered to be enduring within the child and relatively unchangeable" (Lilly, 1992:90). As such, the system for identifying, categorizing and reporting students as having an educational disability supports the tendency to view learning and behavior problems as caused by an individual pathology which is located within the individual (Mercer, 1974; Hobbs, 1975). Labeling "downplays the possibility that many individuals assigned special education labels have problems initially caused (and perhaps maintained) by environmental factors," keeping the intervention narrowly focused on the individual (Mercer 1974; Adelman, 1992:98), as opposed to the school environment.

The vast majority of students with disabilities in school settings have what are considered to be mild disabilities, such as students with learning disabilities, mild mental retardation, and/or emotional disturbance (Algozzine & Korinek, 1985; Reschly, 1988). The major characteristics these students are identified as possessing consist of achievement problems, no identifiable biological anomalies, and social skill problems, but normal behaviors in most social roles, whose position is better understood from a social system
perspective rather than by a medical model paradigm (Mercer, 1974; Reschly, 1987). This perspective is supported by the notorious unreliability of current classification systems and the uneven distribution of disabilities among different socio-economic groups.

In summary, there is evidence to support the assertion that the identification of students with disabilities is a primarily subjective process for the majority of students. Most students are identified and defined as disabled by educational personnel as a result of academic performance and/or social behavior that is deemed to be outside of the boundaries of what is *normally expected*, or expected of the *norm*, and as measured by criteria and "instruments" considered to be "objective." The processes whereby students are identified as disabled as a result of exhibiting academic and/or social behavior that violates the cultural boundaries and performance expectations of the school community norm can be seen as a process whereby these students are labeled as educational deviants.

Disability as a form of deviance is well supported in the literature (Davis, 1961; Freidson, 1965; Scott, 1969; Safilios-Rothschild, 1970; Hanks & Poplin, 1981), and provides one perspective for understanding some of the issues raised relative to the implementation of LRE. Schools function as formal agencies of social control. Like other control agencies, schools are similar to those traditionally associated with the processing of deviant populations. In his discussion of the production of deviant populations by social institutions, Friedman (1973) states that social agencies concerned with deviance 1) are ones in which socially structured biases seem to operate; 2) are in the business of defining deviance and must solicit support for their activities and account for what support they have already gained; 3) having been professionalized and bureaucratized, they objectify and reify diagnostic categories; and 4) by the nature of their activities refine and clarify their boundaries. The historical development of schools as institutions of social control, the growth of behavior and medical
science (and their related professions) in the identification and treatment of social deviants, including that of the professionalization of special education, serve to support the notion that the historical development of the identification and treatment of students with disabilities reflects the social construction of these students as deviants within the school community.

The processes and actions engaged in by school officials in seeking out and sorting out students as "educationally disabled" are clearly bound by the context of the school community and the expectations by those in authority relative to the responsibilities with which (they believe) schools are charged. In his study of the role of guidance counselors in public schools, Bud B. Khleif asserts that the way in which schools process students reflects several sociological assumptions with regard to the role of the professional in the school that are relevant here. These assumptions are 1) that "practitioners define clients in term of an ideal client; 2) that "practitioners tend to define clients on the basis of problems they cause them in the performance of their work or on the basis of the client’s social class," and 3) that "the client needs to be pre-trained to deal with institutions" (Khleif, 1966:175). In the case of schools as agencies of social control, the institutional processes whereby the majority of students with disabilities come to be identified and processed differently functions to define and reinforce the boundaries of institutional expectations for behavior and academic performance relative to the ideal student, and in doing so serve to justify the institutional interventions that these behaviors necessarily imply.

While the conceptualization of students with disabilities as deviants will be further developed in Chapter Two, it is important to understand that it is not the fact that students with disabilities occupy a deviant role per se that is of ultimate concern to us here. It is rather the role played by the identification and differential treatment of these students in maintaining the structural and ideological functions of education that their status as deviants
becomes important to the sociological problem this research seeks to address.

The Sociological Context

The purpose of this section is to present a perspective for understanding the processing of students with disabilities by educational institutions as one that is grounded in sociological theory. It will be argued here that the issues raised relative to the identification and differential treatment of students with disabilities is best understood in terms of theories of social reproduction as they interface with those of deviance theory in that both serve to provide valuable insights into how education as a social institution serves to reinforce the conditions necessary to sustaining the status quo. It will also be argued here that these theories serve to illuminate the institutional tensions that result from the federal mandate of LRE as schools struggle to come to terms with the conflicting purposes with which they are charged.

Education and Social Reproduction

The notion that education has become the most important of modern social institutions in serving a primary function of socialization and the allocation of social roles is found throughout the sociological literature. This socialization function of education entails that of developing in the individual "the commitments and capacities" that are essential to adult participation in society, which include a "commitment to the implementation of the broad values of society, and commitment to the performance of a specific type of role within the structure of society" (Parsons, 1959 in Ballantine, 1989:155). In American society, these "commitments and capacities" translate into the knowledge, skills and attitudes necessary for participation in a work place that is organized around the economic relations of capitalism as well as the values, beliefs and attitudes set forth by a democratic society organized around the ideology of individual freedom and equal opportunity. Society's institutions serve the role of
perpetuating existing social relationships, as well as the attitudes that are necessary to sustaining these structural relations.

As Martin Carnoy and Henry Levin (1985) point out, the combination of capitalism and democracy creates internal inconsistencies, and schools are necessarily caught up in the conflicts inherent to a capitalist economy operating in a liberal democratic state. The paradox for Carnoy and Levin is the relationship between education and work in that education -- as the principal institution for transmitting societal values and norms -- is the institution that is also responsible for producing the skills and attitudes necessary for participation in the unequal division of labor necessary to capitalistic economic production. This conflict - that of instilling the norms and values of equality, while at the same time producing the consequences of economic inequality - reflects the inherent obstacles to institutions charged with the simultaneous production of opposites. Yet schools as social institutions tend to be more democratic and offer greater opportunities for social equality than other social institutions (Carnoy & Levin, 1985).

A critical analysis of both the processes of education and its structural outcomes lies at the base of what has come to be referred to as "social reproduction" theory. "In the most general terms, social reproduction theory explains how societal institutions perpetuate (or reproduce) the social relationships and attitudes needed to sustain the existing relations of production in a capitalist society" (MacLeod, 1987:9). Social reproduction theory draws heavily from the work of Emile Durkheim, Max Weber, and Karl Marx. These theorists draw upon Durkheim's notion that the role of education in society is to instill in the child the moral life of the society, as well as allocate social rank and roles, including a commitment to one's vocation. In sum, the purpose of education, for Durkheim, "is to prepare the person to participate in the national as well as the local culture" (Khleif, 1966:177). From Weber,
social reproduction theorists draw upon the Weberian notions of class, status, and authority.

Social reproduction theory relies, however, most heavily upon the work of Marx. According to Marx, the processes of capitalist production produce not only surplus value, but the structural conditions of the capitalist relation itself -- that of the capitalist and that of the wage-earner. For Marx, society's institutions are structured to reinforce and sustain the unequal relations of capitalist production. The continuation of this system, according to Marx, depends upon the ability of capitalism to perpetuate an ideology that masks the true nature of these relations. For Marx, ideology functions as a system of ideals, beliefs and values that are perpetuated by social institutions at all levels, and which serves to justify capitalism as the most rational of economic and social arrangements.

Social reproduction theory ranges from that of a structural determinism more closely aligned with the tenets of Marxism (such as the work Samuel Bowels & Herbert Gintis) to less deterministic models that allow for a greater emphasis on the role played by individuals in the social construction of meaning in the social reproduction process (as reflected in the works of Pierre Bourdieu & Henry Giroux). The common thread that unites social reproduction theories is their attempt to explain how and why the structural class relations of society come to be reproduced such that children who come from families of lower socio-economic class and status tend to grow up and assume similar class locations and status as adults (MacLeod, 1987).

Broadly stated, social reproduction theory asserts that the purpose of education is to prepare individuals unequally for participation in the social relations of capitalistic production, and that the process of schooling is structured in such a way as to ensure the reproduction of existing social class relations and status. In addition, social reproduction theory maintains that the ideological belief in the American credo of equal educational opportunity functions to
create the hegemonic illusion that the distribution of educational and occupational resources and rewards are the result of individual ability, effort, and merit.

Bowles and Gintis (1976), maintain that there is a direct correspondence between economic relations and the social reproduction of class relations. They emphasize the strong correspondence between the structural design and function of the workplace and that of schools, including that of the alienation of workers and students from each other through competition and the processes whereby each are subjected to hierarchal structures of authority where they relinquish control of their production. Bowles and Gintis assert that the similarities between school and work serve to reinforce and reproduce the relations of dominance and class inequality necessary to feed and sustain a capitalist economy, which includes a division of labor that unequally allocates economic rewards and social class status.

Bourdieu (1977) proposes a less deterministic model in explaining the processes of social reproduction and the role of schools in this process. While his work does not necessarily contradict that of Bowles and Gintis, Bourdieu focuses more on the cultural forces that are brought to bear upon individuals as social agents in the socio-cultural reproduction of class relations. Bourdieu’s explanation is both dialectical and circular such that social reproduction for Bourdieu is the result of "objective structures [that] tend to produce structured subjective dispositions that produce structured actions which, in turn, produce objective structure" (Swartz, 1977:548).

Bourdieu’s theory rests heavily upon his concept of "cultural capital." Cultural capital, for Bourdieu, refers to the class interests and ideologies that the child brings with him or her into the school, which are communicated to school authorities through the child’s linguistic and cultural competencies. These competencies include the knowledge, skills and attitudes acquired through family and community cultural experiences. Since schools embrace
and embody the class interests and ideologies of the dominant class, they reward the cultural capital of child from the dominant classes and devalue that of the lower classes. As MacLeod (1987) explains in his discussion of Bourdieu, "children who read books, visit museums, attend concerts, and go to the theater and cinema (or simply grow up in families where these practices are prevalent) acquire a familiarity with the dominant culture that the educational system implicitly requires of its students for success in school" (Ibid:12).

Bourdieu's contribution to social reproduction theory lies primarily in his analysis of the way in which the school functions as a market place in which the cultural capital of the child comes to be exchanged. Students whose cultural capital is more valued by the system will be responded to differently by the educational system than that of a child who lacks the cultural capital of the dominant class. Rejecting a deterministic model, Bourdieu contends that there is a greater correspondence between the educational attainment of a student's parents and a child's academic achievement. While acknowledging that the relationship between educational and economic achievement continues to be strong, Bourdieu further contends that even "social class background is mediated through a complex set of factors that interact in different way at different levels of schooling" (Bourdieu, 1977:496). In other words, for Bourdieu, the social reproduction of class relations is not as "cut and dry" as it may appear, but is rather somewhat imperfect in both its process and its outcomes.

Social Reproduction and Students with Disabilities

While Bourdieu's analysis focuses primarily upon the effects of social class and the educational attainment of a student's parents, his theory of cultural capital could well be extended to explain that of the differential treatment of students with disabilities. While his analysis already offers some keen insights into the "how and why" students from lower socio-economic backgrounds are more likely to be identified as having a learning disability, it could
easily be argued that students identified as mentally retarded, severely emotionally disturbed, or severely physically disabled lack the kind of cultural capital that is not only highly valued by schools, but considered necessary to academic success. Even if a student comes from a family of high status and economic means, the presence of a disability may become an overriding factor when it comes to providing these students access to the rewards offered to their non-disabled peers of the same socio-economic class.

Cultural capital can be understood, then, not only in terms of social class or the educational status of one’s parents, but in terms of the mental and/or emotional disposition of the student and the perceived intellectual aptitude they possess relative to school success. Put bluntly, a student with severe mental retardation has little, if any, cultural capital to exchange in the educational marketplace, despite the economic or educational success of his or her parents. This is not to say, however, that the resources of economic and social class status of these students will have no bearing upon the process of accessing educational resources for their child. The point here is only that, in terms of cultural capital, students with educational disabilities, by definition, bring less cultural capital to the educational marketplace, resulting in less access to the opportunities and experiences (as a result of educational tracking) that are critical to educational and occupational success.

Just as important to our study of students with disabilities as it relates to social reproduction theory is Bourdieu’s concept of *habitus*, which is best understood as the internalized perception of one’s self, one’s world, and one’s relationship with others. This internalized perception of, and disposition toward, the social world provides for the individual a kind of anticipatory design for what it is that the individual can expect from society and its institutions. As MacLeod (1987) summarizes and concludes in his discussion of Bourdieu’s concept of "habitus":

This conglomeration of deeply internalized values defines an individual’s
attitudes toward, for example, schooling. The structure of schooling, with its high regard for the cultural capital of the upper classes, promotes a belief among working class students that they are unlikely to achieve success. Thus, there is a correlation between objective probabilities and subjective aspirations, between institutional structures and cultural practices...
Aspirations reflect an individual's view of his or her own chances for getting ahead and are an internalization of objective probabilities. But aspirations are not the product of a rational analysis; rather, they are acquired in the habitus of the individual (p.13)

The same can be said of persons with disabilities. The identification of a student as having an educational disability represents an institutional response that essentially asserts that the student can't learn under "normal schooling conditions." The labeling process calls forth an institutional response for special interventions that the system defines as necessary to meeting the unique needs of the child. However, labeling theory informs us that individuals often internalize the assessment that the label applied by others necessarily implies. For students with disabilities (and their families), while the labeling process may provide a "rational" (i.e., objective) explanation as to why the student is not successful in school, it also produces in the individual a sense of lowered aspirations with regard to what it is she/he can hope to achieve academically as a student as well as occupationally as an adult (Phelps, 1985; Stainback & Stainback, 1992).

The culture of the school community necessarily reflects that of the larger society. Just as in a democratic society, the division of labor is viewed as a complex process wherein occupational selection is assumed to operate freely on the basis of interests, ability and potential (Thompson, 1973), the American credo of equal educational opportunity is also seen as a normative enterprise that results from a process of selection that is believed to operate freely and "objectively," -- that is, on the basis of individual effort, interest, and ability. But as Michael Apple (1982) points out, education through and through is a political enterprise, and while the emphasis may be upon providing what may appear to be a "neutral" method of...
delivery, the real aim of education is to produce a willing labor force for a hierarchy of positions that are inherently unequal. Education, as an institution, must therefore legitimize the supporting ideologies of equality and class mobility in order to justify and perpetuate itself in a liberal democratic state. The consequences, according to Apple, is that - as a fundamental part of our belief system - the notion that America is the land of equal opportunity undermines and misdirects any serious consideration of issues of social inequality.

While the legislative mandate that students with disabilities be educated in the least restrictive environment along side their non-disabled peers can be seen as a logical out growth of a democratic nation-state that is predicated on ensuring equal opportunities for all its members, the role of educational institutions as socialization agencies responsible for instilling democratic values in society’s youth while at the same time sorting individuals for participation as adults in an unequal and highly differentiated workplace, may very well run counter to the goals and intent of LRE.

Just as the sorting and selecting of students for adult roles can be seen as a process whereby educational institutions come to define and process students in terms of categories that rest upon notions of the "ideal type," so too the "outcomes" of the educational system come to be defined in terms of an "ideal type." These ideal types are expressed in terms of the dominant cultural values of the institutions, which include those of high academic achievement and individual aspirations for higher education as a means to economic and occupational success. It is within this context that the education of students with disabilities in the least restrictive environment, as well as the purpose of vocational education, come to be understood as a logical consequence of an American educational system that is charged with conflicting aims and purposes -- those of practicing a democratic idealism while at the same time providing for the differential preparation of society’s youth for participation in a
capitalist economy.

Social reproduction theory, when combined with deviance theory, provides a theoretical perspective for understanding the ways in which schools process students with disabilities in the process of dealing simultaneously with the conflicting aims of the institution. This research seeks to better understand the socio-political and structural dynamics of the school as a social institution that reproduces the values and beliefs of the community, and how these values and beliefs come to be expressed in terms of the educational placement of students with disabilities in vocational education. As such, in addition to addressing the issue of STEP as it relates to the barrier these programs might pose to the mainstreaming of students with disabilities in vocational education, one of the objectives of this research is to determine the extent to which the findings that result from an investigation of the structural dynamics of the student placement process offer support for the theoretical assumptions upon which social reproduction and deviance theory are based.
CHAPTER II

VOCATIONAL AND SPECIAL EDUCATION:
ISSUES OF LABELING AND STIGMA

Federal legislation aimed at ensuring equal educational opportunity for persons with disabilities can be seen as the culmination of nearly two centuries of social policy directed toward ensuring the "appropriate" treatment of persons with disabilities in American society. This chapter discusses the development of social reform movements in the 19th and early 20th century as they relate to treatment of persons with disabilities. Proceeding in the early 1800s with society's response to persons deemed to be "feebleminded," or otherwise "mentally subnormal," public policy trends toward the institutionalization and deinstitutionalization of persons with disabilities over time reflect the changing views in American society with regard to both persons with disabilities and the role and function of the American educational system in providing these persons with education and job-related skills. Of particular importance here is the emergence of intelligence tests in the early part of the 20th century and the role that intelligence testing played in both the birth of special education and the rise of vocationalism\(^8\) in American education.

The second section of this chapter provides a discussion of sociological theories of deviance as they relate to understanding the role that deviance plays in defining and maintaining group boundaries. In addition, this section discusses the social construction of

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\(^8\) The term "vocationalism" refers to advocacy for the provision of what used to be referred to as "practical arts," and later "industrial arts," education as an important part of a comprehensive public education. At the turn of the century, these courses consisted primarily of instruction in skills of industrial trades, such as wood working and millery, or metal working (for boys), and the domestic trades of home economics and housekeeping, such as sewing and cooking (for girls).
stigma, pariah groups, and minority group status as they relate to understanding the placement of students with disabilities in segregated settings as one that functions to delineate competing status groups and corresponding group boundaries within the schools which serve to reaffirm the values and beliefs of the institution and the dominant culture.

Social Reform in the 19th and early 20th Century

In early American society, the family and community were the primary agencies of social control. Care for the physically handicapped, the infirmed, aged, maimed and mentally ill was not mediated through separate special institutions, but was dealt with informally by the family and community. "While Americans had always been concerned about these issues, during the colonial period they did not define crime, poverty, or illness as critical social problems" (Lazerson, 1974:35). As American society grew in size, complexity, and diversity, formal agencies and institutions of social control began to emerge.

The Asylum Movement

Early social reformers in the 19th century initially identified the cause of insanity, and other forms of social deviance, as located in the chaos and disorder produced by the destruction of the traditional community and the inevitable stresses and strains it produced for the individual (Rothman, 1971). Locating the etiology of insanity within a social context, reformers laid the basis for an environmental approach to therapy as one that would be accomplished either by reconstructing American society or by creating model environments in which the "insane could be made sane" again (Lazerson, 1974).

Not surprisingly, reformers turned to creating model environments. According to Lazerson (1974):

The most striking feature of nineteenth century America's response to deviancy and dependency was the movement to construct specialized segregated residential institutions. Asylums for the criminal delinquent, for the insane and feebleminded, and for the poor and the orphaned became the pre-eminent response to all forms of social disorder... the preferred treatment
for those who stepped outside the social code and the bounds of normality (Ibid:35).

The asylum movement stressed both the social origins of disease and the notion that individuals could be treated without the use of undue force or punishment by controlling the environment of the person.

For much of the 19th century, insanity and feeblemindedness were linked in professional and lay people's minds and were often associated with an inability to tell right from wrong. The first residential institutions created for these populations were originally designed to be educational and therapeutic environments for the treatment of patients with the intention of returning the individual to their respective communities. "Although doubts existed that all could be made normal, the expectation was to make the deviant as much like the non-deviant as possible" (Lazerson, 1974:40).

Expectations that the mentally subnormal could be educated and trained for self-sufficiency soon gave way to custodial practices and an ideology of humanistic "care taking." Increasingly it was assumed that it was better for the feebleminded to remain institutionalized in order to spare them from society -- an assumption that Wolfensberger (1969) refers to as "protecting the deviant from the non-deviant." However, by the late 19th century studies linking feeblemindedness to criminality become popular. The notion of protecting the feebleminded from society gave way to that of protecting society from the feebleminded. As Lazerson (1974) states:

When tied to studies that showed that feeblemindedness and criminality were correlated, the essential basis for a custodial ideology was forged. The feebleminded were a potential menace to society, "moral imbeciles," and had to be permanently segregated so that they would neither contaminate others nor reproduce... a pattern of institutional development that paralleled that found in the treatment of other forms of deviancy and dependency (p.41).

Similarly, while early advocates of institutional care for the mentally retarded had based their plea for separate institutional facilities upon humanitarian beliefs buttressed by
religious conviction, by the end of the nineteenth century, as the mentally retarded and insane were increasingly portrayed as prone to criminal behavior, disease, moral degeneracy, and sexual promiscuity, both public and professional concern shifted away from a desire to protect the mentally retarded against society to that of protecting society against the mentally retarded (Edgerton, 1967). The widespread practice of institutionalizing the mentally ill, mentally retarded, mentally subnormal, and feebleminded became a standard societal response to the control of these populations.

However, by the turn of the century, many social reformers were charging that a large number of persons were being placed in asylums who were capable of being educated and trained to remain in the community. With the public school system fairly well established as a tax-supported and tuition-free system, it was increasingly argued that the public schools could serve a large portion of the population that had previously been served by residential asylums (Cremin, 1962; Lazerson, 1973).

At the turn of the century, American society was experiencing the social disruptions brought about by rapid changes in the size and ethnic composition of its population as well as changes in the social organization of communities and the workplace resulting from increased industrialization. Public education was quickly emerging as the primary institution for the solving of society’s ills. Increasingly education was seen as capable of providing an effective means for not only facilitating the "appropriate" assimilation of America’s growing immigrant population into American society, but for transmitting the knowledge, skills and attitudes necessary to assume a productive role in America’s rapidly expanding, industrial based, economy.

**Educational Reform, Vocationalism, and the Birth of Special Education**

The birth of special education and growth of vocationalism were part of a much
broader transformation of the American school that resulted from the educational reform movements of the century. These movements, and the educational policies and practices that they spawned, reflected the changes in the social, political and economic landscape of the times. These movements also produced changes that would serve to define the purposes, goals and practices of American education for the new century that lay ahead.

In the mid- to late 1800s through the mid 1900s, the entire western world experienced tremendous shifts in social organization. These shifts were largely the result of changes in both the forces and social relations of production as a result of increased industrialization. Industrialization, and the changes in division of labor and the distribution of power and wealth it produced, was the single most important factor that contributed to changes in the structure of the family, community and nation-state. In America, rapid changes in economic production were also accompanied by a tremendous influx of immigrants.

Also accompanying the economic developments in America was a new and emerging national identity of economic, political, and moral leadership and clout, which was expressing itself in forms of economic and political expansion. The combination of American laissez-faire free market capitalism, American pragmatism (with its emphasis on utility and efficiency), and American Progressivism (with its social and political ideals of democratic social reform), produced a variety of internal struggles and contradictions. Among these internal struggles was the issue of public education -- its function and objectives.

Much of the support received for educational reform was directly related to the powerful child welfare movement that had emerged in the later half of the 19th century, led largely by the Progressive movement. Citing the school dropout rate of children and their concentration in the factories, the apparent failure of many families to provide the proper upbringing and the need to improve the educational level of the work force for purposes of
offsetting the threat of international economic competition, the movement to get children out of the factories and into the schools received widespread support. Rejecting the popular notions of Social Darwinism, the Progressive movement emphasized the pragmatic ends of educational reform as a primary mechanism for democratic social reform.

**Vocational Education.** Central to debates in the area of educational reform at the turn of the century was the issue of vocational education (Cremin, 1988; Cuban, 1982). Vocational education, as an essential aspect of the schooling of American youth, was seen by many as the ideal cure for many of the social and economic ills plaguing both the American economy and the social life of American communities (Davenport, 1909; Ricciardi, 1932; Norton, 1938; Prosser & Quigley, 1949; Thompson, 1973; Cuban, 1982).

Historically, vocational education took place informally in the home, on the farm, and in small family owned shops where the knowledge and skills of craft and cottage industry were transmitted from one generation to the next. Apprenticeship was also an early form of vocational education, again largely informal, yet also often bound by verbal contracts of commitments of production or other economic repayment. The industrial revolution, with its increased reliance upon machines and increased divisions of labor, changed the ways in which goods were produced, who controlled production, and how the material rewards of production were distributed. The specialization of tasks and the knowledge and skills necessary to perform these tasks required constant training and retraining, rendering traditional modes of vocational education obsolete.

Between 1880 and 1920, the national urban-industrial output in America was increasingly dominated by large corporations (Wiebe, 1967, cited by H. Kantor, 1982:18), and the specialization of labor spread to most industries, dramatically altering the nature and meaning of work (Kantor, 1982). Corporations began complaining about the shortages of
skilled workers and established their own schools to recruit and train workers. Labor unions as well developed their own training schools and apprenticeship programs to train workers in skilled occupations (Murray, 1964; Katznelson & Weir, 1985). Soon, conflict developed between business and industry and labor over the training of workers, many of them immigrants for whom English was not their first language.

Increasingly, it was to education, and particularly vocational education, that Americans turned in response to the industrial conflict and social alienation these forces produced. As Kantor (1982) points out:

After 1890,... what had been a loosely articulated desire to use schools to prepare youth for the workplace blossomed into a major movement, attracting almost every group in the nation that had an interest in education. Businessmen, manufacturers, farm leaders, labor spokesmen, social reformers, intellectuals, and many educators joined the campaign to vocationalize the schools (p.26).

Each group had its own vested economic or moral interest in advocating for vocational training in the schools. Both business and labor saw the economic payoff of no longer needing to invest in the training of workers. Labor also saw the advantage of a well-educated work force in the advancement of greater worker control in the factory. The labor movement, heavily Marxist-socialist in orientation, saw other advantages to a well-educated labor force -- namely, the socio-political transformation of the workplace.

Social reformers saw vocational education as a way of keeping youth out of the factories and in the schools longer, not only providing youth with a trade, but instilling in them the desire to work -- a moral value of intrinsic good aligned to the Protestant work ethic. Influential educators and social reformers, such as John Dewey and Jane Adams, who saw vocational education as an opportunity for youth to transform the workplace also advocated for the vocationalization of schools and the schooling process. Dewey, an American educational philosopher and writer, saw the need for children to be able to see a
connection between educational content and their lives in the real world. Jane Adams, a social activist and child advocate, saw the potential of education as a means to improving the human condition.

For Dewey, vocational education exemplified the pragmatic application of knowledge -- the ideal integration of content and form with purpose and real-world relatedness. The results of this, as Dewey saw them, would also be the active democratic participation of workers in changing the workplace as adults. For Adams, vocational education was a way to teach the value of industrial cooperation and instruct young people how to work together democratically -- values they would bring with them into the workplace as adults.

The Birth of Special Education. By the 1920s, it was widely assumed that any social problem could be effectively treated by making it an educational problem (Cremin, 1962). The cultural and economic roots of the conflict between the philosophical ideals of democracy and the pragmatic ends of economic production not only impacted the structure and process of public education and schooling in America, but also helped to shape the birth and development of the field of special education as well.

Lazerson (1974) cites four specific developments in the first three decades of the 20th century that served to lay the foundation for the establishment of special education. The first is the notion that schools could assume a greater role in the solving of social problems. The second was the adoption of a corporate industrial model of organization for schools, the third was the development of vocationalism as a central aspect of "equality" of educational opportunity, and fourth was the increasingly widespread use of intelligence tests as the objective basis upon which the distribution of education and schooling experiences would be made (Lazerson, 1974).
The corporate industrial model upon which schools came to be designed, incorporated the basic social philosophy of the paternalistic "free schools" while at the same time reflecting the organizational forms of the developing industrial order. This organizational model, which Katz (1971) refers to as the "incipient bureaucracy," was characterized by compulsory attendance, with an emphasis on the importance of time; the centralization of administrative control; the assignment and classification of students into grades on the basis of age; an emphasis on the training and professionalization of teachers; and the standardization of curriculum. While schools were officially religiously and politically neutral, the values taught in schools reflected those of both capitalist ideology and the Protestant ethic, which included "a fear of poverty, a desire for wealth, a respect for work, a need for thrift, and a keen sense of duty to be productive, useful citizens of the community" (Karier, 1973:10).

Even the organization of the classroom reflected the factory model (Bowels & Gintis, 1976; Carnoy, 1974). The design of classrooms and classroom activities paralleled that of factory floor production -- filled with repetition and routine, rote memorization, and the assignment of academic piecework tasks to be accomplished. Grade assignment was age-based and curriculum content was delivered to students en masse, with the expectation that "normal" students learn at basically the same rate, and that results would be achieved uniformly. Education and schooling were seen as similar to that of the industrial production process wherein it was assumed that -- the same material (children), receiving the same processing (instruction) would produce the same product (educated, productive person), with little variation in quality.

However, as Lazerson points out, the creation of a mass educational system served to highlight group and individual differences, and "raised in a cogent way the phenomenon of failure, i.e., those who did not achieve despite the availability of opportunity." (Lazerson,
If students did not achieve success through the model of delivery, it was assumed that there was something wrong with the child.

The Use of Intelligence Tests

The assumption that a student's lack of academic performance was necessarily the result of an individual deficiency was reinforced by the appearance and use in the early 1900s of the Binet-Simon scale for measuring intelligence (Terman, 1916; Goodenough, 1949). In fact, the Binet-Simon was originally designed and intended to identify those children who would not succeed academically through regular schooling and should be placed in special schools for the mentally subnormal (Binet & Simon, 1905 in Mercer, 1974:145). With the acceptance of the Binet-Simon test of intelligence, which was widely used and dominated mental testing in the U.S. and Europe, IQ (intelligence quotient) became synonymous with intelligence. In addition to its proclaimed efficiency, the Binet-Simon could be used on a massive scale and at a relatively low cost (Yoakum & Yerkes, 1920; Yerkes, 1921; Weinland, 1970).

The widespread use of intelligence testing on students came about largely as a result of the efforts of Henry C. Goddard (Goodenough, 1949; Weinland, 1970) and Lewis Terman (Lazerson, 1973). In his studies, Goddard found that at least two percent of the school population was "mentally defective" and therefore unable to achieve in the traditional classroom. Goddard also claimed that his findings provided scientific evidence for the belief that mental deficiency was both hereditary and a cause of social deviancy. Goddard used his findings to attack what he considered the educational system's "archaic attachment to equality" and urged the use of testing for purposes of classifying individuals by their inherent "trainability," calling for the isolation and sterilization of the worst cases of mental deficiency (Binet & Simon, 1916 in Kanner, 1964; and Lazerson, 1973).
It was Lewis Terman, and the use of psychological tests of intelligence during World War I, that made mental ability testing a major influence in American education with his book, *The Measurement of Intelligence* published in 1916. According to Lazerson (1973), Terman's book became the Bible of mental testing and the standard by which a child's potential could be determined. By the 1920s, several key relationships were assumed to be true with regard to an individual's intelligence. These include the notions: (1) that intelligence was inherited and immutable; (2) that IQ and intelligence were synonymous and could therefore predict school achievement; (3) that socioeconomic status was a product of intelligence; and (4) an individual's intelligence determined their future social and occupational behavior (Lazerson, 1973). As such, these tests served to provide *scientific* evidence that confirmed most of the commonly held stereotypes regarding the relationship between social class, race, nationality, and intelligence (Lazerson, 1973) [Emphasis added].

The popularization and widespread use of intelligence testing provided the basis for the development of special education in the following three ways: (1) it confirmed that large numbers of the population were subnormal (between two and three percent were deemed to be severely deficient and 14% to 16% to be borderline) -- numbers too large for residential institutions to accommodate; (2) the tests provided a foundation of "scientific" support for not only the notion of inherent limits of learning ability, but a procedure for the categorizing of students for purposes of educational training that was more in line with their *inherent* ability and future role as a workers; and (3) reinforced the ties between mental deficiency, low socioeconomic status, and deviancy (Lazerson, 1974). As Lazerson points out:

*Questions relating to the choice of studies, vocational guidance, schoolroom procedure, the grading of pupils, promotional schemes, the study of retardation of children in schools, juvenile delinquency, and the proper handling of sub-normals on the one hand and gifted children on the other,--all alike acquired new meaning and significance when viewed in the light of the measurement of intelligence...*(p.45)
Notions of social responsibility for providing educational and training opportunities tailored to the child's needs and abilities, and the possibilities of social engineering strengthened the case for special education of the handicapped (Gesell, 1921; Wallin, 1924), as did the new emphasis on the need for curriculum differentiation and vocational training. The need to provide a distinctive curriculum that was in accordance with a student's learning capability for future vocational roles meant that claims for special education and demands that it be provided, were in accordance with prevailing trends in the educational system as a whole (Lazerson, 1973). There was little resistance to the development of special education as the answer to the "social problem" of educating and training the "mentally subnormal."

Perhaps most importantly, intelligence testing provided a rational means for identifying the reason for a student's school failure, as well as a method by which students could be separated out from the mainstream for differential schooling. It was reasoned that all students would benefit from segregated schooling. First, segregation would free normal pupils from the restrictions imposed by the deficient who represent a drag on the learning of normal students. Second, by being taught by specially trained and sympathetic teachers in a special school or segregated setting, the "mentally underprivileged" could be provided aid and encouragement, as opposed to scorn and ridicule (Wallin, 1924).

The distinctions made between mental deficiency, behaviorally disruptive and truant children, and the physically handicapped were frequently ignored and special classes became the "dumping grounds for those the system could not accommodate or tolerate" (Wallin, 1924; White House Conference, 1931, as cited in Lazerson, 1974:49). With the growth of special education came the demand for better facilities, trained teachers, and a curriculum more suited to the educability of the mentally deficient that was tied to their limited vocational expectations.
Vocationalism and Special Education

The growth of vocationalism in the early 1900s reflected a number of assumptions about American life and the purpose of schooling. It reflected, for instance, the assumption that social mobility in an urban-industrial society was somewhat circumscribed. Vocationalism also assumed that in a society that valued institutional efficiency and one in which work was fragmented and specialized, education should be designed to accommodate the adult vocational roles that individuals would later assume (Lazerson, 1973). In addition, with traditional education deeply entrenched in the British tradition of the liberal arts (that which was originally designed for the middle and upper classes who would continue on to college and a profession), increasingly there was a demand for educational curriculum that was more relevant to the student’s life. It was argued that, to appeal to youth who had traditionally failed at school, course work would have to be directly relevant to future economic and social status.

It was within this context that "equality of educational opportunity" came to be articulated in terms of the need to provide a differentiated curriculum structure that allowed students to choose the area of study most suited to their interests and abilities (Lazerson & Grubb, 1974). Not unlike those individual who were separated out for special education, vocationalism was most consistently applied to youth who were considered to be inadequate for receiving a traditional liberal arts education in the traditional school setting.

How to determine exactly what the needs and abilities of individuals were, what school course work they should take, who should decide, and how the decisions were to be made posed tremendous methodological and ethical dilemmas for the schools. Assuming that most of the weak school achievers would come from among the lower socio-economic classes, educators were faced with finding a means for democratic categorization no matter how highly
correlated to school success they might be. Not surprisingly, "upon these issues of choice and classification, so crucial to vocationalism, intelligence testing in America's schools grew" (Lazerson, 1974:44). Intelligence testing became the scientific (and therefore "objective") and ultimate means for determining which type of educational treatment plan was best suited to the individual's interests, needs, and potentials in preparing them to assume the adult role of being a productive member of society.

In summary, educational tracking in the form of both separate schooling and vocational education provided for the differential processing of persons who did not fit the norm, were disruptive in class, were from families of poor and lower class parents, or who otherwise represented a drag on a system. It did so by providing a "reasonable" and justifiable solution to the widely held criticism that the standard, traditional educational curriculum was not relevant or responsive to the real needs of the majority of children, particularly those who would not be going to college or pursuing a profession.

The institutionalization of intelligence testing provided a means for sorting out those students who fell outside the boundaries of what was considered normal or expected with regard to educational performance. As such, the social conceptualization of their behavior, natural abilities and tendencies, and the treatments they were subjected to, reflect their status as deviants. Casting certain categories of persons within these roles served to provide a set of boundaries for what was expected and what would be tolerated by certain social institutions.

"Disability as deviance" -- as it functions as a system of boundary maintenance is further developed in the next section. The importance of developing this theoretical line of reasoning lies in the contribution it makes to understanding the institutional treatment of students with disabilities in vocational education as one that serves to define and maintain group boundaries. By maintaining the internal integrity and identity of particular status
groups within the school as an institution, the segregation of students with disabilities from the mainstreamed setting reaffirms the value and belief that academic achievement as the product of individual ability.

Disability as Deviance

Traditionally in American sociology, the study of deviance has focused on criminals, juvenile delinquents, prostitutes, drug users and addicts, homosexuals, the mentally ill and retarded, and political and religious radicals (Lifton et al., 1968; Liazos, 1972). However, the notion that persons with physical disabilities occupy a deviant or stigmatized social role is also found throughout the sociological literature on disability (Davis, 1961; Freidson, 1965; Scott, 1969; Safilios-Rothschild, 1970; Hanks & Poplin, 1981). There remains an absence of direct reference in research literature to persons with learning disabilities as also being deviant. However, there is ample research data to suggest that an analysis of the processes whereby students with learning disabilities are identified and treated by the schools indicates that students with learning disabilities occupy a deviant role similar to that of their physically, mentally and emotionally disabled peers.

The importance of understanding the social construction of students with disabilities as deviants lies in the functional role deviance plays in society. It will be argued here that the sorting, selecting, and separating out of students with disabilities for purposes of receiving separate educational instruction serves the purpose of defining and maintaining social order, role expectations, and group boundaries within the social organization of schools by creating a pariah group within the walls of the institution. As a pariah group, those who are segregated from their mainstreamed peers act as a pollution barrier -- a barrier which serves to define certain boundaries within the institution that legitimize the existence of competing status groups, and in so doing serves to reinforce the dominant values and beliefs of the American
capitalist society and the myth of meritocracy.

The first part of this section provides a review of deviance theory and presents a theoretical perspective for understanding "disability as deviance," the role of stigma, and the institutional designation of the disabled as a pariah group when they are educated in a separate setting. The second part of this section discusses the identification and classification of students with disabilities within the school and the response to these labels by control agents and peers within these institutions in ways that reflect the social construction of deviance, stigma, pariah and minority group status for students with disabilities.

**Sociological Theories of Deviance**

In formulating a theoretical perspective on disability as deviance as it relates to schools as a primary social institution, it is necessary to identify a series of primary assumptions upon which sociological theories in the area of deviance are based.

Acknowledging the existence of divergent paradigms in the area of sociological theory, Elaine Rizzo (1982), in formulating her theoretical perspective on "victims" as deviants, points out that:

> Debates over whether society is consensually based or a product of groups conflict and over whether the proper locus for theory and research is in the social structure or the process of interaction have resulted in theory and research that is fragmented and discontinuous rather than unified and cumulative. (p.1)

Despite the lack of consensus in the field of sociology over these issues, Rizzo is able to draw selectively from both the structuralist and interactionist orientations in cogently identifying five primary theoretical assumptions upon which deviance theory is based. The five assumptions delineated by Rizzo are:

1. Social expectations regarding behavior provide predictability and order to social life;
2. Behavior that violates such expectations generates an imbalance which requires an adjutive response from the social audience in order to restore predictability and order;
Therefore, behavior that deviates from societal expectations will be identified, labeled and categorized into a role that functions to maintain group boundaries;

The creation of deviant roles isolates and devalues the occupants in ways that reinforce and strengthen group norms and values;

Role assignment occurs as part of an interactive process which is influenced by both the nature of the deviance and the nature of societal reaction toward the behavior and those engaging in the behavior. 

(Ibid.p.3)

Applying these theoretical assumptions to the treatment of students with disabilities by schools as agencies of social control, the following observations can be made:

The identification and tracking of students as educationally disabled serves to define and reinforce a set of behavioral expectations for all students with regard to what constitutes acceptable and successful school performance, which provides order and predictability to social life within the institution;

The identification and tracking (including the removal) of students with disabilities represents an adjutive response on the part of the social institutions to restore predictability and order within the institution;

The over-representation of lower class students in certain categories of disability, and the practice of tracking these students, functions to maintain social class and status boundaries within the institution;

The stigmatization of students with disabilities by teachers and peers as "dumb," "mentally retarded," "weird," and/or "deformed" devalues students with disabilities and serves to reinforce the dominant norms and values placed on educational certain types of social behavior and academic achievement; and

The labeling of students as educationally disabled is an interactive process that is influenced not only by the appearance and behavior of the individual, but by the school culture, the social class values of those in positions of authority and decision making, and the social class of the individual being labeled.

Deviance theory informs us that the process whereby an individual comes to be labeled deviant depends not only upon the behavior and other personal characteristics the individual may exhibit or possess that violates what is socially expected, but also upon the social and cultural context within which the label of deviant is applied. Deviance does not exist "out there" in the world as an objective reality, but is rather socially created as a result of the cultural and institutional context of the school and society's need for order and predictability.

The central problem for theory and research in the sociology of deviance lies in (1)
understanding what behaviors come to be defined as deviant as such by members of a group, community, or society, and (2) how these definitions "organize and activate the societal reactions by which persons come to be differentiated and treated as deviants" (Kitsuse, 1973:248). That is, it is not the behavior per se that defines a person as deviant in the sociological sense, but "the responses of the conventional and conforming members of the society who identify and interpret behavior as deviant" such that the individual is accorded "differential treatment as a consequence of that definition" (Ibid:253).

As Howard Becker (1963) points out, "social groups create deviance by making the rules whose infraction constitutes deviance, and by applying those rules to particular people and labelling them as outsiders" (Ibid:8). The degree to which an act will be treated as deviant, according to Becker, depends not only upon who commits the act, but who feels harmed by it as well. Because of this, social rules tend to be applied more to some persons that others (Becker, 1973a). Similarly, Freidson (1965) suggests that disability is an "imputed" form of deviance, meaning that the disabled individual is "deviant" because other people consider his or her condition or behavior inappropriate or other than normal (Hanks & Poplin, 1981).

In summary, the social construction of deviance may be conceived as a process by which members of a group, community, or society (1) interpret behavior as deviant, (2) define persons who so behave as a certain kind of deviant, and (3) accord them the treatment considered appropriate to such deviants (Kitsuse, 1973a:17). Therefore, issue of social control, power, and authority are critical to understanding the process of labeling deviants in that "those who label (the victimizers) are more powerful than those they label (the victims)" (Liazos, 1972). And, as Delos Kelly (1978) points out, "the school, like most any other institution concerned with processing people, is an excellent place to observe the labeling
process or ceremony" (Ibid:12).

The Social Construction of Deviance in the Schools

According to Kitsuse, the differentiation of deviant populations from non-deviant populations "is increasingly contingent upon circumstances of situation, place, social and personal biography, and the bureaucratically organized activities of agencies of control" (Kitsuse, 1973:248). Evidence of this "contingency" factor is suggested by a variety of findings in the research, including: (1) the significantly different rates at which students are identified as having an educational disability, both across school districts and individual states; (2) significantly different rates in the distribution of students with disabilities across categories of disability; (3) the tendency for students of racial minority and low socio-economic class to be identified as disabled; (4) the fact that the majority of students identified as having a disability are identified as learning disabled -- a category that remains the most subjective with regard to the diagnostic criteria utilized for classification purposes; and finally (5) the effect that such things as state funding policies have on the rates at which students with disabilities are identified, as well as served in mainstreamed or separate settings.

These issues are among the general aspects of what Kitsuse and Cicourel (1963) called the "rate producing process" in the institutional construction of rates of deviance, and reflects what Freidson (1973) is referring to when he talks about the institutional circumstances that are responsible for producing a "representation" of the general universe -- that is, those circumstances and institutional behaviors which reflect the way in which control agencies "root out, reach out, or bring to book" their cases in establishing official rates of deviance (Kitsuse & Cicourel, 1963:26).

The bureaucratic processes whereby students with disabilities are identified by schools exhibit striking similarities to the processes identified by Freidson (1973) in his discussion of
what Kitsuse and Cicourel refer to as rate producing behavior. According to Freidson (1973), both professionalism and bureaucratization objectify deviance and reify diagnostic categories. In this sense, while such agencies may not actually create deviant roles, they do by the nature of their activities refine and clarify their boundaries and, by assuming responsibility for their control, add elements to the roles that may not have existed previously, and so encourage pulling new people to them (Freidson, 1973:26).

Acknowledging that "indeed, socially structured biases seem to operate in the identification of deviants and their allocation into deviant roles," Friedson (1973:125) also states that control agencies in our society also have "the business of defining deviance and must both solicit support for their activities and account for what support they have already gained: if only to account for themselves, they must calculate a general universe" (Ibid:125).

One of the problems, according to Michelle Fine and Adrienne Asch (1988), is that disability is often assumed to be located solely in biology, and thus disability is accepted uncritically as an independent variable (Fine & Asch, 1988: 64). The shift toward the identification of a disability as located within the individual is reflected not only in the historical use of I.Q. and other tests of "aptitude," but also the definitions that delineate specific clinical criteria in specifying the categories of disability to which a person may belong. This "medical frame of reference" reflects a conceptualization of disability and deviance as an individual pathology (Mercer, 1973) and present labeling practices have been criticized as colluding with this presumption (Adelman, 1992). Identifying the "problem" as located within the individual results in an institutional response of imposing interventions which are designed to "treat" the individual in terms of their pathology, as opposed to the environment - or context - in which the disability is defined. Educators, education administrators, and school psychologists design "treatment programs" for students with disabilities in the form of the student's formal, written "individual educational plan" (IEP) much the same way that doctors prescribe medical treatments for patient recovery and
rehabilitation. As Mercer points out, when deviance is perceived as an individual pathology, social action then centers on changing the individual, and when these efforts fail, on removing them from participation in society (Mercer, 1973).

Researchers have long been aware that the degree of visibility of the impairment or the age at which it was acquired may influence the psychological consequences and the social situation of people with disabilities (Barker, 1948; Ladieu, Adler, & Dembo, 1948; Davis, 1961; Goffman, 1963; Fine & Asch, 1988). Within the school setting, the acceptance of students with disabilities by non-disabled peers depends more upon the social competencies of the student than the academic competencies, with anti-social behavior identified as the primary reason for non-disabled peer rejection (Johnson, 1950; Gottlieb, 1974). Gottlieb found that levels of non-disabled peer acceptance of students identified as mentally retarded varied on the basis of the social class of non-disabled peer, with middle class peers exhibiting more negative attitudes and rejection behaviors than lower class non-disabled peers.

Efforts to integrate students with disabilities have occurred primarily at the elementary school level. While elementary schools may continue to engage in ability grouping and tracking within their classrooms with some "pull out programs" for individualized remedial instruction and support, for most school districts, tracking in the form of "whole class" ability grouping begins at the middle or junior high school level (grades 6-8, or 7-9) and continues through high school. If public labeling and/or the visible segregation of individuals occurs because a labeling conclusion is drawn from the process of ability grouping in school, the process, itself, may be said to be deviance-producing since by labeling the individual, it organizes a response on the part of members of the community toward the individual as a stereotyped deviant (Freidson, 1973).

The school culture is one that reflects the values and beliefs of the community and
larger society in which it is located. In American society, as Michael Begab (1974) points out, ambition, hard work, the rational and efficient use of time, moral behavior, and independence are considered to be the gateways to success, and it is assumed that the door of opportunity is open to all who possessed these virtues. The values of rugged individualism and self-reliance have served as cornerstones for public school teaching and social policy and to "fail" in this presumed "open-ended" system results in this failure being attributed to personal weaknesses and deficiencies (Levine & Levine, 1970; Begab, 1974.) According to Begab, it is because of this dominant cultural paradigm that "solutions" to the problem of educational failure "had to be person centered and orientated toward the remediation of individual deficits for better adaptation to the social milieu" (Begab, 1974:4-5).

It is within this context that the conceptualization of educational disability as deviance, as presented here, supports the observation made by Robert Merton that it is not so much that certain behavior is treated by others as deviant "since the overt behavior is institutionally permitted, though not culturally prescribed," but rather that the behavior is deviant because it "clearly represents a departure from the cultural model in which men are obliged to move onward and upward in the social hierarchy" (Merton, 1957:150, as cited in Kitsuse, 1973b:248). As such, the "failure" of a student to succeed educationally in terms of acceptable academic performance can be seen as a failure on the part of the individual to subscribe to the moral values of the community.

The Consequences of Labeling

While the labeling perspective has been central to much of the research and theory on deviance over the past several decades, it has not been as thoroughly explored in the area of disability (Hanks & Poplin, 1981). Labeling theory incorporates the notion developed by George Herbert Mead (1934), that persons perceive and define themselves as they believe
others perceive and define them.

In the case of students with disabilities, labels become shorthand terms which facilitate communication among teachers and other professionals within the organization of the school about who or what the child is. According to Begab (1974), every label, especially when it has been assigned pejorative meanings by the public, conjures up an image and stereotype of the person labeled which conceal his differences and individuality. Thus, blindness is immediately associated with disability, delinquency with "badness," and retardation with dependency and, often, stigma (p.28).

When an individual is labeled as deviant, the individual is responded to by others on the basis of this label, and this societal reaction to the label creates and reinforces the image of oneself as being odd, different, or deviant. The classroom in which a student participates is an important place in the life of the child. As Khleif (1966) points out, the classroom is a place where teachers and peers make assumptions about what the student should do, should get, and should be and therefore is a place which generates assumptions about one's identity. As such, "a pupil's participation in the classroom has self defining implications" (Ibid:182). The placement of a student in a high or low ability group affects the expectations that a teacher holds with regard to the student's performance and behavior (Rosenthal & Jacobson, 1968). Students in low ability tracks report lower self esteem than students in higher ability tracks (Oakes, 1985) and these negative attitudes toward one's ability become more negative over time as each year passes and they remain in a lower track (Marsh, 1989).

When the perception and expectations of others are internalized by the student it creates a self-fulfilling prophecy - the student behaves in ways that are consistent with the label that has been applied, as Delos Kelly (1978) observed in her study of how schools manufacture misfits. It is in this sense that Bourdieu's notion of habitus is relevant. As students internalize the expectations of the institution, teachers, and peers, their performance and aspirations come to be defined.
The practice of tracking serves to generate and reinforce group differences. Not only is the student’s perception of his/her self reinforced by the tracking process, the student’s placement into a particular track sets into motion a pattern of differential schooling which results in the student being exposed to a different curriculum. Placement in a lower track results in the lack of exposure to the higher level knowledge and skills necessary to be advanced to a higher ability group (Oakes, 1985). This structurally limits not only the range of schooling opportunities available to the student for academic success, but the peer groups to which the student is exposed to as well (Oakes, 1990; 1992). Hence, the initial identification and tracking process that occurs early in a student’s career are structurally reproduced since the placement of a student in a lower track virtually guarantees the continuation of that placement through the student’s middle and high school years (Dentzer & Wheelock, 1990; George, 1993). It is not surprising that the differential educational tracks that emerge reflect the same inequalities of social class found in the communities and larger society in which they exist, with members of the cultural majority located in the higher tracks (Persell, 1979; Oakes, 1985, 1990, 1992; George, 1993). In the case of students with disabilities, the tracking process serves to realign them with a group that is associated with the stigma of school failure, lower class status, and constricted adult aspirations.

Poor academic performance, inappropriate social behavior, and/or severe physical dependance or deformity that is deemed so inappropriate or disruptive to the structure and flow of classroom interactions that it requires the student’s removal, serves to reinforce not only group boundaries, but the norms, values, and expectations of social and cultural institution and of the larger society in which they exist. As Erikson (1973) points out, behavior identified as deviant serves to represent the most extreme forms of conduct found to be within the wider experience of the group. According to Erikson, in this sense, transactions taking place between deviant persons on the one
side and agencies of control on the other are boundary maintaining mechanisms. They mark the outside limits of the area within which the norm has jurisdiction, and in this way assert how much diversity and variability can be contained within the system before it begins to lose its distinct structure, its cultural integrity (p.29) [Emphasis added].

As a transgressor against the group norms, the student who does not fit within the range of behaviors that will be tolerated represents that which lies outside of the group’s boundaries, and serves a purpose. The deviant, according to Erikson, informs us, as it were, what evil looks like, what shapes the devil can assume. And in doing so, he shows us the difference between the inside of the group and the outside. It may well be that without this ongoing drama at the outer edges of group space, the community would have no inner sense of identity and cohesion, no sense of the contrasts which set it off as a special place in the larger world (Erikson, 1973:29) [Emphasis added].

In this sense, by sorting out, separating, and excluding those persons whose behavior or physical appearance is most abhorrent to the group, the institution maintains its sense of identity, purpose, and location within the social order of the institution and the society at large. Once the individual has been cast as a deviant, the label acts as a master status which overrides all other, and his/her other identities fade into the background; the consequences of which are changes in the individual’s public identity and one’s future social participation (Goffman, 1963; Becker 1973).

Disability and Stigma

In recent years, social scientists studying the relationship between persons with disabilities and the larger society have criticized the conceptualization of disability as deviance (Schwartz, 1988). According to Lawrence Haber and Richard Smith (1971), stigmatization does not require or imply deviance. In the case of persons with disabilities, according to these authors, disability is a social role that has become legitimized by the diagnostic and helping professions. For students with disabilities, these professions include regular educators, special educators, and other school professionals.
Despite the lack of consensus that persons with disabilities occupy a deviant status, there continues to exist a general agreement among social scientists that persons with disabilities are stigmatized (Gove, 1976; Hanks & Poplin, 1981). Reasserting the claim made by Lee Meyerson in 1948, Fine and Asch (1988) maintain that "the problems of the handicapped are not physical, but social and psychological" (Meyerson, 1948, in Fine & Asch, 1988:64).

Goffman (1963) defines stigma as "an attribute that is deeply discrediting - a relationship between attribute and stereotype" that is "neither credible or discreditable as a thing in itself," and "an undesired differentness from what we anticipate," such that "on the assumptions we associate with the person of stigma we act differently" and "exercise discrimination through which we effectively, if not unthinkingly, reduce his life chances" (p.3-5). According to Goffman, society establishes a means of identifying and categorizing attributes thought to be ordinary and natural for those who are categorized, and that "we construct a stigma theory, and ideology to explain his inferiority and account for the damage he represents, sometimes rationalizing an animosity based upon other differences, such as those of social class" (p. 5). Similar to deviance, stigma is socially constructed on the basis of the values, beliefs and expectations of the dominant culture, and implies a certain lack of social status.

Goffman (1963) identifies three important factors that contribute to the social construction of stigma and the response of others to stigma that are relevant to the study of stigmatization of students with disabilities in schools. They are: the visibility of the attribute that results in stigma; the obtrusiveness of the stigmatizing attribute - that is, how much it interferes with the flow of interaction; and the perceived focus, which refers to assumptions made about the individual with regard to the sphere of life activity for which the stigma
disqualifies her/him. In order for an individual to be stigmatized, the attribute must be accessible to the audience - that is to teachers and/or peers. Secondly, the attribute must intrude upon the flow of interaction - that is, disrupt the flow of classroom interaction and processes. And thirdly, the assumptions made with regard to what the student is capable of, or entitled to, must result in differential treatment that disqualifies her/him from being able to participate as a group member in the same classroom experiences of his/her non-disabled peers.

While students with physical disabilities, and severe emotional and/or mental retardation may be easily and readily identified as disabled and stigmatized accordingly, the status of students with less visible disabilities is made accessible to the school community when they are among those that are separated out for differential treatment, including their placement in a segregated setting. According to Goffman, there is a tendency for a stigma to spread from the stigmatized individual to her/his close connections, a concept he refers to as "courtesy stigma" - a type of 'guilt by association'.

Attitudes toward persons with disabilities develop at an early age (Morrison & Upsprung, 1987), children with disabilities experience greater social rejection than their non-disabled peers (Johnson, 1950; Gottlieb, 1974) and teacher's hold less favorable opinions of and expectations for students with disabilities (Gottlieb, 1974).

Exclusion and Pariah Group Status

For years, perceptions of disability have been a repository and projection of human needs (Fine & Asch; 1988), with thoughts or awareness of disability by the non-disabled evoking feelings of vulnerability and death (Jones, Farina, Hastorf, Markus, Miller, Scott & French, 1984). By definition, according to Goffman (1963), the person of stigma is viewed by others as being "not quite human," and if persons with disabilities, or deviant behavior,
are considered to be not quite human, it provides a rationale for excluding them from the community of those who deserve to receive the just distributions of rewards and resources society has to offer (Fine & Asch, 1988).

In his discussion of pariah groups, Lifton (1979) asserts that all societies struggle to resolve the fears and uncertainties generated by mortality and that it is through the designation of a group that embodies a "death taint" that societies seek to restore a symbolic balance and a sense of collective immortality through the collective denial of others. In segregating those students whose disabilities are considered too severe to be educated along side their non-disabled peers, the school designates a pariah group within the school community. In a society in which educational achievement is not only highly valued but culturally proscribed as a moral imperative, particularly in terms of how it translates into the economic and occupational success, the placement of a student into a separate educational setting serves to represent an academic and future occupational "death taint" which not only defines group boundaries, but reinforces and perpetuates the values, beliefs and norms of the social order.

The historical isolation and pejorative treatment of persons with disabilities by social institutions, including schools, creates for persons with disabilities a deviant and minority group status. The notion that persons with disabilities constitute a minority group by virtue of their treatment by society is well supported in the literature (Safilios-Rothschild, 1970, 1976; English, 1977; Bowe, 1978; Hanks & Poplin, 1981). This notion is also supported by the development and growth of a movement to secure their rights as a group through legislative intervention. The inclusion movement, which seeks to secure the education of all students with disabilities in classrooms with their non-disabled peers, represents a continuation of the struggle to shed the stigma that has long been associated with having a disability, and to secure the same opportunities and life chances for persons with disabilities that are available
to their non-disabled peers.

In summary, the history of the birth and development of vocational education and special education can be seen as American society's response to a number of social, political, and economic forces which reflected the value and beliefs of American society. Included among these forces was an attempt to assimilate a growing immigrant population into an expanding industrial economy under the hegemonic umbrella of American individualism, American democracy, and industrial capitalism -- as well as an attempt to establish a place within the social structure for persons with disabilities.

The historical conceptualization and treatment of persons with disabilities, as understood through the theoretical perspective of deviance theory, provides us with a way to understand how the labeling and segregation of persons with disabilities historically has served to define and maintain boundaries for what is considered acceptable behavior or performance in social institutions. In educational institutions, the processes of sorting have relied heavily upon the use of I.Q. and other forms of "ability" testing, which, despite evidence of biases toward members of different social class, race, and gender, are used to differentiate between the intellectual "haves and have nots." One of the results of this sorting process is the differential exposure to curriculum content, instructional practices, teacher expectations, and other educational opportunities afforded to others. The institutional practice of tracking students on the basis of an assessment of their "ability" is but one of the ways that schools define the boundaries of group membership, and group status. As such, these practices can be seen as not only as a reaction to the "cultural capital" students bring with them into the schooling process, but the differential allocation of the intellectual and social resources that, in a large part, determines one's future position in life.

The development of federal legislation in the early 1950s through the 1970s represent
an attempt on the part of the federal government to address inequities in the educational opportunities available to different groups of people within American society, including persons with disabilities. The product of several decades of social reform efforts toward ensuring basic civil rights for all American citizens, P.L.94-142 -- the Education of the Handicapped Act of 1975 -- represents an attempt to ensure these rights for persons with disabilities. It is within this law that the legal foundation for integrating students with disabilities in American schools was forged.
CHAPTER III

FEDERAL LEGISLATION AND THE RIGHTS OF PERSONS WITH DISABILITIES

This chapter presents a discussion of the development of federal legislation directed toward ensuring the educational rights of persons with disabilities, and issues that emerged with regard to its implementation. The first section of this chapter provides a discussion of the social and political context within which P.L.94-142 emerged and the intent of the legislation, particularly as it relates to the requirement that students with disabilities be educated in the least restrictive environment (LRE).

The second section of this chapter provides a discussion of issues related to the implementation of P.L.94-142 as schools attempt to meet the legislative mandates that are set forth in the act. Finally, the third section of this chapter provides a discussion of research findings relative to the positive effects of mainstreaming students with disabilities in classrooms along side their non-disabled peers, as well as some of the problems that have been cited with regard to determining what constitutes mainstreaming, and the least restrictive environment.

The Development of P.L. 94-142

Public policy does not develop or come to be implemented in a vacuum, but rather grows out of the social climate of the period in which the public issues of policy evolve. This holds true for Public Law 94-142, the Education for All Handicapped Children Act, which was the result of a series of social and political forces dating back as far as the 1950s. The most important of these forces was the civil rights movement, which laid the constitutional foundation that would be used to argue for expanded services and legal protections for
students with disabilities.

One of the earliest and most important judicial decisions that laid the foundation for the development of P.L. 94-142 was the case of *Brown vs. the Board of Education* which, in 1954, established the right for all children to an education in a non-segregated setting. While the primary social issue addressed by the *Brown* decision was that of racial segregation, this case became the cornerstone for the development of additional civil rights legislation. The two primary contributions of this case, later reinforced by subsequent court cases, was the ruling that "separate was not equal" and that the right to "equal protection" and "due process" under the law provided under the 14th and 15th Amendments of the Constitution extended to educational institutions.

The rationale was that schools are a major socializing institution and a means of imparting cultural values, so that the exclusion of some children from school attended by the majority deprives those children of an equal opportunity to make a successful adaptation to the society (Hargrove, et al., 1983:5).

In establishing the applicability of constitutional protections to public education, this case brought issues of public education into the arena of civil rights and legitimized subsequent anti-discrimination legislation, thereby providing an entry of the federal government into education policy (Hargrove, 1983).

The civil rights movement of the 1960s served to raise public awareness of the social and structural inequities of race and gender, and while persons with disabilities remained largely outside of this movement, the movement provided for a greater understanding of the barriers society imposes upon certain groups that result in the denial of access to equal opportunities. As the 1960s progressed, American society witnessed an increase in the amount of involvement of the federal government in addressing issues of social inequality. The American political system, forced to respond to the civil rights demands being made largely by black Americans and women, resulted in the Civil Rights Act of 1964. Title VI of
the Act states that "no person in the United States shall, on the grounds of race, color, or national origin, be denied benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." This anti-discrimination language was borrowed a decade later and applied to legislative protections for persons with disabilities (Percy, 1989).

The development of federal involvement in education for students with disabilities paralleled that of federal support for elementary and secondary education in general (Percy, 1989). Prior to the 1960s, the provision and support for education was considered to be the responsibility of state and local governments. The Elementary and Secondary Act of 1965 (ESEA) changed this. While state and local governments would retain primary responsibility for providing an education to its citizens, this act served to shift a greater emphasis to the federal level. Coming out of the 1950s, with a strong and expanding industrial-based economy largely fueled by the cold war, the federal government was in an economic position to launch several social policy initiatives in response to growing political pressure and demands to address issues of social inequality. Under the Kennedy and Johnson administrations, in addition to providing new educational incentives in response to "Sputnik," massive new social programs in health care, transportation, housing, and education were launched -- programs that fell under the rubric of a "War on Poverty" and "The Great Society."

As federal funds were made available to states for purposes of improving education for America's youth, states found that in accepting federal funds they had to abide by rules governing the use of these funds, ushering in what would represent a loss of power and control at the state and local level that would continue to grow. While initially these funds were intended to improve the educational opportunities for all children, particularly the economically disadvantaged, the 1966 amendments to ESEA authorized funds to provide
expanded services for the handicapped, though service to the handicapped was not legislatively required.

The tremendous growth in federal programs in the 1960s was also accompanied by a tremendous growth in evaluation research (Rossi & Freedman, 1987), which would serve to provide a wealth of information with regard to issues of implementation and the effectiveness of social programs. Among the multitude of studies conducted were two major studies that influenced the development of legislation designed to address the needs of persons with disabilities. One study, conducted by the General Accounting Office (GAO), revealed that the ineffectiveness of federally supported vocational rehabilitation programs was largely the result of architectural barriers of access to public buildings. The second study, conducted by Rand Corporation, revealed large variations in the rates at which handicapped students were being served by states, with a very large proportion of students not being served. The Rand study also indicated that an increase in federal funds to support programs for these students was necessary if programs were to address the needs of students, and that incentives must be built into the law for increasing the equity and access of students with all types of disability. In both studies, physical and social barriers were cited as the primary forms of discrimination that kept persons with disabilities from participating in mainstreamed society. In addition, public exposure to the often horrendous treatment of persons who had been institutionalized revealed that a large number of the mentally and physically disabled were not only a neglected minority in American society, but were victims of abuse as well.

From the mid-1960s throughout the early 1970s, individuals and groups representing persons with disabilities lobbied successfully for federal policy initiatives aimed at improving the living conditions of the handicapped. The passage of the Architectural Barriers Act of 1968, the Education of the Handicapped Act of 1970, the Rehabilitation Act of 1973, the
Educational Amendments of 1974 represent the primary legislative attempts to address these issues of discrimination. In 1971, then President Richard Nixon issued a mandate of "deinstitutionalization," initiating a nationwide movement that sought to return the physically, emotionally and mentally disabled to their communities. One of the consequences of deinstitutionalization was a growth of special education in the schools that would, within the course of two decades, witness the need to serve a population whose range of disability had expanded to include students with the most severe of handicaps as persons with more severe disabilities who would previously have been sent to residential institutions remained in their communities.

There are several specific pieces of legislation and court rulings that lead up to the passage of P.L. 94-142 that are worth noting. In 1973, a bill expanding and reauthorizing the Rehabilitation Act (P.L. 93-112) contained a section that would provide the central linchpin for efforts to ensure the rights of persons with mental disabilities. Section 504 of the Act, which "was born very quietly as a relatively unnoticed paragraph" in the bill (Percy, 1989:54), used the same language as that used in the Civil Rights Act of 1964 to extend the right of non-discrimination to persons who are handicapped in a provision that states that no recipient of federal funds shall discriminate against persons with disabilities. Perhaps more importantly, Section 7(6) of the Act defined the term "handicapped individual" to mean any individual who "has a physical or mental disability which for such individual constitutes or results in substantial handicap to employment" and "which can reasonably be expected to benefit from vocational rehabilitation services" (P.L. 93-112 as cited in Percy, 1989:54).

In addition to the legal debates that gave rise to federal legislation to secure the right to a free and public education for students with disabilities, several legal battles were fought at the state level that would provide precedent for the development of P.L. 94-142 and its
eventual passage in 1975. Two specific cases are considered landmark decisions. The first case, *Pennsylvania Association for Retarded Children [PARC] vs. the Commonwealth of Pennsylvania*, was a class action suit brought against the State of Pennsylvania on behalf of 14 mentally retarded students charging that their rights to due process and equal protection under the law had been violated by virtue of their exclusion from access to a public education. In its settlement, the court stated that "it is the Commonwealth’s obligation to place each mentally retarded child in a free, public program of education and training appropriate to the child’s capacity" (343 F. Supp. 279 ED pa 1972 as cited in Percy, 1989:56). The case, viewed as a huge victory by advocates of persons with mental disabilities, received widespread publicity and resulted in similar legal actions in other states.

The second case, *Mills v. Board of Education of the District of Columbia*, was a case in which the parents and guardians of seven retarded children sued the Washington D.C. Board of Education in 1972, charging that these children had been denied publicly supported education. The ruling in this case served to strengthen the legal foundations of the right of handicapped children to a free and appropriate education (FAPE) in two important ways. First, it extended the rights of FAPE to children with physical and emotional disabilities or impairments, and second, it stated that a child could not be excluded from access to publicly supported education on the basis of a claim of insufficient resources. While the issue of extending the rights of a free and appropriate education to all persons, regardless of their disability, was the victory that seemed the most important at the time, years later the cost of providing educational services to the disabled, for which school districts would be held liable would become of greater interest and concern.

According to Stephen Percy (1989), during the second half of the 20th century traditional conceptions of disabled persons had shifted to a relatively more enlightened
position that symbolically was one of "goodwill." This symbol of goodwill and that of the right of all Americans to equal opportunity, which were so potent in the civil rights movement of the 1960s and 1970s, helped serve to secure federal legislation for persons with disabilities. However, Percy contends that disability rights laws and policies have remained largely separate from other civil rights policies, which protect against discrimination based on race, sex, religion, and national origin, due to a general lack of enthusiasm by traditional civil rights groups to accept disabled citizens into the civil rights movement.

There remain several similarities between these two movements that lie beyond the statutory language and appeals to fairness employed by each in their pursuit of equal rights, opportunities, and protection under the law. One similarity, that by its very virtue placed these groups in situations where they felt the need for governmental intervention in securing their rights, is the minority group status and stigma experienced by each as members who lie outside of the cultural majority. Legislation aimed at protecting the rights of these groups represents a type of social change that was being forced on society by virtue of the class conflicts that are created when groups hold differential power and influence in the structure and processes of social institutions. As such, these movements reflect the conflict of values, attitudes and beliefs that are held by different members of a society. Social change can be understood as the movement of individuals and institutions toward new and different configurations of social relationships. Judicial law may force changes in some behaviors, but the values, attitudes, and beliefs that gave rise to the need for forced change are not as easily modified. Despite commonly held interests and ideals, and the similarities between the two movements in terms of their efforts to secure civil rights protections under the law, the disabled remained marginalized as a group and political force.

The issues raised by the implementation of P.L. 94-142 provide an interesting case
study in social change and the social, political and economic environment within which change occurs. Understanding the issues that are raised by educators, administrators, and the general public in the process of implementing the law provides an opportunity for sociological insight into the dynamics of the school as a social institution that is grounded in the dominant cultural values of the community and society in which it exists. As Percy (1989) points out, while goodwill and civil rights symbols have remained powerful in securing legislative protections for a variety of groups, these symbols run up against new and conflicting symbols, including those of large public costs and increased taxation. The negative impact of high public costs is accentuated when coupled with assertions that expenditures are (1) made for a relatively small class of beneficiaries and (2) mandated by the federal government without reference to local preferences of fiscal capacity (p.241).

**The Implementation of P.L. 94-142**

P.L. 94-142 was reluctantly signed into law by President Gerald Ford on November 29, 1975, who stated that the bill promised more than the federal government was able to deliver, and that "its good intentions could be thwarted by the many unwise provisions it contains" (Public Papers of the President: Gerald R. Ford, as cited in Percy, 1989:62). The majority of problems cited with regard to the implementation of P.L. 94-142 fall into one or more of the following categories: (1) economics; (2) constitutionality; (3) politics; and (4) philosophy (Stone, 1983).

**The Economics of P.L. 94-142**

While federal allocations to support the implementation of P.L. 94-142 increased from 100 million in 1976 to more than 1½ billion in 1985, the federal promise to contribute 40 percent of the average per pupil cost to the school district for educating students with disabilities has never materialized, leaving state and local agencies to pick up more than 90 percent of the total cost (Gartner & Lipsky, 1987). In New York City in 1980, it cost three
times as much to educate a handicapped child than a non-handicapped child, resulting in an 80 percent increase (over a five year period) in the tax levy needed to support special education (Stone, 1983). Nationally, the per pupil cost of providing special education services is roughly twice that of non-disabled students (Singer & Raphael, 1988). In 1992, in New Hampshire the average cost of educating a handicapped student of high school age is anywhere between twice to three times that of educating a non-handicapped high school student (depending upon the costs of a student’s placement, including out-of-district placements).

New Hampshire ranks fiftieth in the nation in proportion of educational funding that is provided by the State. Consequently, New Hampshire relies more heavily upon the local tax base to support education than any other state, with approximately 90% of school funding raised at the local level and the remaining 10% provided through state and federal funding sources. As the costs for providing education and related services to students with disabilities in compliance with the mandates of the Act increase, and the economic resources available to school districts constrict, there is an increased potential for conflict between competing status groups for access to available resources. Poorer school districts are at a greater disadvantage than wealthier school districts in their ability to provide financial support for students and programs. The structure of educational funding and local governance issues increases the probability that there will be greater variations between school districts in the rates at which students with disabilities will be identified, and the types of services the schools are able to provide. Since schools cannot deny the provision of services to a student with a disability on

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9 The average percentage of students with disabilities (for which the district is liable) who are placed in agencies or institutions outside of the district is approximately 10 percent. There are tremendous variations in the cost associated with out of district placements depending upon the needs of the student. However, the cost of out-of-district placements tends to be the highest.
the basis of the district's lack of ability to pay, schools may be forced into a position of providing educational services for students with disabilities at the expense of maintaining or improving educational programs for the general student. This heavy reliance upon local funding also creates an incentive at the local level to exercise parsimony in the identification of students.

Larger school districts are typically better able to provide a greater variety of programming and special services because of the cost efficiency of serving large numbers of students, whereas smaller districts that do not have the economics of scale are still mandated to provide the same services (Connors, 1980). In addition, larger schools are typically located where there are not only more people, but places of business and industry as well, which provide a larger tax base upon which to draw financial revenues to support schools.

The financial crisis brought about by the economic costs of meeting the requirements of P.L. 94-142 have placed many school district across the nation at a point of fiscal disaster (Stone, 1983).

An unfortunate side effect of this financial squeeze has been to mislabel a student as handicapped in order to get more funds, or to mislabel a handicapped child as less severe to avoid liability of providing expensive education services (Ibid, p. 22).

However, three years into the implementation of the Act, the National Education Association issued a report that indicated that while there were indeed problems posed by the lack of federal funding for the implementation of P.L. 94-142, it stated that:
The barriers that will be hardest to bring down are those that involve human attitude and bureaucratic inertia. No amount of money is going to cure the human ailments of prejudice against withdrawal from those who do not fill some vague standard of normalcy. No amount of money is going to infuse state departments of education, public schools, and other related agencies with the flexibility, openness, and responsiveness necessary to work effectively with each other, with parents, and with students, in meeting the mandates of the law (NEA, 1978 as cited in Percy, 1987:189).
Issues of Constitutionality

One of the most controversial and debated issues regarding the implementation of P.L. 94-142 has been the concept of LRE. Some legal theorists have argued that the decision to place a handicapped student in any setting other than with his/her non-disabled peers is inherently restrictive and thus, a deprivation of individual liberty (Stone, 1983). Those that espouse this view are proponents of what has come to be termed "inclusion." Inclusion takes as its starting point the question, "How can we best serve all students in a mainstreamed setting?" as opposed to the question "Which environment is least restrictive" for the students with a disability?

Historically, the interpretation of the LRE requirement has relied heavily upon an interpretation of "appropriate education," which has rested in the IEP process itself (Hargrove, 1983). The problems of ambiguity in the language of the law is exacerbated by a lack of criteria or guidelines for interpreting the LRE requirement (Hargrove, 1983). While the right to due process provides both an incentive and safeguard against restrictive placements, particularly since the student’s parent participates in the IEP process, these rights may not act as the safeguard that was intended by the legislation.

The Politics of Implementation

While, the politics of implementation begins with legislative rule making, it does not stop there. Implementation authorities, such as state departments of education and local school districts, often have a great deal of discretionary latitude in carrying out public programs. The politics of implementation, broadly defined, refers to all of the decision making that goes into creating, executing, and receiving educational programming, from the development of federal and state rules to attitudes and behavior of school boards, superintendents, principals, guidance counselors, special educators, teachers, parents, and
students. One of the problems remains the IEP process itself and the extent to which parents feel able to affect the process. While the law requires their participation, in reality parents are not always in a position to know or advocate for what is best for their child. Studies indicate that parents are often unaware of their rights under the law, they often feel intimidated and alienated by the educational jargon that is used by professionals in the school, and are fearful of challenging the decisions of "experts" (Turnbull & Turnbull, 1986; Poll, 1993). Middle-class and upper-middle class parents feel less intimidated by the process because they possess the knowledge, skills, and resources to work their way through the system by drawing upon their "cultural capital" and are therefore more confident in making demands (Poll, 1993). Working and lower class parents, on the other hand, feel a sense of inferiority when facing special educators, may experience communication problems stemming from cultural barriers, and may not understand the nature or severity of their child's needs or their legal rights in demanding specific services (Poll, 1993). Lower-class parents, who have more difficulty understanding the jargon and medical terminology, often trust the school to assume the responsibility for knowing what is best for the student (Lareau, 1989). Parents feel as though teachers perceive them as a "bother" because the parent asks questions or appear to be looking over the teachers' shoulders (Biklen, 1992). The irony seems to be that a minority of sophisticated, aggressive parents can get thousands of dollars worth of services, but that for most the system doesn't work because they don't understand the IEP process, or the court hearings procedure (McCay, 1981).

As Poll points out, findings such as these support the contention made by Willard Waller (1932) that the nature of parent-teacher relationships is one of natural enemies. Professionals in the school act as "experts," and exercise more control over the process in determining what is best for the child. This is partially due, according to Poll, to goal
displacement as the priority for the IEP process is shifted to meeting the letter of the law as opposed to developing an individualized instructional guide to meet the educational needs of the student. Parents repeatedly express anger, frustration, and resentment with school personnel and the IEP process and at the unnecessary burdens they and their children face as a result of social attitudes and behavior of the school toward students with disabilities. While parents may attend these meetings, they often feel as though they are not involved in the decision making process (Poll, 1993).

The Positive Effects of Mainstreaming

Research indicating that programs in which students with disabilities are mainstreamed obtain more positive student outcomes for these students continues to grow, fueling the movement toward full inclusion. Among the findings that indicate benefits to mainstreaming students with disabilities are:

- Increased rates of IEP goal completion (Brinker & Thorpe, 1984; Hunt, Goetz, & Anderson, 1986);
- Significantly greater gains in communication and social skills (Gaylord-Ross & Peck, 1985; Jenkins, Odom, & Speltz, 1985 & 1989; Bagnato, Kontos, & Neisworth, 1987);
- More appropriate and frequent interactions with non-disabled peers (Gaylord-Ross & Peck, 1985; Haring, Breen, Pitts-Conway, Lee & Gaylord-Ross, 1985; Brinker & Thorpe, 1986; Lord & Hopkins, 1986; Voeltz, 1992); and
- Post-school adjustment to employment and community life (Hasazi, Gordon, & Roe, 1985; Wehman, Kregel & Seyfarth, 1985; Brown, et al., 1987).

Among the findings of benefits to persons without disabilities are improved attitudes and perceptions about persons with disabilities (Voeltz, 1980, 1982; Kilburn, 1984). In addition to the research that points to the positive effects of mainstreaming for students with disabilities, there is no evidence that placement of students with disabilities in regular schools in any way interferes with or otherwise impedes the educational program of students without disabilities (McDonnel et al., 1991).

Studies continue to support the contention that mainstreaming efforts cannot be
successful unless the regular classroom teacher has a positive attitude toward mainstreaming, and the skills necessary to implement it well (Taylor, 1982; Stone, 1983; Stainback & Stainback, 1985, 1990; Taylor et al., 1986). Among the findings with regard to barriers to attempts at mainstreaming are the following:

- Teachers respond more positively to mainstreaming if the handicap is less severe (Hirshore & Burton, 1979).
- Many teachers don’t believe in mainstreaming, and they feel they have too many other duties to invest the effort that is required for change (Altschuld & Downhower, 1980).
- Especially at the secondary level where teachers are traditionally more content oriented (as opposed to student oriented), individualized instructional needs of the student are often not met (Shapiro, 1980).
- Teachers and special educators are committed to their existing program and don’t wish to modify it (Stone, 1983).
- Teachers expect the mainstreamed student to conform to the standards of the regular environment (Stone, 1983).
- Teachers feel a loss of professional identity when differing from the customary routine, including taking on the responsibilities of what they view to be the responsibility of special educators and resent that they are treated as technicians who are supposed to implement the decisions made by others (Altschuld & Downhower, 1980).
- Teachers express bitterness at the amount of time involved in meetings with parents, evaluating student’s progress, determining goals, and performing other clerical duties associated with complying with the IEP (Thomas, 1980).
- Teachers resent the inequitable distribution of funding and the fact that so much staff time and money are allotted to so few (Thomas, 1980) and that the provision of these resources takes resources away from others (Singer & Raphael, 1988).

The need for in-service training for teachers is seen as the most critical factor in achieving greater and more successful mainstreaming efforts (Brinker & Thorpe, 1985; Harris and Associates, 1989; Burrell, 1990).

Another important factor that continues to be identified as critical to implementation studies is that of the quality of public officials, including school administrators, that is, not only their commitment to policy objectives, but the possession of the technical knowledge and political skills necessary to effective implementation efforts (Levin & Ferman, 1985). In the case of elementary and secondary education, studies have indicated that the commitment and
quality of the school building principal to programs and program objectives is one of the most
important factors in achieving program success. While the principal is responsible for seeing
to it that the law is implemented and for making organizational provisions for the delivery of
services, she/he is typically not a member of the IEP team responsible for determining the
content and delivery of a student’s individual education plan. However, the ability to provide
for the allocation of resources at the local level lies with the school administration (and the
school boards that govern them) to accommodate the program and support needs necessary to
mainstreaming. The extent to which this is made a priority depends not only upon the
commitment and skills of the administration, but the financial and political support of the
school board and local community.

Eugene Bardach, in his study of implementation of public policy, suggests a "game
metaphor" for understanding the interpersonal dynamics that occur in the implementation
process wherein there are players, rules of play, strategies and tactics for "winning." This
approach focuses upon the resources and strategies that actors use in seeking to affect the
outcome of public programs, and that this is accomplished through their interactions with
other relevant players. This approach stresses not only the political nature of implementation
actions, but also the processes through which interacting persons attempt to manipulate
outcomes in their favor. In schools, the design and delivery of educational programs serve
the interests of a variety of players differently. Parents, teachers, administrators, special
educators, and specialists that are often brought into the IEP process, are likely to have
different personal and professional interests, attitudes, and beliefs about not only what
educational program is best for the child, but also about what will serve their own personal or
professional interests. For instance, a teacher who feels professionally unqualified,
unprepared or personally uncomfortable with having a student who has severe mental
retardation in his/her class, will not be as inclined to support a mainstreamed placement for that student as a teacher who does not have the same reservations. A special educator who has been warned by her/his administrator to keep costs low may be less likely to advocate for additional services for the student that might improve the student’s educational outcomes. Or a teacher who is at risk of losing her/his program due to low enrollments may lobby for additional placements in her/his class in an attempt to retain the position.

In addition to the interpersonal dynamics that influence the process of placement, there remain organizational issues of the bureaucratic administration. Placement decisions are often the result of the bureaucratic nature of the organization of schools, where program configurations, such as scheduling, tend to be based upon administrative rather than student needs (Stone, 1983). Carolyn Reihl and her colleagues, in their study of the assignment of students in high school courses, found that placement decisions were based more upon administrative convenience, and that placements occurred with little or no information about the student’s ability, interests or academic needs (Reihl et al., 1992). While this study did not focus on the placement of students with disabilities, it is reasonable to assume that similar issues arise in providing for the educational programming of these students as well.

But as Shapiro (1980) contends, even if mainstreaming occurs in the process of placement, the equality of access to educational programs continues to be bound by the hierarchal social structure, with schools providing experiences that structure individuals into their appropriate social and economic roles, and that despite the increased physical proximity mainstreaming might provide students with disabilities, the real sources of student identity remain untouched and student needs are not met.

Conflicting philosophies regarding the purpose of education lie at the heart of most issues related to the implementation of P.L. 94-142. While there may exist a loose consensus
that the purpose of education is to impart the values and beliefs of American society, including a belief and commitment to teaching democratic ideals, for many the primary purpose of education remains that of preparing society's youth with the knowledge, skills and attitudes necessary for economic and social participation as adults in society. Some of the barriers to implementing the mandate of LRE reflect this conflict over which purposes and goals deserve greater weight.

Early efforts to provide equal opportunities for persons with disabilities came to be expressed in terms of the ideology of "normalization." As an ideology, normalization maintains that persons with disabilities deserved to lead lives that are as much as possible like the lives of the non-disabled. Early on it was felt as though the only way to accomplish this was to force structural changes in American institutions that would provide persons with disabilities access to the same opportunities and experiences enjoyed by the non-handicapped. The focus of normalization as a philosophical ideal has quickly shifted [these goals] from a philosophical idealism into a constitutional right through the legislative history that emerged. What also emerged, and is reflected most strongly in the works of those who advocate the full inclusion of students with disabilities in all educational settings, was the notion that our commitment as a nation to democratic ideals demanded nothing less than the provision of complete access and participation of persons with disabilities. Advocates for the full and total mainstreaming of students with disabilities suggest that the continuum of educational placements presently mandated under federal regulations be modified to include only integrated placement options (Biklen, 1985; Certo, Haring, & York, 1984; Taylor, 1988; Gaylord-Ross, 1989; Sailor, Anderson, Doering, Filler, & Goetz, 1989; Stainback & Stainback, 1990).

One of the problems with much of the literature is a lack of consistency in the use of
terms. The term mainstreaming, for instance, means different things to different people. In the research, "mainstreaming" is used by some researchers to refer to the relocating of special education classes into the regular neighborhood schools where students with disabilities will have more opportunities to interact with non-disabled peers while still receiving most of their education in a separate, segregated classroom. Other researchers use the term to refer to the process of integrating students with disabilities in classrooms with their non-disabled peers while providing curriculum adaptation and support to the student as is necessary for their success. This lack of a consistent use of terms has not only been the cause for some confusion, it has also resulted in a general lack of ability to begin measuring exactly how much integration or mainstreaming is taking place (Brinker & Thorpe, 1984a).

In addition, while the interpretation of what constitutes the least restrictive environment in each case remains subjective, a review of the research published over the past 15 to 20 years indicates that what is seen to be the least restrictive environment has changed dramatically over the years toward the integration of more and more students into the mainstream environment whose disabilities in the past would have resulted in their not only being placed in separate schools for the retarded in many cases, but in residential institutions that provided little or no education at all.

"The Inclusion Movement" is the most recent movement in the field of special education as it relates to the least restrictive environment. This movement advocates that the full integration of students with disabilities, without exception, is both philosophically and pedagogically the most sound approach to educating students with disabilities. Susan and William Stainback are among the most prominent and prolific writers and researchers in the area of inclusion. For Stainback and Stainback, inclusion is related to but different from the movement to integrate or mainstream students with disabilities into their regular neighborhood
schools and classrooms. Inclusion focuses on how to operate supportive classrooms and schools that include and meet the needs of everyone. As such, inclusion does not focus on treating persons with disabilities as special and different, but rather on creating environments in which everyone is treated and respected as a unique and valued member of the community.

Stainback and Stainback cite three primary reasons for supporting inclusion. The first is that research has indicated that students with disabilities learn both social and academic skills better in an integrated setting. The second is that to include all students in the mainstream is to avoid the effects of segregation inherent when students are placed in separate schools or classrooms, such as the lack of self-confidence, lack of motivation and lack of positive expectations for achievement that are the products of a segregated environment. The third and most important reason to include all students in the mainstream, according to the authors, is that it is the fair, ethical, and equitable thing to do.

The basic underlying purpose of educating all students in the mainstream, according to Stainback and Stainback, is to provide every student the opportunity to learn to live and work with her or his peers in natural, integrated education and community settings. Additional reasons for inclusion that have been cited are (1) the notion that each person has a basic need to belong (Brandt, 1988); (2) that it is to everyone’s benefit to create schools that welcome and support all individuals as valued members (Vandercook & York, 1990); and (3) that diversity enriches "the experience of learning for the children and for those who teach them" (Safford, 1989: 11). Supporting this argument, there are those that claim that the labeling process itself utilizes a reductionist model that focuses on why children can’t learn, and claim that educators need to completely remove the labels in order to focus on the fact that all children can learn (Lilly, 1979; Gartner & Lipsky, 1987).

The inclusion movement is being met with resistance from not only regular educators
but special educators as well, who question whether or not inclusion is in the best interest of
the child. According to Lawrence Lieberman (1992) the full integration of students with
disabilities, particularly the severely disabled, is misguided because it imposes academic
failure on them. Because the ability to perform well in school is such an important aspect of a
student’s self-esteem, self-confidence, and the acquisition of basic skills one needs to live
effectively in our society, Lieberman thinks that to place a child in an environment where
she/he will not achieve an acceptable measure of successful skill acquisition and self
confidence creates for the individual a future of lifelong handicaps. For Lieberman, school
failure is more handicapping than the original disability, and school failure is almost
guaranteed if the student is placed in an environment where she/he cannot experience success.
Instead of claiming mainstreaming for all, the goal of least restrictive environment should be
the degree to which clients reach specific goals rather than how well the placement embodies
a particular approach (Epstein, 1982). Vergason and Anderegg (1992) agree, asserting that
least restrictive environment is not a location but instead refers to the appropriateness of the
instruction offered.

Some professionals suggest that a child should be placed in a environment where he
or she will be safe from the pressures of unrealistic expectations for academic success the
child would otherwise feel if she/he were in the same class as their non-disabled peers and
where they can receive the individualized attention need to learn. Others cite the high rates of
course failure among students with disabilities who are mainstreamed as one of the negative
consequences of the move to mainstream students either inappropriately, or without adequate
supports as one of the negative consequences of mainstreaming (Wagner, 1988, 1989;

According to Lieberman, to be against full integration as public, educational, or
school policy, is not to be for exclusion but for a greater variety of choice for students. For Leiberman, those who are "full integrationists" seem to reject choice or any continuum of service delivery. Lieberman draws upon the notion of "functional ability" in supporting his contention that not all students belong in the mainstream classroom. Recent research has demonstrated powerfully that students with differing disabilities vary as much from one another as they do from students without disabilities (Wagner, 1991), and that even within a single disability category, young people represent a broad range of functional skills, interests, and potential for positive educational outcomes (Marder & Cox, 1991). Acknowledging that an important aspect of being handicapped is relative and subjective, depending upon environmental context, cultural mores, and social norms, as well as personal choice, Leiberman contends that certain handicaps create functional limitations that are objective -- such as profound retardation, severe autism/schizophrenia, and total immobility. While those who are physically disabled can choose to aspire to almost any profession or any activity involving mental competence, persons with mental disabilities are more limited in what they can achieve, citing that "the list of professions that include people who are physically disabled is as long as the list of professions. This is not the case of the mentally disabled" (Lieberman, 1992:16).

On the one hand, questions and concerns with regard to the efficacy of mainstreaming seem to focus on meeting the needs of students as they relate to skill acquisition. This, for instance, is true of the concerns expressed by teachers, the majority of which feel unqualified in meeting the needs of these students. On the other hand, questions and concerns regarding resistance or barriers to mainstreaming focus on changing the attitudes of teachers, administrators, and students and the practices of professionals within the school in the belief that skill acquisition can take place in a mainstreamed setting provided that the appropriate
and necessary support is available to ensure its success.

Most of the research on mainstreaming, its strategies and philosophies represent work that has been done on the elementary school level. There is very little research on mainstreaming at the high school level. This may be due to the fact that as the level of schooling progresses, curriculum content becomes more content specific and more highly differentiated by ability levels. There is more research and literature available on the mainstreaming of high school aged students with disabilities in vocational education. The bulk of this research is on demographic trends in the rates at which students with disabilities are served in vocational education and textbooks and manuals on the vocational training needs of students with mild to moderate disabilities in a mainstreamed setting. However, most of the literature on serving students with moderate to severe and profound disabilities in vocational education reflects the traditional practices of providing vocational training in a separate sheltered workshop setting.

In summary, there is no consensus with regard to the interpretation of what constitutes the least restrictive environment. While the legislation is clear with regard to the intent of the LRE provision — that "to the maximum extent appropriate" students with disabilities are to be educated alongside their non-disabled peers — a lack of clear guidelines for determining what constitutes "appropriate" in determining the LRE for as student has resulted in both a great deal of confusion and debate among educators. Inclusion advocates view the full and total integration of students with disabilities in classrooms with their non-disabled peers as not only good educational practice in which all students benefit, they also see inclusion as a civil rights issue. Other educators and educational researchers view the issue of LRE as one of determining an educational environment that is most appropriate to meeting the child's educational and emotional needs contending that the mainstream environment is not
necessarily in the best interest of every child. These distinctly different philosophical stances will undoubtedly influence how educators and administrators come to define what constitutes an "appropriate" placement under the legislative requirements of LRE.

Within the organizational context in which schools operate, these issues are clearly not only philosophical, but are also administrative in nature. Most regular classroom teachers have not been trained in special education and are unprepared to meet the needs of students with special needs. Most teacher have been trained in how to educate the typical child -- children who fall within the range of what is considered normal. Beyond a change in attitude and philosophy, the mainstreaming of students with disabilities requires organizational and instructional arrangements than those that were used in the past. These changes require resources not only for the staff development of teachers, but in many cases for modifications in curriculum, class size and course schedules, equipment, and instructional practices as well. Long established organizational arrangements and attitudes among educators and other staff may constitute barriers to the mainstreaming students even in those school districts where there is a level of philosophical support for mainstreaming.

Therefore, the ability or willingness of the institution to make the modifications that are necessary to accommodate the mainstreaming of students with disabilities are critical issues that are directly related to how the mandate of LRE comes to be defined and implemented within a particular school district. This may be especially true for placement of students with disabilities in vocational education where the classroom setting includes dangerous equipment. The criteria used by school districts in determining what constitutes the least restrictive environment will therefore be bound by not only the attitudes and beliefs of school personnel, but the resources available in making the modifications that are necessary to the effective and safe mainstreaming of these students.
CHAPTER IV

ISSUES OF MAINSTREAMING: ACCESS TO VOCATIONAL EDUCATIONAL OPPORTUNITIES FOR STUDENTS WITH DISABILITIES

This chapter discusses the development of federal legislation related to serving the needs of students with disabilities in vocational education in the least restrictive environment; the impact of changes in educational policy in the 1980s as they relate to vocational education and the enrollment of students with disabilities in vocational education; and the effects of vocational education on the lives of students with disabilities relative to the goals of normalization. In addition, this chapter provides a review of the literature as it relates to those factors of the school and community within which the school is located that may serve as barriers to serving students in vocational education in a mainstreamed setting. Finally, the last section of this chapter provides a summary of research related to factors that influence the rates at which students with disabilities are served in vocational education, and the rates at which these students are mainstreamed. This summary is then used in the construction and presentation of the specific research questions and hypotheses to be investigated by this study.

The Development of Federal Legislation Relative to Serving the Vocational Education Needs of Students with Disabilities

The development of vocational legislation as it relates to serving students with disabilities in many way parallels that of the Elementary and Secondary Act (ESEA) of 1964. The Vocational Education Act of 1963 represented the first federal initiative aimed at serving students with disabilities in vocational education by allowing for the use of funds specifically for purposes of creating or improving vocational program opportunities for these students. Before that time, "handicapped students who could not compete on an equal basis with the non-handicapped had to look outside regular vocational education establishment for rare
opportunities available to them in sheltered workshops, private training programs, or institutions for the handicapped" (Olympus Research Corp., 1974, p.194 as cited in Wagner, 1991).

Amendments to federal vocational legislation in 1968 strengthen these provisions by requiring that not less than 10% of each state's basic federal grant for vocational education be used exclusively for programs for students with disabilities, the effects of which resulted in vocational education projects for the handicapped that would never have occurred had there been no such legislation (Wagner, 1991).

Additional legislative support for vocational education for students with disabilities came with the passage of P.L. 94-142 in 1975, as well as P.L. 94-482 (Education Amendments of 1976, Title II) and P.L. 93-112 (Rehabilitation Act of 1973) all of which mandated that access to appropriate vocational programming for students with disabilities be provided, and that this programming be provided in the least restrictive environment. Those who had been responsible for developing federal legislation "recognized that, upon leaving school, handicapped individuals need to be able to enter the workforce in productive and satisfying employment" (Cobb & Phelps, 1983:3). Among the requirements for a comprehensive program for students, these laws included language designed to assure that every handicapped child who leaves school has had career educational training that is relevant to the job market (Albright & Tomlinson, 1977).

Several studies conducted in the late 1970s and early 1980s would reveal shortcomings in the structure and implementation of federal legislation that would in part serve as a basis for further strengthening the requirements to assure students with disabilities greater access to vocational educational opportunities. One of these studies was conducted in 1979 by the National Institute of Education. The study was conducted in accordance with the
request by Congress to include a provision in the amendments to Title II of the Education

Amendments of 1976 to study the effects of the federal role in vocational education relative to providing greater opportunities to students with disabilities. Among the major findings of this study, published in a report by David and Hendrickson (1981), which were instrumental in Congress’s revision of the law in 1984, were:

- Federal grants, the instrument for assisting states, were too limited in scale to help states with the task of realizing all the diverse objectives of federal policy.
- Policies for distributing funds within states allowed funds to be allocated for purposes that might or might not have been congruent with the purposes of federal policy.
- Although states made greater efforts to serve students with special needs, the manner in which excess costs and requirements under which local districts must provide matching funds were sometimes prohibitive, preventing districts from accessing federal funds for these populations, thus creating a disincentive to mainstreaming these students in regular classes.

Despite this, it was also acknowledged by advocates in the field of special education and vocational rehabilitation that

The idea of reserving federal funds for the purpose of assisting and stimulating the states to provide programs and services to students with special needs is a sound approach to attaining greater equality of opportunity in vocational education. In the absence of such a provision, states and localities would very probably not be devoting even the relatively modest resources they now do to serving the handicapped…. (David, 1981:p.ix).

Further research would support the contention that while students with disabilities were accessing vocational education, they were not accessing quality programs, nor were they receiving access on the basis of an assessment of their interests or needs, as was the intention of the legislation. A study conducted for the National Institute on Education, published in 1980, found the following:

the academic related identification and assessment procedures used by most school districts tended to limit the vocational options available to special needs students. In most instances, placement appeared to be contingent on performance in basic competency areas of reading, writing, and mathematics. Students who failed to achieve a level of acceptable competency in these basic skills were placed in compensatory or remedial programs. Such placement usually reduced the likelihood of
participation by subgroups of special needs students in regular vocational education programs. (Nacson & Kelly, 1980:p.xiii).

A study conducted by Brian Cobb and Allen Phelps (1983) revealed findings of inappropriate placements of students with disabilities in vocational programs, and a general lack of support services for these students. Only one third of the students in their study who were enrolled in a vocational programs had any reference in their IEP that indicated a vocational placement, and less than 40% of the IEPs that included mention of a vocational placement lacked the identification of vocational-related goals or objectives in their IEP. In addition, a review of the transcripts of these students revealed that the majority of students with disabilities in vocational education were receiving no support or assistance and large numbers of them were receiving "D"s, or "F"s or had dropped out of the course. In addition to this, Cobb and Phelps noted the following:

- enrollment patterns of handicapped students in regular vocational education programs continues to show (1) depressed levels of overall enrollment relative to their numbers in the general high school population, (2) consistently high proportions enrolled in low-skill training programs, or those (such as in work study) whose goal is not related to occupation-specific training at all, and (3) consistently high levels of mildly handicapped students whose regular vocational education is occurring without benefit of supportive services (primarily learning disabled) or who are being trained in segregated vocational education or special/vocational education classes (primarily mildly mentally retarded) (Ibid, 1983).

These and other findings were used to expand the requirements of school districts in the provision of services related to vocational education. The Carl D. Perkins Vocational Education Act of 1984 (PL 98-524) served as the first step toward a narrowing of the use of federal vocational funds to the focus on two priorities: program improvement and serving special populations (Phelps & Frasier, 1988).

Section 204 of the 1984 amendments required local schools to provide each handicapped and disadvantaged student with the following types of specific services in meeting the vocational education needs of these students:
- a vocational assessment of the student's interests, abilities; and special needs;
- the provision of special services, including the adaptation of curriculum, instruction, equipment, and facilities necessary to serve the student's vocational needs;
- the provision of guidance, counseling, and career development activities; and
- career development and counseling services designed to facilitate the student's transition from school to post-school employment and career opportunities.

In addition, the legislation required that the mandates of P.L. 94-142 also be met in serving students with disabilities in vocational education. Taken in sum, these laws provide the legal framework for ensuring that students with disabilities are served in the least restrictive environment, and that every effort is made to ensure that additional services and supports are provided to assist students in this setting.

The following is a summary of the relevant requirements of the act, as stated in the legislation. These requirements, when taken together, represent the full range of services school districts are expected to provide to students with disabilities under the requirements of P.L.94-142 which provide the foundation upon which the relevant vocational education goals and objectives for designing a student's IEP as it relates to their vocational program and the setting in which the student's vocational program is to occur.

Sec. 300.346 Content of individual education program
(a) General. The IEP must include—
(1) A statement of the child's present levels of educational performance;
(2) A statement of annual goals, including short term instructional objectives;
(3) A statement of the specific special education and related services to be provided to the child and the extent that the child will be able to participate in regular educational programs;
(4) The projected dates for initiation of services and the anticipated duration of the services; and
(5) Appropriate objective criteria and evaluation procedures and schedules for determining, on at least an annual basis, whether the short term instructional objectives are being achieved.

(b) Transition services
(1) The IEP for each student, beginning no later than age 16 (and at a younger age, if determined appropriate), must include a statement of the needed transition services as defined in Sec. 300.18, including, if appropriate, a statement of each public agency's and each
participating agency’s responsibilities or linkages, or both, before the student leaves the school setting.

Sec. 300.550 General. Least Restrictive Environment
(a) Each SEA shall ensure that each public agency establish and implement procedures that meet the requirements of Secs. 300.550 - 300.556.
(b) Each public agency shall ensure --
   (1) That to the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are non-disabled; and
   (2) That special classes, separate schooling or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

Sec. 300.552 Placements
Each public agency shall ensure that:
(a) The educational placement of each child with a disability-
   (1) Is determined at least annually;
   (2) Is based on his or her IEP; and
   (3) Is as close as possible to the child’s home.
(b) The various alternative placements included in Sec. 300.551 are available to the extent necessary to implement the IEP for each child with a disability.
(c) Unless the IEP of a child with a disability requires some other arrangement, the child is educated in the school that he or she would attend if non-disabled.
(d) In selecting the LRE, consideration is given to any potential harmful effect on the child or on the quality of services that he or she needs.

Sec. 300.555 Technical Assistance and Training Activities
Each SEA shall carry out activities to ensure that teachers and administrators in all public agencies --
(a) Are fully informed about their responsibilities for implementing Sec. 300.550; and
(b) Are provided with technical assistance and training necessary to assist them in this effort.

Efforts to provide greater access to quality vocational education opportunities continued through the 1980s. At least in part through federal initiatives, opportunities to access vocational educational opportunities by students with disabilities would continue to expand, to the point that an evaluation in 1987 of the impact of the Carl D. Perkins Vocational Education Act of 1984 concluded that "handicapped...students enrolled in public
high schools do have access to vocational education; in fact, they earn more credits in vocational education than any other students" (Hayward & Wirt, 1989, p.viii). However, despite improvements in the delivery of services to students with disabilities in vocational education that occurred over the years, the mandates for the cooperation and collaboration among service delivery personnel at the school level remain lacking and have not accomplished the intended outcomes of the legislation (Walters, 1986).

The increase in enrollments of students with disabilities during the 1970s and early 1980s was occurring at a time when vocational enrollments overall were declining worldwide (Benavot, 1983). In the U.S., while vocational enrollments were declining, there was a dramatic shift taking place in the composition of students enrolled in vocational programs, with students who are economically and academically disadvantaged and students with disabilities represented in increasingly greater proportions and high-achieving students taking fewer and fewer vocational courses (USDE, 1994). This shift can be seen as the result of a variety of social, political, and economic forces in the late 1970s and early 1980s that would serve to impact the direction of educational policy and reform initiatives into the 1990s.

The Socio-political and Economic Context of Increased Access of Students with Disabilities in Vocational Education

During the 1970s, America's share of the world market had begun to shrink, and its relative economic position in the world economy was in steady decline. This shift has been attributed as being largely the result of the nation's economy moving from one of an industrial base to one that is a service based. With the loss of manufacturing jobs also came the loss of the relatively high wages available to unskilled and semi-skilled labor - wages which had previously been the major source of economic stability for a large portion of the American working class.

In what could be described as a political and cultural backlash to the radicalism-
turned-liberalism of the 60s and 70s, as middle class baby-boomers settled into "career and family," the Republicans gained control of the White House on a platform of fiscal constraint and a return to traditional values. Several researchers and educational analysts (Fitzgerald, 1988; Decoteau, 1989; Wagner, 1991; USDE, 1994) have attributed the decline in vocational enrollments to the nation’s response to a report published in 1983 by the U.S. Department of Education, entitled "A Nation at Risk." Citing the country’s declining economic competitiveness, the "poor performance" of American students on international achievement tests, and growing complaints from leaders in business and industry and the military with regard to the lack of basic skills among high school graduates, this report generated a fire storm of educational reforms that were aimed at creating higher standards of academic achievement for elementary and secondary students. One of the primary responses to the "call to excellence in education" on the part of many states and local school districts was to raise high school graduation requirements (Decoteau, 1989; Wagner, 1991; USDE, 1994), which created an obstacle for students wishing to access vocational education. "As credit requirements in mathematics, science, or foreign language increase, for example, the space in students’ schedules for courses in vocational education is reduced" (Wagner, 1991:30).

However, vocational education was seen as one of the solutions to addressing the problem of employment opportunities for those populations that were least likely to be college bound, including students with disabilities, and new federal vocational legislation responded to this by calling for increased access in vocational education for these populations. Paralleling these educational reform efforts was "the evolving social movement that has called for increased normalization for all persons with disabilities" (Decoteau, 1989).

The participation of students with disabilities in vocational education continued to increase as these youth were increasingly seen as employable (Gaylord-Ross, 1984).
Professionals in the field of special education soon adopted the practical philosophy of the career education movement that emphasizes the development of knowledge and skills which enable students to qualify for entry-level occupations and to succeed in other non-school environments (Bellamy et al., 1985).

Researchers and practitioners in the area of vocational special needs were expanding their knowledge base with regard to effective strategies and practices in the vocational training of students with disabilities. Among their findings were the benefits vocational education had to offer students with disabilities with regard to keeping students in school and increasing their chances for employment.

The Benefits of Vocational Education for Students with Disabilities

The primary objective of normalization is for persons with disabilities to be able to live their lives in a fashion as similar to the non-disabled as possible. With regard to education, this includes being afforded the same educational opportunities, environment and outcomes as their non-disabled peers. With regard to work, this includes being afforded the economic and social opportunity of employment.

The purpose and aims of vocational education for students with disabilities is the same as that of vocational education for students who are non-disabled; that is, to acquire the knowledge and skills necessary to securing entry-level work in a particular occupation or trade. The ability to work is an important aspect of normalization for persons with disabilities, in that it provides the individual access to not only the economic rewards of work, but a source of dignity that comes with being productive as well as access to the social status that working confers. As Wirth (1983) points out

A person's quest for work is related to the human quest for potency in which the human may explore his potential, test the limits of himself, be in touch with his powers and in the process discover his human dignity and worth (Ibid:p.70).

While the general aim of vocational education for students with disabilities may be
that of preparing students for the world of work, researchers have found that vocational education is effective in keeping students with disabilities from leaving school early - or, dropping out. Researchers have noted that by virtue of their disabilities, the nature of the school environment, and the fact that they are disproportionately more likely to experience the risk factors associated with being economically disadvantaged, many students with disabilities experience a greater risk of poor school performance and greater chances of dropping out (Mercer & Cox, 1991; Wagner, 1991).

**Vocational Education and School Retention**

Recent research suggests that a lack of social bonds between students and their schools may be at the heart of alienation from school and much poor school performance (Wehlage, 1983; 1989; GAO, 1987; Pittman & Haughwout, 1987; Finn, 1989). A social bond is apparent when a student "is attached to adults and peers, committed to the norms of the school, involved in school activities, and has belief in the legitimacy and efficacy of the institution" (Wehlage et al., 1989). In addition, the school's culture and practices, including the structure, organization, and nature of the social bonds and norms that govern the institution, have a great deal to do with the decisions of students to drop out of school (Coleman & Hoffer, 1987; Wehlage, 1988).

Dropping out of school can be seen as a measure of the lack of attachment to the school as an institution - a rejection of its norms, values and practices. While the decision of an individual to drop out of school may be an indication of alienation from the institution, a high incidence and prevalence of school leaving by any one group may be viewed as an institutional measure of group marginality. And, as some see it, "the rising number of school dropouts is the single most dramatic indicator of the degree to which schools are failing children" (Lichenstein & Nisbet, 1992).
Research indicates that students with disabilities are more likely to drop out of school than the general student population (Fitzgerald, 1988; Wagner & Shaver, 1989; Siegel, 1990; Stainback & Stainback, 1992), with the drop out rates among students with learning and emotional disabilities the highest of all (Butler-Natlin & Padilla, 1989; Levin, Zigmond, & Birch, 1985). The notion that students with disabilities are marginalized by the school as an institution is further supported by research on their reasons for dropping out.

The reasons for dropping out cited most often in the literature are poor academic performance, "not liking school" or not seeing the relevance of school to the outside world, and discipline problems (Barro & Kolstad, 1986; Center for Educational Statistics, 1986; Rumberger, 1983). According to the research conducted by Butler-Natlin and Padilla (1989), one third of the parents of children with learning or emotional disabilities who had dropped out of school cited not liking school as their primary reason for leaving school. Of the remaining students, parents of emotionally disabled students were more likely to cite behavior problems as the reason for their child dropping out, while parents of students with learning disabilities were more likely to cite poor grades or generally not doing well in school. In addition to these findings, these authors found that (1) I.Q. was unrelated to the tendency to dropout, (2) students with behavior, in school or out of school, that was considered deviant (e.g. had been suspended or expelled from school, had been arrested, fired from a job or incarcerated) were more likely to drop out, (3) that students with disabilities who attended larger schools were more likely to drop out, and (4) that students with disabilities who "belonged to a group" were less likely to drop out.

A national longitudinal study, supported with a contract from the U.S. Department of Education's Office of Special Education Programs, conducted during the 1980s provided evidence of the efficacy of vocational education for students with disabilities in a variety of
areas. In addition to finding that students with disabilities who took vocational education were significantly less likely to drop out of school than their disabled peers who did not take vocational education, the study also found that these students were absent from school less, reported greater satisfaction with their educational program, and were more likely to be involved with a group or school activity (Wagner, 1991), all of which could be considered indicators of an attachment to the school community - even if this attachment remains characterized by a degree of marginality.

The question arises then, what is it about vocational education that provides an incentive for students with a disability to remain in school when so many of their peers are dropping out? While there is a lack of research to address this question specifically, it has been suggested by some that vocational education provides many of the same characteristics of schools and programs that are known to affect the rates at which students decide to dropout, including smaller classes that provide for greater personal contact with the teacher, a focus on basic skills development, and school work that has meaning and relevance outside the classroom (Wehlage, 1983; Sherman, 1987). In addition, learning styles research indicates that as many as one third of all learners learn better when information is presented in an applied context in which the student can actively engage in the subject matter (Fitzgerald, 1988). Vocational education flows from a "constructionist" model of learning wherein knowledge is actively applied in a concrete manner and in a way that results in a tangible product, as opposed to a "abstract reductionist" model of learning most often found in traditional liberal arts instruction wherein knowledge is acquired in a passive manner and rarely applied in a way that is meaningful or relevant to the life of the child (Poplin & Stone, 1983). As an active, hands-on instructional approach, vocational education appeals to those students who tend to be more concrete, visual, tacit learners (Cross, 1992). Only recently are
educational theorists beginning to recognize that a large percentage of students learn better when information is presented in an applied context (Raizen & Colvin, 1992). Students with learning disabilities may find that vocational education better accommodates their learning style, enabling them to be successful.

The research conducted by Wagner, served to validate other research findings in the field which had made claims with regard to the "holding power" of vocational education for students with disabilities. Her findings with regard to the ability of vocational education to increase employment opportunities for students with disabilities would also serve to validate the efficacy of vocational education for students with disabilities.

Like other students who are not college bound and potentially at risk, vocational education was seen as being able to offer both relevance and appropriateness to their high school education (Weber, 1987), and increasingly was shown to be an effective strategy to prevent early school leaving (Hahn, Dansberger, & Lefkowitz, 1987). For these, and other reasons, vocational education has increasingly been viewed as providing greater opportunities for students with disabilities than the programming offer by a traditional high school liberal arts program (Cobb, 1983; Gaylord-Ross et al., 1984; Bellamy et al., 1985; Phelps, 1992).

**Vocational Education and Increased Employment Outcomes for Students with Disabilities**

Employment increases the status and quality of life of all persons, including persons with disabilities. Secondary vocational education for students with disabilities is seen as essential to enhancing the chances for a normalized adult life for these students (McDonnell, 1985; Phelps, 1992; Siegel, 1990). Because of this, it has been argued, the educational program of study for most students with disabilities as they move from primary school to secondary education, should focus on the development of life skills that will assist them in their transition from school to work and independent living (McDonnell, 1985; Siegel, 1990).
According to Siegel (1990), beyond the goals of independent living, there continues to be a concern for the "cost-benefit" of vocational training and vocational rehabilitation programs that emphasize the value of employment for persons with disabilities relative to their ability to survive without the Social Security Income (SSI) and contribute to the tax base.

And, as Siegel points out, the public policy inferred by research that proceeds from this position is that (1) if a particular vocational service is associated with vocational success, it is worth the cost, and (2) i.e. the targeted population is experiencing vocational success, that population is happy to be employed, or at least no more unhappy than the population at large. (Ibid: 184).

For several years now, studies regarding the employment among students with disabilities who participated in vocational education programs continue to indicate that (1) these students are more likely to be gainfully employed than their disabled peers who did not participate in vocational education (Brody-Hasazi et al., McDonnell, 1989; Wagner, 1991; USDE, 1994), and (2) that in comparison to their non-disabled peers who are also employed, students who participated in vocational education made more money (Wagner, 1991; USDE, 1994).

In the context of growing support among special educators for the value of vocational education in assisting students with disabilities with a successful school to work transition, enrollments in vocational education by students with disabilities continued to grow. In fact, the 1987 national High School Transcript Study (HSTS) indicated that virtually all students with disabilities in public high schools (96%) earned some vocational credits in high school (Hayward & Wirt, 1989).

Although occupationally oriented vocational courses are related to positive outcomes for students with disabilities as a whole, we must recognize the tremendous variation in the abilities and experiences of students with disabilities. Recent research has demonstrated powerfully that students with differing disabilities vary as much from one another as they do from students without disabilities (Wagner, 1991:p.30).
It must also be recognized that, even within a single disability category, young people represent a broad range of "functional skills," interests, and potential for positive transition outcomes (Marder & Cox, 1991; Wagner, 1991). These differences, both between and within different categories of students with disabilities, must therefore be recognized as an important variable in a study of how schools respond to these students.

Mainstreaming in Vocational Education

Not only have opportunities for vocational education increased in recent years for students with disabilities, but so has the extent to which vocational education is provided to these students in a mainstreamed setting. In 1974, in a study of the impact of the 1968 set-aside of federal vocational education funds for students with disabilities found that 70% of the programs for such students were conducted as special programs in which students with disabilities were taught separately from their non-disabled peers. Data from both the National Longitudinal Transition Study (NLTS) and the High School Transcripts Study (HSTS) suggested that 15 years later, vocational education in the mainstream is the norm for the majority of secondary special education students (Wagner, 1991). The NLTS data indicated that 78% of students with disabilities who took vocational courses in their most recent school year took at least one of their vocational courses in a mainstreamed (regular vocational course) setting, while the HSTS data reveal that 82% of vocational credits were earned in regular education classes (Wagner, 1991). "Not surprisingly, rates of mainstreaming generally were higher for categories of students whose functional abilities also were higher" (Ibid:10).

The combination of a decline in vocational enrollments among the "regular" students population and the increase in enrollments among students with disabilities over the past 10 years has resulted in growing social class and status distinctions in the school community.
One result of this has been an increasing "stigmatization" of vocational education as a marginal education for marginal groups (Dykman, 1992; Oakes, 1992; Rand, 1992; Aring, 1993). And, as a recent report published by the U.S. Department of Education stated, Vocational teachers and administrators are worried about this change in student composition and about the status of vocational programs in the larger education system. Our case studies show evidence of stigmatization where large numbers of special population students are concentrated in vocational programs. Some of these studies suggest that there may be a "tipping point" after which other students avoid vocational programs (USDE, 1994:5).

**Stigma Twice Over: Students with Disabilities in Vocational Education**

Erving Goffman (1961) once observed that there is natural tendency for the stigma of a stigmatized person or group to spread to those with whom they associate. He referred to this as "courtesy stigma." Similarly, Biklen and Taylor (1985) write it is often said that the status of a profession correlates directly with the perceived status of its clientele and the degree to which the ideas and practices of the profession are thought to be esoteric. If this is the case, special education will most likely not rank as a high-status profession. First, its clientele are perpetually the objects of stereotyping, prejudice, and discrimination. In most quarters they hold low status (Ibid:181).

While Biklen and Taylor are speaking in reference to the profession of special educators, and persons with disabilities, the same general social attitude applies to vocational educators, vocational education, and the students who enroll in vocational education.

Consider the following quotes in reference to vocational education.

- In the U.S., vocational - the "V word" - is a dirty word, its negative connotations deeply embedded in language and culture (Aring, 1993:396);
- If we think of the word vocational as a kind of "mental box," and if that box is considered "bad," then any new program we put into that box will become bad (Ibid:397);
- vocational tracks within comprehensive high schools, which are often dumping grounds for the worst students (Ibid:397);
- vocational education has acquired a pretty dismal reputation as an irrelevant corner of the high school curriculum -- over-the-hill instructors teaching unnecessary skills on outmoded equipment -- that frequently has been used as a dumping ground for dim, unwanted or troublesome students (Stanfield, 1993:335); and
- It must come as no surprise that today any middle-class parents insist that vocational education is definitely "not for my kid" (Institute on Policy Research, 1988:32).
Comments offered by Massachusetts high school students in a survey conducted in March of 1989 reflect similar sentiments with regard to vocational education and the vocational students. The report (Massachusetts Department of Education, 1989) tabulated the comments as follows:

- Vocational-technical education is an easy way [sic] out for lazy students; a way to avoid academics (19%),
- Vocational-technical education programs are for students who want to learn a trade; non-vocational program are for students who want to go to college (17%)
- Non-vocational programs provide a better education than vocational-technical programs do (14%)
- Bad reputation of vocational-technical programs prevents students from enrolling in vocational-technical programs (11%), and
- Vocational-technical education programs are for losers and drug abusers [no % given] (Ibid:viii).

Only a small percentage of the students who offered comments indicated that vocational education was valuable. These comments were summarized in the report as "vocational-technical education is a good option for some students; vocational-technical education is beneficial (14%)" (Ibid:viii) [Emphasis added].

According to Jeanne Oakes (1992), the low opinion of vocational education is deeply embedded in the institutional culture of American high schools, which are organized in a hierarchy of tracks where college-preparatory courses - those who teach them and those who take them - are held in high esteem, while "general" and occupational-specific tracks are found at the bottom. Oakes found that academic courses drove curriculum policy and practices at all of these schools, while vocational education functioned as a repository for low ability students and those with behavioral problems.

Americans tend to associate "vocational education" with narrow training for marginal students and as a preparation for manual, low-status work, or at best, work in the blue-collar trades. And as well-paying jobs for vocationally educated workers disappeared during the same time period, the negative view of vocational education was further reinforced (Aring,
Over time, the term vocational "has come to be identified in urban areas with inequities of race, gender, and language, as large concentrations of minorities, especially African-Americans and Hispanics, take part in vocational programs" (Weinberg, 1983:358).

Fueled by the educational reforms of the early 1980s, "as state requirements for academic courses grew and overall school resources shrank, vocational programs suffered, at best, benign neglect; at worst, vocational programs, teachers, and students were held in disdain" (Rand, 1992:2). The low status held for vocational education has also been cited as a barrier to efforts on the part of education administrators to integrate academic and vocational course content and strategies, "because many on the academic side worry that vocational content, teachers, and students might taint their courses" (Rand, 1992:2).

The problem with vocational education's low status is not new. There have been a variety of efforts on the part of vocational education advocates in the past to raise the status of vocational education, particularly in light of declines in enrollments over the last decade. Part of their most recent strategy has been to change the name. As Dykman (1992) observed, as a result of frustrations with regard to the outdated stereotype of vocational education as a "dumping ground" for the "lower-track" students who can't do anything else, many states and individual school districts have either changed the name or are in the process of considering a name change.

Many schools have opted to trade in "vocational" for a name that they say reflects positive changes in their programs. The word was burdened with "negative baggage." Administrators who have been involved in the name-change process say they want to back away from "vocational" because of its negative image. They say a majority of the American public associates the term vocational with slow learners, special education, low pay and entry-level jobs. (Ibid:38).

Clearly, the assertion made in the report issued by the USDE "that there may be a "tipping point" after which other students avoid vocational programs," and that "vocational teachers and administrators are worried about this change in student composition" is an
indication that such concerns may create a barrier to the mainstreaming of students with disabilities, particularly students with severe disabilities, in regular vocational programs as vocational teachers and administrators seek to retain what status they have left, however marginal it may be, within the school community. The extent to which the issue of stigma presents a barrier to the mainstreaming of students with disabilities in vocational education is one of the questions to be investigated by this research.

Little has been written with regard to factors that influence the rates at which students with disabilities are mainstreamed in vocational education. However, one can draw from existing research in the area of factors associated with the mainstreaming of students with disabilities in "regular" educational programs, work that has been done to identify the characteristics of programs that are successful at increasing the rates at which students with disabilities are served in a mainstreamed vocational settings, and research that is peripherally related to factors associated with the segregation and "exclusion" of persons with disabilities, such as the mentally ill. From this, it is possible to construct a set of research hypotheses for purposes of investigating the influence of a variety of community and school characteristics on the rates at which students with disabilities are mainstreamed in vocational education.

Factors Associated with the Mainstreaming of Students with Disabilities in Vocational Education

There exists a wide range of social, political, and economic factors that influence the structure and culture of the school, and the community in which it resides, which may affect the ways in which students with disabilities are provided access to a vocational education in the least restrictive environment. The U.S. Department of Education (1981) found that the capacity of a system to integrate students with disabilities is constrained by the nature and severity of their handicaps and the resources available, and that "reservations over a policy of full integration are both philosophical and technical in nature" (USDE:10). The study also
stated that schools have "the potential to minimize the effects of a handicapping condition and to avoid the creation of unnecessary social and educational marginality" of these students (Ibid:12). Research regarding the benefits of vocational education for students with disabilities, as discussed earlier, support the assertion that one of the ways in which schools can reduce the likelihood of marginality for students with disabilities is through mainstreaming.

This research is interested in both the structural demographic factors of the school and community, as well as the organizational and cultural context of the school, relative to the extent to which factors associated with these conditions effect the rate at which students with disabilities are mainstreamed in vocational education. The purpose of this section of chapter four is to provide a review of the literature as it relates to school and community factors that may be associated with the rates at which students with disabilities are mainstreamed in vocational education. In doing so, this summary of previous research draws upon research that has been conducted in the areas of both regular and vocational education, as well as research in the area community characteristics and the exclusion of deviants.

The summary of research findings relative to factors that may influence the mainstreaming of students with disabilities are presented here under the two broad categories of structural characteristics and cultural characteristics. The summary of research findings relative to those school and community factors associated with the rate at which students with disabilities are mainstreamed or excluded from a mainstreamed setting are more structural, and therefore more easily quantifiable, are referred to here as "community and school variables," and include such things as the size of the school, the wealth of the community, and sending or receiving status of the school. Those factors that are associated with the organizational context and culture of the school and community that effect placement patterns
of students with disabilities in vocational education, are referred to here as "system constraints."

The purpose of organizing the review of the research literature in this way allows for the presentation of previous research findings in a way that corresponds conceptually to the structure of the research design. The effects of community and school variables on the mainstreaming of students with disabilities represent the structural demographic factors of the community and school (e.g. school size, community wealth, and school expenditures) that may influence the placement patterns of students with disabilities, the effects of which will be investigated utilizing quantitative methods of hypothesis testing. System constraints, on the other hand, refer to the social, political, and organizational factors found within the school and community that influence the placement patterns of students relative to serving students in a least restrictive environment. The relative effects of organizational and cultural factors on the placement of students with disabilities will be investigated utilizing the qualitative methods of observations and face-to-face interviews with school personnel. A review of the literature relative to community and school variables is presented first, followed by a review of the literature relative to the organizational and cultural factors believe to influence placement decisions within the school -- factors referred to here as system constraints.

**Community and School Variables**

Community and school variables refer to those characteristics of the local school and community which may serve to influence the mainstreaming of students with disabilities that are more easily quantifiable. These factors include school size; the sending and receiving status of the school relative to whether or not the school is host to an Area Vocational Center (AVC), community wealth, per pupil expenditures, per handicapped student expenditures, and the proportion of students with disabilities who are served in vocational education. A review
of the literature relative to the effect of each of these variables on the mainstreaming of
students with disabilities is presented below, followed by the research hypotheses to be
investigated by this study generated as a result of this review of the literature.

School Size. One of the variables associated with the rates at which students with
disabilities are mainstreamed in vocational education is school size. It has been noted in the
discussion of factors associated with the rates at which students dropout of school that the
school environment, including school size, influence the rates at which students engage or
disengage from the school community. Mainstreaming can be understood as a measure of
integration within the school community -- as a characteristic of the school culture in which
persons with disabilities are included as members of the community. Students in smaller
schools can more readily establish the social bonds that support commitment to school and
community than can students in larger schools (Grabe, 1981; Wehlage, 1983, 1987; GAO,
1987). In addition, in having to process a greater numbers of students, larger schools tend to
offer a larger number classes and program options -- conditions that are also more conductive
to the organization of the curriculum and students in terms of ability levels, and practices of
educational tracking which represent a subtle form of group separation and exclusion. Larger
schools are also more likely to have separate departments and administrations for programs
which are less conductive to on-going communication, cooperation and collaboration -- factors
that are known to facilitate mainstreaming and inclusion efforts (Stetson, 1984; Brinker &
Thorpe, 1985; Halverson & Sailor, 1990). Larger schools are less likely to mainstream
students with disabilities than smaller schools (Wagner, 1992).

- Hypothesis 1. The larger the high school enrollment, the greater the likelihood that
students with disabilities will be excluded from a mainstreamed vocational setting.

Sending and Receiving School Status. Another community variable that is important
to our research is that of "sending" school versus "receiving" school status. Sending school
students are those students who attend their vocational education program at an area vocational center (AVC), which are located within a nearby comprehensive high school. These students travel to the AVC daily for their vocational education for two periods a day. In addition, one class period is typically needed for traveling time. The proportion of students with disabilities from sending schools enrolled in vocational education is not only higher than that of the comprehensive high schools, sending schools are also more likely to send those students who are the most difficult to serve (USDE, 1994). In addition, the time taken out of the sending student’s school day for traveling to the area AVC and the scheduling problems that are created with coordinating school schedules, creates a situation wherein: (1) students from sending schools are more likely to have fewer vocational programming options available to them than receiving students; and (2) there will be a greater likelihood that sending school students enrolled in vocational education are those students who are less restricted by the need to meet graduation requirements (such as students with moderate to severe disabilities). This research proposes that sending school status will have a negative effect upon the rate at which students with disabilities are mainstreamed.

- Hypothesis 2. Students with disabilities from sending schools are more likely to be excluded from a mainstreamed vocational education setting than are their receiving school peers.

**Community Wealth.** The relative wealth of a community is another characteristic that may influence the rate at which students with disabilities are mainstreamed in vocational education. While no direct reference in the research literature to community wealth as a factor associated with rates of mainstreaming could be found, Arnold Linsky (1970a), in his study of the admittance rates of persons who were mentally ill, found that the "propensity to isolate the mentally ill appears to be influenced by a variety of social cultural conditions, including both the characteristics of the deviant and of the community structure itself"
(Linsky, 1970a:304). In this particular study, the relative heterogeneity of the community was the influencing factor of interest. In a similar study by the same author (Linsky, 1970b), research findings indicated that the tendency to exclude persons for deviant behavior (as measured by commitments to mental hospitals) "is greater for those who are either culturally marginal or of low social class and those more isolated from stable group ties" (Linsky, 1970b:170). While Linsky's research utilized the relative heterogeneity of the community on the treatment of deviants, community wealth may well serve as a similar measure -- that is, as a measure of social class differentiation. As cited earlier, there is evidence to suggest that social class differences may effect the level of acceptance or rejection of students whose behavior is considered deviant. This was reflected in the tendency of peers of lower socio-economic class to be more accepting of peers who have mental retardation as well as the tendency for persons from lower socio-economic backgrounds to be less likely to view persons with learning disabilities and mental retardation as deviants. This research proposes that there is a negative relationship between the wealth of the community and the rate at which students with disabilities will be mainstreamed.

- Hypothesis 3. Wealthier communities will have a greater tendency to exclude students with disabilities than will poorer communities.

**Economic Support for Education.** Wealthier communities are also more likely to be characterized by a greater proportion of citizens who have higher levels of educational attainment than that of poorer communities. One of the consequences of this will be that wealthier communities are more likely to have a shared interest in supporting education and will commit higher levels of economic support for education than poorer communities. It is predicted that communities that have higher expenditures for regular education will be less likely to mainstream students in vocational education. The reasons for this are similar to those given for predicting the effects of community wealth on the rates at which students are
mainstreamed. This research proposes that community wealth will be negatively associated with the likelihood that students with disabilities will be mainstreamed.

- **Hypothesis 4.** The greater the expenditure for regular education, the greater the likelihood that students with disabilities will be excluded from a mainstreamed setting.

  **Expenditures for Special Education.** Similarly, expenditures for special education serve to reflect the extent to which the community has a shared interest in supporting the provision of services for special education. For those parents who have a child with a disability, strong support for programs and services for students with disabilities will be in their interest. Parents whose children are not disabled are also more likely to support the provision of special education programs in the interest of ensuring that there are adequate resources to meet the needs of children with disabilities who would otherwise be a distraction or present a drain upon what both the teacher or school are able to provide "regular" children. Poorer communities will have fewer economic resources to support both general education and special education and will therefore be more likely to mainstream students with disabilities due to the extra costs in providing education in a separate setting.

  Local school systems in New Hampshire represent far greater diversity in special education program regulation and service provision than most states, due to its heavy reliance on local taxes and its emphasis on local control (NH Bureau of Special Education, 1985; Kerns, 1988). As such, the measures proposed here provide an excellent opportunity to assess the extent to which these community variables affect the rates at which students are included, or excluded, from regular vocational education. This research proposes that expenditures for special education will be negatively related to the mainstreaming of students with disabilities in vocational education.

- **Hypothesis 5.** The greater the expenditure for special education services, the greater the likelihood that students with disabilities will be excluded from a
mainstreamed setting.

The participation of students with disabilities in vocational education. In investigating the school and community variables that may effect the rate at which students with disabilities are mainstreamed in vocational education, it is important to take into consideration the rate at which students with disabilities participate in vocational education. If the participation rate of students with disabilities is low, it is predicted that there will be a greater likelihood that these students will be placed in a mainstreamed setting, as opposed to in a segregated setting. One of the reasons for this is smaller numbers and the economy of scale. Lower participation rates necessarily imply fewer students and special needs of fewer students are easier to accommodate in a mainstreamed setting than are the needs of many students. Also, as the participation rate of students with disabilities increases, so does the likelihood that this population will be characterized by a greater diversity of students with special needs. As the number and size of the population of students increases, so does the likelihood that schools will create separate classroom settings to accommodate both the greater number, and greater diversity, of students with disabilities. This research proposes that higher rates of participation among students with disabilities will negatively effect the rate at which these students are mainstreamed.

- Hypothesis 6. As the proportion of students with disabilities enrolled in vocational education increases, so does the rate at which these students are excluded from a mainstreamed setting.

The student’s disability status. While not a school or community variable, given the wide range of disabilities that exist within the population of students with disabilities, and the wide variety of challenges posed by the nature and degree of different disabilities, the effect of the student’s disability on whether or not the student is placed in a mainstreamed or separate setting is critical to our research, and must be taken into account and controlled for.
in some way.

The nature and severity of a student's disability will effect decisions regarding the placement of that student in a mainstreamed or separate setting, with students whose disabilities are more severe more likely to be placed in a separate, segregated setting and students whose disabilities are less severe more likely to be placed in a mainstreamed setting. This notion is supported by the preponderance of studies in the research literature that reflect a "functional limitations" approach to the development of educational programs in serving of students with disabilities. More specifically, students with mild to moderate disabilities, such as students with learning disabilities or physical impairments, are more likely to be mainstreamed than are students whose disabilities are more severe, such as students who have been identified as mentally retarded, deaf and blind, or multiply handicapped.

- Hypothesis 7. Students with more severe disabilities are more likely to be excluded from the mainstreamed vocational education setting than students with less severe disabilities.

The Availability of STEP

One of the questions this research seeks to answer is the effect that STEP programs have on the rates at which students with disabilities participate in vocational education. This research proposes that for those school districts for which Separate Vocational Programs for Students with Disabilities (STEP) programs are available as a vocational placement option, the rates at which students with disabilities are served in vocational education will be significantly greater since the availability of STEP provides both a greater number and larger range of vocational program options for placing students with disabilities in vocational education.

In addition, STEP may also provide a means whereby some students with disabilities can obtain basic academic and pre-vocational skills that may enabled them to be mainstreamed into a regular vocational program later in their high school career. While the absence of
STEP as a vocational program option means that all students with disabilities enrolled in vocational education are in a mainstreamed setting, many students with disabilities may be excluded from participation in vocational education as a result of the unavailability of the alternative vocational setting that STEP provides.

- Hypothesis 8. The participation rate of students with disabilities in vocational education will be greater for those school districts for which STEP is available.

In summary, a review of the literature suggests that there are a several structural, demographic features of the school and community within which the school is located that may influence the likelihood that students with disabilities will be placed in a mainstreamed or separate vocational education environment. They are identified here as school and community variables. Among the school and community variables that are predicted to have a negative effect on the rate at which students with disabilities will be mainstreamed are school size, sending school status, community wealth, expenditures for regular and special education, and the rate at which students with disabilities participate in vocational education. While these structural, demographic factors of the school and school community may reflect certain cultural characteristics of the school and the community, they tell us very little about the socio-political and organizational context within which decisions to place students in a mainstreamed or separate setting are made.

Increasingly, educational researchers are interested in the processes whereby a student’s placement is determined and the ways in which the organizational and cultural characteristics of the school which serve to either facilitate or constrain the placement of students with disabilities in a mainstreamed environment. Previous research findings related to the organizational and cultural context of the school as they interface with the mainstreaming of students with disabilities are discussed below. These issues are organized under the general rubric of "system constraints."
System constraints

Broadly stated, "system constraints" refers to those characteristics of the school, and to a lesser extent the community in which it is located, which serve to facilitate or act as barriers to the mainstreaming of students with disabilities. More specifically, system constraints refers to those characteristics of the school and community that may serve to influence the decision making processes whereby students are placed in a mainstreamed or separate classroom environment. Those characteristics, or factors, that influence the processes of decision making with regard to how the least restrictive environment of each student comes to be defined are complex and difficult to delineate. However, in drawing from previous research findings it is possible to construct a series of organizational and cultural characteristics of the school and community that, when taken together, may serve to explain differences in the placement patterns of students with disabilities in vocational education from one school district to the next.

While some research indicates that the culture of the school community will in a large part determine the extent to which the students with disabilities will be included as members of the mainstreamed school community or remain excluded or marginalized, very little research has been conducted in this regard. Most of the research regarding factors that influence the mainstreaming of students with disabilities has been conducted on elementary and middle schools. However, given the increased emphasis on serving students with disabilities in vocational education over the last two decades, it is not surprising that there is more research on the mainstreaming of students in vocational education programs than there is on the mainstreaming of these students in regular high school courses. This may, at least in part, be due to the availability of federal funds to not only provide support for the serving of student with disabilities in vocational education, but for research regarding how
mainstreaming in vocational education is best accomplished.

In presenting a review the research literature on factors that influence the mainstreaming of students with disabilities, an introduction to the research on mainstreaming in regular education is presented first. This is followed by a summary of the research on factors found to influence mainstreaming in both regular and vocational education. The research is then summarized and presented in the form of four categories of barriers to mainstreaming, referred to here as "system constraints," which provide the basis for exploring some of the more complex and dynamic factors of the school and school community which may reflect the ways in which schools differentiate students with disabilities and afford them different opportunities for participation in the mainstreamed classroom along side their non-disabled peers.

**Barriers to Mainstreaming in Regular Education.** Biklen and Taylor (1985) identify eight barriers to the mainstreaming of students with disabilities in regular education programs. All but one, that of jurisdictional barriers, are discussed here. The first barrier is technological, which may include the limitations posed by assessment instruments or procedures; inflexible educational curricula; or the availability of necessary services to support the physical integration of a students, such as an aide. According to Biklen and Taylor, the groups that are typically most affect by technological barriers are the students who are severely disabled, behaviorally handicapped, severely and profoundly retarded, multiply handicapped, medically fragile, autistic, bilingual, or older youth who are in need of vocational training.

The second barrier is negative attitudes toward the mainstreaming of students with disabilities, including attitudes which may be found among school personnel at all levels -- such as administrators, regular teachers, students, parents, school board members, and
indirectly, local taxpayers. According to Biklen and Taylor, the students with difficulties most affected by attitudinal barriers are persons of racial or cultural minority, persons who are severely handicapped, and "students stigmatized by certain conditions (e.g., emotionally disabled)" (Ibid:112).

The third barrier is administrative barriers, which refers to "practices and policies that hinder the attainment of full educational rights for children with disabilities" and may include the lack of coordination and communication between special and regular departments of staff, or the existence of separate facilities for serving only disabled students (Ibid:113). The fourth barrier is political barriers, which includes the ability of parents and/or guardians and children themselves to advocate for students' rights. The fifth barrier identified is architectural barriers, which include facilities and labs that are not accessible to persons in wheelchairs or with limited mobility, including the lack of elevators to access classrooms located on other than one floor in a multi-level building.

The sixth barrier is economic barriers. "While lack of funds is not a legally acceptable excuse for the violation of students' rights, disabled children are sometimes denied an appropriate education owing to economic barriers" (Ibid:115). Some schools are financially overburdened limiting their ability to provide the full range of related services that may be necessary to effectively mainstream students. The economic inability to provide enough aides to serve all the students who are in need of a full-time aide in order to be mainstreamed is an example of an economic barrier. "Clearly, severely disabled and multiply handicapped students for whom educational costs are extensive are most likely to be unserved or underserved because of economic factors" (Ibid:115).

The seventh barrier is personnel barriers, which includes the unavailability of trained special educators and professional staff necessary to accomplish mainstreaming.
Schools sometimes have difficulty recruiting skilled and licensed professionals in the areas of physical therapy, occupational therapy, adaptive therapy, occupational therapy, adaptive physical education, sign language instruction, and other services. All disabled students may suffer from a lack of trained personnel, but students with the most intensive needs—namely, those who are severely disabled—suffer most (ibid:115).

On the other hand, seven administrative factors were identified by F. Stetson (1983) as being effective in facilitating the full integration of students with disabilities in regular education. These factors have found additional support in the work of other researchers (See Brinker & Thorpe, 1985; Halverson & Sailor, 1990). These factors include: organizational support for the LRE concept; an appropriate service delivery model; the assignment of personnel to provide administrative assistance and instructional leadership; a responsive staff development program that prepares personnel to assume new roles in implementing integration; a positive attitude on the part of regular educators and students relative to the integration of students with disabilities; community acceptance of LRE; and parental acceptance of LRE for their child with severe disabilities.

**Barriers to Mainstreaming in Vocational Education.** Phelps and Wermuth (1992) identify the several characteristics of the school, school personnel, and the placement process that promote or increase the mainstreaming of students with disabilities in vocational programs, the lack of which may constitute barriers to the mainstreaming of these students. These characteristics represent the flip side of barriers; that is, the factors that facilitate as oppose to constrain the mainstreaming of students with disabilities. The characteristics identified by Phelps and Wermuth are:

- **Administrative Leadership and Support:** Both institution and program administrators act in ways that reflect concerns for enrollment, completion, and appropriate placement for special needs students within the overall mission of the vocational-technical education programs.

- **Sufficient Financial Support:** Average per student expenditures for special needs students exceeded the expenditures for non special needs students at the institutional level. When comparing expenditures for special needs students, the additional costs of modified instruction, special equipment, staff development, and
other essential services are evident.
- **Individualized Curriculum Modifications:** Instruction is planned and delivered utilizing principles associated with individual education plans. Instructional activities are matched on an individuals or overall group basis to students' learning styles.
- **Vocational and Regular Educators' Involvement in Individualized Planning:** Vocational and regular educators are both involved in the individualized planning process used by the program. Indicators of this involvement include consultation regarding appropriate goals and objectives for students and frequent communication between vocational and special educators regarding modifications to instruction, student performance/achievement, and needed support services.
- **Intra- and Interagency Collaboration:** Effective intra-agency cooperation arrangements include indication of the departments and programs within the educational institution which provide support services, resources, and general assistance to either the special population students or the staff of the vocational special needs program; the coordination activities conducted; and the benefits of this collaboration (p.25-27).

Additional factors attributed to increasing the rate at which students are mainstreamed in vocational education include: the collaboration of special educators and vocational teachers in the development of the student’s IEP (Albright, 1986; Phelps, 1986; Gill, 1989); the availability of support services to teachers and students (Phelps, 1985); positive attitudes of vocational teachers toward mainstreaming (D’Alonzo & Barrett, 1977; Minner, 1982; Minner & Beane, 1983; Reynolds, Freyer, & Boland, 1985); and, the willingness of special educators to relinquish their role as protectors and mediators (Minner & Beane, 1983; Johnson & Pugach, 1992).

While their research was not conducted on secondary vocational education programs for students with disabilities, Simon Hakim & J. Weinblatt (1993) noted that the lack of clear program goals and objectives among staff at different levels in the vocational training programs for adults that they studied represented a barrier to the effective implementation of program delivery. It is safe to assume that the same might be true of placement decisions made with regard to serving students with disabilities in secondary vocational programs, particularly in light of the lack of consensus that exists with regard to what constitutes an
"appropriate" placement in "the least restrictive environment" as they interface with the types of vocational goals and objectives that are identified for the student. This includes questions regarding the extent to which conflicts may exist between the philosophical goals and objectives of mainstreaming and the educational and vocational training goals of skill acquisition, and how these conflicts come to be expressed in terms of decisions to mainstream, or not to mainstream, a student.

The notion that the achievement of the student's educational objectives is the ultimate goal to be achieved has been asserted by Epstein (1982) and Lieberman (1992) as support for the argument that some students are better served in a separate setting. Even advocates of mainstreaming acknowledge that meeting the needs of students with more severe disabled may require special classrooms and facilities (Gaylord-Ross, et al., 1988). Advocates of full inclusion, however, maintain that every student can be integrated into the classroom with their non-disabled peers if appropriate and adequate supports are provided. Inclusion advocates focus on modifying the environment such that all students are able to participate fully in classroom learning. For advocates of inclusion, the question is not when to mainstream, it is how to mainstream.

The issue of conflicting goals and objectives may be particularly acute with regard to the mainstreaming of students with severe disabilities in vocational education. While it has been well documented that persons with severe or profound disabilities learn social skills better in an integrated school setting (Biklen, 1989; Forest & Lusthaus, 1989; Stainback, Stainback & Slavin, 1989; Strully & Strully, 1989), the research suggests that school based vocational training may not provide the environment necessary to skill acquisition and generalizability. Generalizability is the ability to perform a skill under conditions that are different from those under which it was learned (Stokes & Baer, 1977; Horner, McDonnel, &
Bellamy, 1986; Fox, 1989), and a primary characteristic of persons with severe mental disabilities is substantial difficulties with generalization (Brown, et al., 1991). Since a school setting is not where these students will ultimately be using the work related skills they acquire, vocational training in the school setting may constitute an inappropriate and restrictive environment relative to the goals and objectives of their vocational training.

This may present a dilemma with regard to decisions about whether to mainstream students with severe disabilities in secondary vocational programs or to place these students in a community-based program where they are more likely to be able to generalize. Mainstreaming these students in a high school program may run counter to the objectives of their vocational training, while placing these students in a community-based program increases their marginalization as high school students and denies them access to the same high school experiences available to their non-disabled peers.

In summary, there is evidence to suggest that there exists a wide variety of factors within the school as an institutional organization that may affect decisions to place students with disabilities in a mainstreamed or separate program. They are identified here as system constraints, with the understanding that the nature and degree to which these factors are present will serve to facilitate or constrain the organizational patterns of student placement relative to the mainstreaming of these students in vocational education. For purposes of conceptual order, the factors associated with what have been identified as system constraints have been consolidated into four categories. These categories are:

1. **Organizational Constraints** which include those factors associated with administrative structures, placement policies and procedures, and the nature and extent to which there is communication, collaboration, and cooperation among service providers at all levels of the organization and the extent to which there is consensus among service providers regarding the goals and objectives of educational programming and placement.
2. **Attitudinal Constraints** which include the negative or positive attitudes of administrators, educators, parents, students, and the community at large toward
students with disabilities and social and philosophical efficacy of mainstreaming these students for both the individual student as well as the organization;

3. **Economic constraints** which include the extent to which resources are provided for personnel, staff development, and additional support and related services, as well as for adaptive equipment, materials, and curricula to assist teachers with the mainstreaming process; and,

4. **Philosophical constraints** which include systems of values, beliefs, and attitudes held with regard to the purpose and goals of LRE, the value of vocational education for students with disabilities, and the efficacy of mainstreaming students with disabilities in vocational education. In addition, philosophical constraints includes values and beliefs with regard to the purpose of education, the tracking of students on the basis of ability, as well as philosophical notions regarding the structure of schools as one that is grounded in beliefs about democracy and meritocracy.

These four categories of system constraints are not mutually exclusive, but rather overlap and interface with one another in ways that will reflect the social, political and organizational nature of the school culture and community within which the school is located. It is suggested here that an investigation into the nature and types of system constraints that may operate at the local school district level that act as barriers to both the participation of students with disabilities in vocational education, and their placement in a mainstreamed setting, should provide a better understanding of the complex and dynamic nature of the school as an organization as it sorts, selects, and processes students differently.

The treatment of persons with disabilities, historically, has been one of social exclusion and stigma that is best understood in terms of the institutionalized treatment of persons with disabilities as deviants. Largely as a result of the civil rights movement, federal legislation designed to protect the rights of these individuals was secured, including the right of these people to obtain a free and appropriate public education in an environment that is, to the greatest extent possible, similar to and alongside their same age, non-disabled peers. Founded upon the notion that "separate is not equal" the legislative mandate of least restrictive environment (LRE) represents an attempt on the part of the federal government to
force local school districts to integrate students with disabilities for reasons similar to the arguments given for the legislative mandates aimed at the racial desegregation of schools -- that is to offer equal educational opportunities to all citizens. Also similarly, resistance to the integration of students with disabilities in a mainstreamed setting reflect a series of cultural attitudes and beliefs regarding the inherent intellectual ability or inability of particular individuals or groups of individuals and concerns regarding the drag these students may place on the learning of other students.

Taken in sum, there is evidence to suggest that the mainstreaming of students with disabilities is the result of a variety of structural and socio-cultural conditions of the school and community within which the school resides. One of the primary objectives of this research is to investigate the extent to which factors identified as either facilitating the mainstreaming of students with disabilities or presenting barriers to mainstreaming of these students provide a better understanding of the use of STEP in serving the vocational education needs of students with disabilities in New Hampshire. In addition to the structural demographic characteristics of the school and community within which the school resides, among the factors to be investigated by this study include the attitudes and beliefs of school personnel with regard to the intellectual abilities of students with disabilities, the purpose and goals of mainstreaming as they relate to serving the educational needs of students with disabilities in the least restrictive environment, and the ways in which these factors interface with the beliefs and attitudes of school personnel relative to the structure, purpose and goals of schools in American society.

In addition, this research seeks to determine the extent to which an investigation of the educational placement of students with disabilities in vocational education provides evidence that there exists the institutionalized reproduction of social class on the part of schools, as
well as the social construction of students with disabilities as a deviant and stigmatized minority group on the part of educators and educational administrators. As such, it is suggested here that an investigation of the processes where by student placement is determined should serve not only to expose the organizational constraints that may exist in the mainstreaming of students with disabilities, but the ways in which decisions made with regard to the educational treatment of these students reflects the ways in which the school serves to create and maintain competing status groups within the walls of the school and serves to reinforce the dominant values and beliefs of the prevailing culture of the school and community, and the society within which they exist.
CHAPTER V

DETERMINING THE EFFECTS OF SCHOOL AND COMMUNITY VARIABLES: RESEARCH METHODOLOGY

The review of the research literature presented in the previous chapters suggests that there are a variety of structural as well as social, political, and cultural factors that influence the placement of students with disabilities in a mainstreamed setting. While there exists a legislative mandate that students with disabilities be educated in the least restrictive environment (LRE), previous research conducted with regard to implementing the LRE mandate indicates that the ability and willingness of schools to educate students with disabilities in a mainstreamed setting depends upon a multitude of demographic, organizational, and cultural factors within the school and the community.

The review of the literature presented in chapter four was organized around two primary categories of factors associated with the mainstreaming of students with disabilities. The first category of factors are referred to here as school and community variables. These factors represent the structural demographic aspects of the school and community that may affect the mainstreaming of students with disabilities in vocational education. The second category of factors, that of system constraints, represents the organizational, socio-political, and cultural contextual factors that exist within the school and the community that influence decisions regarding whether or not students with disabilities will be placed in a mainstreamed or separate vocational setting.

The purpose of this chapter is to provide a description of the research methodologies that were used in testing the effects of school and community variables on the mainstreaming of students with disabilities in vocational education in New Hampshire. A description of the
methodologies used in investigating the effects of system constraints on the mainstreaming of students with disabilities is provided in chapter seven.

The first section of this chapter provides a summary discussion of the effects of school and community variables identified as factors associated with the mainstreaming of students with disabilities. The second section of this chapter identifies the research hypotheses that were tested and provides a description of how each of the variables were measured. The third section of this chapter describes the sample that was used and the research methodologies that were employed in testing the research hypotheses.

**The Effects of School and Community Variables**

As the reader may recall, the school and community variables discussed in chapter four refer to the structural, demographic characteristics of the school and community identified as having been associated with the mainstreaming of students with disabilities. These include: the size of the school, its status as a sending or receiving school, community wealth, per expenditures for regular and special education, and the rate at which students with disabilities participate in vocational education. A summary review of the predicted effects of each of these variables on the mainstreaming of students with disabilities is provided below.

**School Size**

One of the variables associated with the rates at which students with disabilities are mainstreamed in vocational education is school size, with larger schools less likely to mainstream students with disabilities than smaller schools (Wagner, 1992). While the reasons for this are multiple, among the primary reasons identified for larger school to exhibit this tendency are the organizational characteristics of large schools. Larger schools tend to be more bureaucratic in their organization than smaller schools, with separate departments and administrations charged with providing specialized programs and services and less face-to-face
interaction between members of different departments. The more bureaucratic characteristic of larger schools are not conductive to the kind of organizational environment that has been identified as critical to facilitating the mainstreaming of students with disabilities -- that is, cooperation, collaboration, and coordination between service providers (Stetson, 1984; Brinker & Thorpe, 1985; Halverson & Sailor, 1990).

In addition, in having to process a greater numbers of students, larger schools tend to offer a larger number classes and program options -- conditions that are also more conductive to the organization of the curriculum and students in terms of ability levels, and practices of educational tracking which represent a subtle form of group separation and exclusion. As the size of the school increases, so does the likelihood that some students will become marginalized (Wehlage, 1983, 1987; GAO, 1987). One of the ways in which students with disabilities become marginalized in school is through their placement in separate classrooms to receive their educational instruction.

Sending and Receiving School Status

One of the factors associated with the mainstreaming of students with disabilities in vocational education is that of the student’s sending or receiving school status, with students from sending schools less likely to be mainstreamed in their vocational programs. Sending school students are those students who attend their vocational education program at an area vocational center (AVC) other than the student’s school district of residence. The proportion of students with disabilities from sending schools who enrolled in vocational education tends to be higher than that of receiving schools, and are more likely to be students who are the most difficult to serve (USDE, 1994).

In addition, the time it takes for a student to travel to the area AVC, and scheduling problems that come to be associated with travel needs, create a situation wherein students
from sending schools have fewer vocational programming options available to them than receiving students who do not lose the one or two periods of class time a day to travel. Sending schools also tend to be smaller schools where program offerings are more limited, including the program options available to them to serve the needs of students with more moderate to severe disabilities. Out of a lack of greater program options for these students, sending schools may be more receptive to allowing these students to be placed in a STEP program at the AVC, particularly if this is what personnel at the AVC have recommended.

Community Wealth

One of the structural factors discussed in chapter four as having a potential effect upon the mainstreaming of students with disabilities is the wealth of the community. This is in part supported by the work of Arnold Linsky (1970b), who found that the tendency for a community to exclude members of a deviant group "is greater for those who are either culturally marginal or of low social class and those more isolated from stable group ties" (Linsky, 1970b:170). Wealthier communities are more likely to have a greater number of students from middle- to upper-middle class backgrounds -- who place a high value on academic success and school achievement. Students with disabilities who do not do well in school academically may therefore be more likely to be culturally marginalized in wealthier communities, especially if these students come from poor or working class families. One of the ways in which this marginality is expressed by the school as an institution is the exclusion of students with disabilities from the mainstreamed setting.

Expenditures for Special Education

The costs of providing services for students with disabilities is another structural factor that has been associated with the mainstreaming of students with disabilities. Placing students with disabilities in a mainstreamed classroom is less expensive than providing these
students with a separate classroom and staff. Therefore, it is predicted that lower expenditures for special education will be associated with higher rates of mainstreaming. In addition, it has been suggested that higher expenditures for special education may be the result of the willingness and ability of parents in the community to support separate services and classrooms for students with disabilities in an effort (1) to ensure that their child, if disabled, receives extra help and support for their education that are often provided in pull-out and separate classrooms, and (2) for the child who is not disabled, to ensure that the attention and instruction their child receives is not incumbered by the presence of students with disabilities in their classes. Therefore, it is predicted that high expenditures for special education services will be negatively associated with the mainstreaming of students with disabilities in vocational education.

Expenditures for Out-of-District Placements

Another structural school and community variable that may affect the mainstreaming of students with disabilities is the expenditures that are made by the school district for out-of-district placements. The practice of "out-of-district" placements can be seen as a measure of exclusion of students with disabilities -- one that reflects the ability and willingness of the school district to retain these students in the district as members of the school community. The costs associated with sending a student to a facility outside of the district are much higher than serving the student within the school district. Therefore, the amount spent on out-of-district placements, as measure of exclusion, will also be associated with the likelihood that students with disabilities in the district are less likely to be mainstreamed.

As was noted in chapter four, local school systems in New Hampshire represent far greater diversity in special education program regulation and service provision than most states, due to its heavy reliance on local taxes and its emphasis on local control (NH Bureau
of Special Education, 1985; Kerns, 1988). Therefore, the effects of community wealth and expenditures of special education on the rates at which students are included, or excluded, from regular vocational education are particularly relevant to the study of structural factors of the school and community that are associated with mainstreaming in New Hampshire.

The Participation of Students with Disabilities in Vocational Education

One of the factors anticipated as having an effect upon the mainstreaming of students with disabilities in vocational education is the rate at which these students participate in vocational education, with the rate at which these students are mainstreamed decreasing as the participation of students with disabilities increases. Lower participation rates necessarily imply fewer students, which places a lighter demand upon the system to provide special services. Having fewer students with disabilities would necessarily be easier to accommodate in a mainstreamed setting than would be a greater number of students with special needs. In addition, as the participation rate of students with disabilities increases, so does the likelihood that this population will be characterized by a greater diversity of students with special needs. As the number and size of the population of students increases, so does the likelihood that schools will create separate classroom settings to accommodate both the greater number, and greater diversity, of students with disabilities. This research proposes that higher rates of participation among students with disabilities will negatively affect the rate at which these students are mainstreamed.

Nature and Severity of a Student’s Disability

While not a variable that is associated with the structure of the school or community, it is important to take into consideration the types of disabilities of the students when studying issues of mainstreaming. Students’ disabilities may vary greatly, with some students experiencing mild to moderate disabilities and others experiencing more severe disabilities.
The nature and severity of a student's disability may very well affect the ability or willingness of the school to place a student in a mainstreamed vocational program setting. That is, the ability or willingness of the school to accommodate the curriculum modification and instructional needs of a student who has a mild learning disability in a mainstreamed setting may very well differ from the ability or willingness of the school to accommodate the curriculum and instructional modification needs of a student who experiences severe mental retardation or multiple handicaps. Therefore, students with more severe disabilities, such as those with mental retardation, who are deaf and blind, or have multiple handicaps are less likely to be mainstreamed than students identified as having a learning disability or who are orthopedically impaired.

The Availability of STEP Programs

Of central concern to this research is the use of STEP programs in serving the vocational education needs of students with disabilities in New Hampshire. By definition, one hundred percent of students with disabilities who are enrolled in vocational programs at area vocational centers (AVCs) that do not offer STEP are mainstreamed. That is, AVCs that do not offer STEP do not place students with disabilities in a separate vocational education classroom setting in providing these students vocational education. Therefore, in addition to determining the effect of the school and community variables identified above, the question of the effect of STEP on serving the vocational education needs of students with disabilities shifts to one of determining the effect of the availability of STEP as it relates to the accessibility of vocational education for students with disabilities. That is, what is the effect of the availability of STEP on the rates at which students with disabilities participate in vocational education in New Hampshire? It is anticipated that the availability of STEP significantly increases the rate at which students with disabilities are provided access to vocational
education in New Hampshire in that in the absence of STEP, those students with more severe
disabilities and who are therefore less easily mainstreamed are denied access to vocational
education opportunities.

In summary, this research proposes that the school and community variables of school
size, sending or receiving school status, community wealth, expenditures for special
education, and the participation of students with disabilities in vocational education are among
the more salient structural characteristics of the school and community that may affect the
likelihood that students with disabilities will be mainstreamed in vocational education. More
specifically, it is suggested here that school size, sending school status, community wealth,
expenditures for special education, and the participation of students with disabilities in
vocational education are all negatively associated with the likelihood that students with
disabilities will be mainstreamed in vocational education. In addition, it is also suggested here
that the type of disability a student experiences may affect decisions made by school personnel
regarding whether or not that student is placed in a mainstreamed or separate program. In
addition, it is proposed here that while the presence of STEP programs will necessarily result
in a mainstreaming rate of less than one hundred percent, the availability of STEP will have a
positive effect upon the participation of students with disabilities in vocational education,
particularly those students with more severe disabilities.

Research Hypotheses and the Measurement of Variables

The research hypotheses generated by the review and discussion of previous research
findings that were investigated by this research are as follows:

Hypothesis 1. The larger the size of the school, the greater the likelihood that students
with disabilities will be excluded from a mainstreamed vocational setting.

Hypothesis 2. Students with disabilities from sending schools are more likely to be
excluded from a mainstreamed vocational education setting than are their receiving school peers.

**Hypothesis 3.** Wealthier communities will have a greater tendency to exclude students with disabilities than poorer communities.

**Hypothesis 4.** The greater the school district expenditure for regular education, the greater the likelihood that students with disabilities will be excluded from a mainstreamed setting.

**Hypothesis 5.** The greater the school district expenditure for special education services, the greater the likelihood that students with disabilities will be excluded from a mainstreamed setting.

**Hypothesis 6.** As the proportion of students with disabilities enrolled in vocational education increases, so does the rate at which these students are excluded from a mainstreamed setting.

**Hypothesis 7.** Students with more severe disabilities are more likely to be excluded from a mainstreamed vocational education setting than are students with less severe disabilities.

**Hypothesis 8.** The participation rate of students with disabilities in vocational education will be greater for those school districts for which STEP is available.

With regard to the first seven research hypotheses tested, the dependent variable at the student level of data analysis was "mainstreamed status," while at the school district level of data analysis the dependent variable was "rate of mainstreaming." The independent variables were school size, sending/receiving school status, community wealth, expenditures for regular education, expenditures for special education, the participation of students with disabilities in vocational education, and the student's disability status. With regard to the eighth research
hypothesis, the dependant variable was the participation rate of students with disabilities in vocational education and the independent variable was the availability of STEP as a vocational program option. A description of the means by which each of these variables were measured is provided below.

Measurement of the Dependent Variables

At the student level of data analysis, the dependent variable is "mainstreamed status." This variable was measured by whether or not the student is enrolled in a STEP program, or a regular vocational program. At the school district level, the dependent variable was the "rate at which students with disabilities were mainstreamed" in vocational programs offered at the AVC in that district. This measure was obtained by calculating the percentage of students with disabilities enrolled in vocational education at that district who were enrolled in a STEP program.

The status of a student as being in a "mainstreamed" or "separate" vocational program was determined by the classification of instructional program (CIP) code of the vocational program for which the student was reported to be enrolled by the school district. The CIP code is a numerical system of program classification consisting of a six digit code that is assigned to each vocational program on the basis of the occupational area for which the program is designed. STEP programs are assigned a CIP code in which the first two digits are 98, indicating that the program is separate vocational program designed specifically for students with disabilities. According to the guidelines published by the Bureau of Vocational-Technical Education of the NH Department of Education, STEP programs are vocational programs "designed to accommodate students with disabilities who have a disabling condition that prevents them from participating successfully in regular vocational programs even though support services or modified programming are provided" (Bureau of Vocational-Technical
Students with disabilities who were reported in vocational programs that begin with a 98 code were identified in the data as being enrolled in a separate program, whereas students with disabilities reported as being enrolled in a vocational program with a CIP code that is not preceded by the 98 code were considered to be in a mainstream vocational program. Data pertaining to the program in which the student was enrolled, as indicated by the program CIP code, was provided by the Bureau of Vocational-Technical Education of the New Hampshire Department of Education.

The dependent variable at the district level of analysis was the rate at which students with disabilities were mainstreamed in vocational education. This measure represents the proportion of the total number of students with disabilities enrolled in vocational education programs at the AVC who were enrolled in vocational programs that are not STEP programs. For instance, if a total of 100 students with disabilities were enrolled in vocational programs at an AVC located in school district 1, and 25 of those students were enrolled in a STEP program, the mainstreaming rate of students with disabilities at this AVC would be 75%. The rates at which students with disabilities were mainstreamed was calculated using individual student record data obtained from the Bureau of Vocational-Technical Education at the New Hampshire Department of Education.

**The Measurement of School and Community Variables**

The means by which the variables school size, sending and receiving school status, community wealth, expenditures for regular and special education, the participation of students with disabilities in vocational education, and disability were measured are described below.

**School Size.** School size was measured in terms of the "average daily attendance"
(ADA) reported by school districts to the New Hampshire Department of Education’s Bureau of Computer and Statistical Services on the MS-25 school record report, which is submitted at the end of each school year. While the ADA is not a measure of the total number of students served throughout the school year, it was the best measure of total high school enrollment available.

Sending vs. Receiving School Status. The status of a student as a sending or receiving school student was drawn from individual student record data provided by the Bureau of Vocational-Technical Education. Sending school students are students from school districts which do not host an area vocational center and who must therefore travel to an area vocational center (AVC) located at another school district. Receiving school students are students from school districts that host an area vocational center that is attached to the high school the student would normally attend based upon their town of residence.

Community Wealth. Community wealth was measured by the weighted per capita income of the towns served by the school district. This measure was calculated using per capita income data obtained from the 1989 national census, population data obtained from the New Hampshire Office of State Planning, and information relative to the towns that comprise New Hampshire school districts as retained by the New Hampshire School Boards Association.

Per Pupil Expenditure. The variable "per student expenditure" was calculated by taking the total expenditure for "instructional services," as reported to the NH Bureau of Computer and Statistical Services on the MS-25 end-of-year report, divided by the average daily attendance of the school. "Instructional services" include expenditures for general facility maintenance, administration, staff salaries and benefits, and school resources and materials related to the provision of educational instruction. This measure does not include
expenditures for special education, which are reported to the state separately. It is predicted that as the per pupil expenditure increases, the rate at which students are mainstreamed in vocational education will decrease.

**Per Handicapped Student Expenditure.** The variable "per handicapped student expenditure" was calculated by taking the total expenditures for the provision of special education services at the districts high school, as reported to the NH Bureau of Computer and Statistical Services on the MS-25 end-of-year report, divided by the total number of students, ages 15-21, identified as having a disability in that school district for the same year, as provided by the SPEDIS information system.

**Expenditure for Out-of-District Placements.** This variable was measured by taking the total expenditures reported by high schools to the NH Bureau of Computer and Statistical Services on the MS-25 as tuition "other" expenditures, divided by the total number of students (ages 15-21) identified as having a disability in that school district for that year. Tuition "other" expenditures are those expenditures reported by school districts as the amount of tuition paid by the school district to "other" educational facilities to educate a student for whom the district is liable. This expenditure typically represents the costs of providing private out-of-district placements for a student with a disability who cannot be adequately served by programs offered by the school district. Students placed outside of the district may be students whom the parents and school district considered to be too severely disabled to participate in the regular or special education programs offered by the district, or may have obtained their out-of-district placement as a result of a court decision on behalf of the parent, student, or district. The reason for calculating an average per-student expenditure for each district is that total raw expenditures for out-of-district placements are a greater reflection of the size of the school district than the relative proportion of cost expended for out-of-district
placements.

Category of Disability. The variable "student's disability" was measured in terms of the primary disability for which a student was reported to the state in 1992 via the Special Education Information System (SPEDIS). SPEDIS is the statewide information management system used to collect and report detailed information with regard to students who have been identified as having one or more of the disabilities recognized by the U.S. Department of Education. This system serves as the official state and local record keeping system for identifying those students who are entitled to all of the rights and protections provided to persons with disabilities under P.L.94-142. In the state of New Hampshire, each student identified as having a disability is assigned an identification number, referred to as a SPEDIS number. The SPEDIS number is included as part of the student's individual vocational education enrollment record. Using the SPEDIS number provided by school districts on the student's individual vocational enrollment record, the student's primary handicapping condition was accessed from the SPEDIS system. While the student's primary handicapping condition is also provided as part of the vocational data collection system, the data contained within the SPEDIS system is more reliable than that contained in the vocational enrollment data system.

Due to the low incidence of most types of disabilities, four categories of disability were constructed from the eleven categories of disability in which a disabled student may be identified. These categories were: 1) learning disabled (LD), 2) seriously emotionally disturbed (SED), 3) mentally retarded and multiply handicapped (MR&M), consisting of those students identified as either mentally retarded, deaf and blind, or as having multiple disabilities, and 4) other (OTH), consisting of those students identified as hard of hearing, deaf, speech and language impaired, visually handicapped, orthopedically disabled, or as
Table 1. Distribution of Students with Disabilities in 1992, ages 15-21, by Category of Disability.

<table>
<thead>
<tr>
<th>Disability Category</th>
<th>Number of Students ages 15-21</th>
<th>Percent of % of Disabled Pop.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>4653</td>
<td>69.2%</td>
</tr>
<tr>
<td>ED</td>
<td>833</td>
<td>12.4%</td>
</tr>
<tr>
<td>MR&amp;M</td>
<td>435</td>
<td>6.5%</td>
</tr>
<tr>
<td>OTH</td>
<td>802</td>
<td>11.9%</td>
</tr>
<tr>
<td>Total</td>
<td>6723</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 2. Number and Participation Rate of Students with Disabilities in Vocational Education in 1992, ages 15-21, by Category of Disability.

<table>
<thead>
<tr>
<th>Disability Category</th>
<th>Number of Students Enrolled in Voc.Ed.</th>
<th>Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD</td>
<td>966</td>
<td>20.8%</td>
</tr>
<tr>
<td>ED</td>
<td>155</td>
<td>18.6%</td>
</tr>
<tr>
<td>MR&amp;M</td>
<td>171</td>
<td>39.3%</td>
</tr>
<tr>
<td>OTH</td>
<td>109</td>
<td>13.6%</td>
</tr>
<tr>
<td>Total</td>
<td>1401</td>
<td>20.8%</td>
</tr>
</tbody>
</table>

having been identified as having a disability other than one of the disabilities described in the previous ten categories. The distribution of these populations in 1992, for persons ages 15-21 in New Hampshire schools is provided in Table 1.

Participation Rates of Students with Disabilities. Participation rates of students with disabilities refers to the proportion of students with disabilities in each school district, by category of disability, who were enrolled in vocational education that year. The SPEDIS system provided the total number of students with disabilities, by category of disability, for each school district. The number of students enrolled in vocational education was provided by the vocational individual student record data provided by the Bureau of Vocational-Technical Education. The distribution of participation rates of students with disabilities in
vocational education, by category of disability, is provided in Table 2.

**Availability of STEP as a Vocational Program Option.** In 1992, 13 AVCs (50%) offered STEP as a vocational program option for students with disabilities. For those regions in which there are more than one AVC, if one center offered STEP as a vocational program option, then the other AVCs in the region also offered STEP. The converse is therefore also true -- if STEP was not available in one of the AVCs in an area vocational region with more than one AVC, then STEP was not available in any AVC within the region. Therefore, the availability of STEP as a vocational program option is measured in terms of whether or not STEP is offered at any of the AVCs in the vocational region within which the student’s school district is located.

**Sample Size and Research Methodologies**

Testing of the research hypotheses was conducted on two different levels of data analysis -- the student level of data analysis and the school district level of data analysis. At the student level of data analysis, the sample size consisted of 1401 students with disabilities who were enrolled in vocational education in 1992. This sample represents the population universe, as reported by school districts to the New Hampshire Department of Education in 1992. Individual student records of these students include the student’s primary disability category, the vocational program in which the student was enrolled, and the student’s school district of residence. At the school district level of analysis, the sample size consisted of 26 school districts, which represents the universe of secondary school districts in New Hampshire that provide vocational education to all of the school districts in their region through an area vocational center (AVC) that is attached to their high school.

**Student Level Data Analysis: Logistic Regression**

Logistic regression analysis was used at the student level of data analysis to determine
if the effects of individual school and community variables on the probability that a student
with disabilities will be mainstreamed are statistically significant. Logistic regression was
selected as the most appropriate form of statistical analysis to be performed due to the
dichotomous nature of the dependent variable -- mainstreamed status. In addition to testing
for the overall and individual effects of selected school and community variables on the
probability that students with disabilities will be mainstreamed, the logistic regression models
used tested for the effect of the student's category of disability on the likelihood that the
student will be mainstreamed relative to each of the school and community variables.

Given the categorical nature of the variable, the effect of "disability" as an
independent variable was controlled for through the construction of dummy variables for each
category of disability. The construction of dummy variables for purposes of testing the effect
of disability category on the likelihood that a student would be mainstreamed was
accomplished by coding the disability category of interest with a "1" and all of the other
disability categories "0." The coefficient for the log likelihood that students in each of the
disability categories would be mainstreamed, and the statistical significance of the resulting
coefficient, are reported and discussed.

School District Level of Data Analysis: Multiple Regression

At the school district level of analysis, OLS regression was used to predict the effects
of selected community and school variables on the rates at which students with disabilities are
mainstreamed in vocational education. The purpose of using OLS regression analysis was to
determine the proportion of variance in the rates at which students with disabilities were
mainstreamed explained by the selected community and school variables, as well as the
statistical significance of the regression model. The confounding effects of category of
disability, and the participation rate of students by category of disability, were controlled for
in determining the relative effects of community and school variables on the rates at which students with disabilities were mainstreamed. This was done by including these factors in the regression models. In controlling for the effects of disability, separate regression models were tested on the mainstreaming rates of students for each of the disability categories.

**Methodological Concerns**

In testing for the effects of multicollinearity, a correlation matrix of each independent variable on the others revealed an almost perfect positive correlation (.998) between per handicapped student expenditure for special education and per handicapped student expenditure for tuition "other." To avoid the problems posed by multicollinearity in testing the effects of these two variables, two separate logistic regression models were used. As would be expected, the results of these analyses revealed that the separate effects of these two variables in each of the models were virtually identical. Therefore, only one of these measures -- that of per handicapped student expenditure for special education -- was used in testing the effects of per handicapped student expenditures on the likelihood that a student will be mainstreamed. The reader may therefore accurately assume that effects of the variable "per handicapped student expenditure for tuition-other" are the same as those found for "per handicapped student expenditure for special education."

With regard to the use of STEP as an inverse measure of mainstreaming, it was anticipated that the design of STEP programs would vary from one school district to the next such that the measure of mainstreaming used in this study would not be valid. For instance, it was found that some students reported in STEP at one school were educated in a completely separate environment, while students reported as enrolled in STEP at other schools received some of their vocational training in a mainstreamed setting. Therefore, STEP as a measure of mainstreamed status cannot be generalized to mean fully separated from a regular vocational
education program environment. That is, depending upon the design of STEP programs at the local school district, students enrolled in STEP are not necessarily completely segregated from their non-disabled vocational education peers while receiving their vocational education training. In this sense, STEP as a measure of mainstreamed status is a measure of whether or not the student is reported by the school district as enrolled in a regular vocational education program, as opposed to a valid measure of exclusion from a mainstreamed setting.

In addition to the problems posed by using students reported as enrolled in STEP as an inverse measure of mainstreaming, in the course of interviewing personnel at each of the interview sites it was discovered that there were problems with the reliability and validity of the vocational enrollment data used in this study for five of the six interview sites. Due to problems related to the validity and reliability of the vocational enrollment data, the quantitative research findings of this study should be interpreted with caution.

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10 See Appendix D for a more detailed discussion of methodological concerns regarding the use of vocational enrollment data used in this study.
CHAPTER VI

THE EFFECTS OF COMMUNITY AND SCHOOL VARIABLES ON THE MAINSTREAMING OF STUDENTS WITH DISABILITIES IN VOCATIONAL EDUCATION

This chapter presents an analysis of the effects of community and school variables on the mainstreaming of students with disabilities in vocational education. Two different levels of analysis were conducted -- one at the student level of data analysis, and one at the district level of data analysis. The first section of this chapter presents the research findings for the student level of data analysis. At this level of analysis, logistic regression analysis was used to determine the effects of community and school variables on the likelihood that students with disabilities would be excluded from mainstreamed vocational education programs. Logistic regression was used due to the dichotomous nature of the dependent variable.

The second section of this chapter presents the research findings as they relate to the district level of data analysis of the effects of community and school variables on the rates at which student are mainstreamed in vocational education. The third section of this chapter provides an analysis of the effects of community and school variables on the rates at which students participate in vocational education. The reasons for conducting this analysis are provided in the discussion of findings relative to factors that effect the rates at which students with disabilities are mainstreamed.

Student Level Data Analysis: Community and School Variables and the Likelihood that Students with Disabilities will be Mainstreamed in Vocational Education

Logistic regression analysis was used in determining the effects of selected community and school variables on the likelihood that students with disabilities would be excluded from a mainstreamed vocational program. Logistic regression was used due to the dichotomous
nature of the dependent variable -- whether or not the student is served in a mainstreamed or separate setting, controlling for the effects of the student's category of disability and the participation rate of students in vocational education. For purposes of this analysis, the variable measuring the student's mainstreamed or separate placement status was constructed as a dummy variable. Student placement in a separate vocational setting (STEP) was coded "1," while student placement in a mainstreamed vocational setting was coded "0." This was determined by the CIP code of the vocational program for which the student was reported to be enrolled.

Although the research hypotheses stating the anticipated effects of community and school variables on the mainstreaming of students with disabilities presented in chapter three are stated in bivariate form, it was important to control for the confounding influences of the other independent variables when testing for the effects of one independent variable on the dependent variable. Similar to ordinary least squares (OLS) regression, logistic regression allows for the testing of bivariate hypotheses while controlling for the effects of other independent variables.

The independent variables hypothesized as effecting the placement of students with disabilities in a separate vocational program, and therefore included in the regression models, were the demographic variables of school size, sending or receiving status, community wealth, per student expenditure for regular education, per handicapped student expenditure for special education, and per handicapped student expenditure for tuition "other." However, due to the almost perfect correlation between the variables "per handicapped student expenditure for special education" and "per handicapped student expenditure for tuition-other" of .998, to avoid problems associated with multicollinearity, only the variable "per handicapped student expenditure for special education" was included in the regression models. This was done with
the understanding that, due to an almost perfect correlation of these two variables, the effects of these variables on the mainstreaming of students with disabilities were virtually identical.

Correlation coefficients on the remaining independent variables ranged from -.38 (school size and per pupil expenditure) to .37 (school size and weighted per capita income), none of which was large enough to pose a serious risk of multicollinearity.

One of the disadvantages to using logistic regression is that logit coefficients are logarithmic measures, and therefore the size of the coefficient does not provide a clear indication of the size of the effect. However, logistic regression does provide for significance tests on individual independent variables, as well as the statistical significance of the regression model.

The dependent variable in the hypotheses to be tested was whether or not students with disabilities were mainstreamed in vocational education, or excluded from a mainstreamed vocational program. In testing the hypotheses, each of the independent variables was tested for the effect that it has on the likelihood that a student will be excluded from regular vocational education by virtue of being placed in a STEP program.

Table 3 provides the logistic regression outputs for each of the regression models used to test the effects of community and school variables on the likelihood that a student will be excluded from a mainstreamed vocational program setting, for each category of disability. A discussion of the effects of each of these variables on the mainstreaming of students with disabilities are provided below.

**School Size**

The size of the high school population, as measured by the average daily attendance of the school, was found to be positively related to the likelihood that students with disabilities will be excluded from a mainstreamed vocational program. This tendency for larger schools
Table 3. Logit Regression of Community and School Variables and the Log Likelihood that Students will be Excluded from Regular Vocational Education

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>All</th>
<th>LD</th>
<th>ED</th>
<th>MR &amp; M</th>
<th>OT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef.</td>
<td>SE</td>
<td>Coef.</td>
<td>SE</td>
<td>Coef.</td>
</tr>
<tr>
<td>School Size</td>
<td>.0004*</td>
<td>.0001</td>
<td>.0005*</td>
<td>.0001</td>
<td>.0005*</td>
</tr>
<tr>
<td>Send./Rec. Status</td>
<td>1.1105*</td>
<td>.1726</td>
<td>1.0357*</td>
<td>.1817</td>
<td>1.051*</td>
</tr>
<tr>
<td>Community Wealth</td>
<td>-.0003*</td>
<td>.0000</td>
<td>-.0003*</td>
<td>.0000</td>
<td>-.0003*</td>
</tr>
<tr>
<td>Per Pupil Expend.</td>
<td>.0003*</td>
<td>.0001</td>
<td>.0002</td>
<td>.0001</td>
<td>.0002*</td>
</tr>
<tr>
<td>Per Handicapped Student Expend./Special Ed.</td>
<td>.0001*</td>
<td>.0000</td>
<td>.0001*</td>
<td>.0000</td>
<td>.0001*</td>
</tr>
<tr>
<td>Participation Rate in Voc. Education</td>
<td>.0145</td>
<td>.0081</td>
<td>.0117</td>
<td>.0069</td>
<td>.0069</td>
</tr>
<tr>
<td>Disability</td>
<td>-1.607*</td>
<td>.1467</td>
<td>-.4727**</td>
<td>.2284</td>
<td>3.2322*</td>
</tr>
</tbody>
</table>

* P > .01
** P > .05
to exclude students with disabilities from a mainstreamed setting may be explained by the
ability of larger schools to provide a greater variety of course levels and programming
options, including the provision of separate programs for students with disabilities. In
addition, larger schools are more conducive to the creation and maintenance of a heterogenous
community consisting of many groups of students, which also provides for the separation of
students into status groups -- often on the basis of the student's race or social class. One of
the ways this is done in through the practice of ability grouping in the assignment of students
to different levels of academic courses. STEP can be seen as a form of ability grouping,
wherein students with disabilities are kept separate from the mainstreamed vocational setting
on the basis of an assessment of the student's ability on the part of school officials. These
ability levels, as they are defined by the school, serve to delineate different groups within the
school community who are, in turn, ascribed different status. The positive effect of school
size on the likelihood that students with disabilities will be excluded holds true regardless of
the student's disability.

**Sending and Receiving School Status**

As predicted, students enrolled in vocational education from schools districts other
than the school district (students from sending schools) were more likely to be excluded from
regular vocational education than are students from the receiving school district -- which hosts
the AVC. This may be due to the tendency on the part of sending schools to send those
students who are considered to be the most difficult to serve -- i.e., those students who are
more likely to be excluded. One indication that sending schools tend to send those students
who are the most difficult to serve is the lower participation rate of students with disabilities
from sending schools in vocational education for all students from every disability category
except that of mentally retarded and multiply handicapped (MR&M). The average
participation rate for all students with disabilities from sending schools was 16.1%, compared to 26.1% for students with disabilities in receiving districts. The average participation rate of students in the MR&M category who were from sending schools was 41.6%, compared to a participation rate of 39.2% for students from receiving schools. However, controlling for the possible confounding effect of participation rates in vocational education, the positive effect of sending school status on the likelihood that students with disabilities would be excluded from a mainstreamed vocational setting held true, regardless of the student’s disability.

Community Wealth

Community wealth, as measured by the weighted per capita income of the towns served by the school district, was found to be negatively related to the likelihood that students with disabilities would be excluded from regular vocational education. Thus, community wealth had an opposite effect on mainstreaming than what was predicted. A possible explanation for this is that communities with greater per capita income are also more likely to have a more educated population, due to the positive relationship between educational attainment and income. It is possible that a community population that has, on the average, more educational attainment will be more supportive of mainstreaming students with disabilities out of a greater awareness of the issues -- including the "politically correct" status that mainstreaming has acquired.

Per Pupil Expenditures

Per pupil expenditures for regular education had an overall positive effect on the likelihood that students with disabilities will be excluded. However, when disability was controlled for, this effect was not statistically significant for students who have learning disabilities, mental retardation, or multiple handicaps. It was hypothesized that per pupil expenditures, as a measure of the community’s shared interest and commitment to education,
would be positively related to the tendency to exclude students with disabilities. It is difficult
to know why this relationship did not hold true for the two categories of disability that are
considered to lie on opposite ends of the continuum in terms of severity of disability.

*Per Handicapped Student Expenditures for Special Education and Per Handicapped Student
Expenditures for Tuition-other*

Given that these two measures had the basically the same effect on the likelihood that
students with disabilities will be excluded, they were treated as similar measures of
expenditures for special education. The strong positive relationship between these two
measures, however, was surprising. One would think that greater out-of-district placement
costs would be associated with lower per handicapped students costs for those students
remaining in the district. In attempting to decrease the total costs associated with serving
students with disabilities, it would seem that bringing students back into the district in order to
decrease the costs associated with out-of-district placements, would serve to increase the per
handicapped student expenditures for special education services provided within the district.
In other words, one would expect high out-of-district expenditures to be associated not only
with greater rates of exclusion of students with more severe disabilities from the school
community, but also with lower per student expenditures for those students with disabilities
who remain in the district. However, both measures of expenditures for services for students
with disabilities were positively related to the exclusion of students with disabilities from the
mainstreamed vocational setting, regardless of the category of disability to which the student
belongs. It is interesting to note that since community wealth is negatively associated with
exclusion, given that higher per pupil expenditures for special education services are
associated with exclusion, that those communities who were perhaps least likely to be able to
afford the high costs of exclusion were more likely to exclude students with disabilities. The
notion that wealthier communities would be more likely to invest in the services necessary to
exclude students with disabilities in an attempt to retain status and group boundaries was not supported by the findings.

**Participation of Students with Disabilities in Vocational Education**

The control variable of participation rates of students with disabilities in vocational education was included in each of the regression models. The effects of this variable on the likelihood that students with disabilities would be excluded was found to be statistically significant only for students in the category of mentally retarded and multiply handicapped. That is, the rate at which students who have mental retardation, deafness and blindness and multiple handicaps participate in vocational education had a positive effect upon the likelihood these disabilities would be excluded from regular vocational education, while the participation rate of students with disabilities other than these did not have a statistically significant effect upon whether or not they would be excluded.

**Category of Disability**

The category of disability to which the student belongs was also controlled for in each of the regression models through the construction of a dummy variable for each category. In each case, the disability category to be controlled for was coded 1, with the remaining categories coded 0. The effects of disability category on the likelihood that a student would be excluded was found to be significant for three of the disability categories. Disability was found to have a negative effect on the likelihood that a student identified as having a learning or emotional disability would be excluded. This was not true for students identified as having mental retardation, who are deaf and blind, or who have multiple handicaps. That is, students with learning disabilities and student with emotional disabilities were significantly more likely to be mainstreamed than students whose disability was not that of learning or emotionally disabled, and students identified as having mental retardation, who are deaf and blind, or who
have multiple handicaps were more likely to be excluded from a mainstreamed setting than were students from the other disability categories. The only category of disability for which there was no statistically significant effect was the category of "other," which includes primarily those students with a physical disability.

**District Level Data Analysis: Community and School Variables and the Rates at which Students with Disabilities are Mainstreamed in Vocational Education**

This section of chapter four presents an analysis of district level data on the effects of community and school variables on rates at which students are mainstreamed in vocational education. In analyzing the data, ordinary least squares (OLS) regression was used to test the effects of community and school variables on the rates at which students with disabilities are mainstreamed in vocational education, controlling for the effects of disability category and the participation of students with disabilities in vocational education. One of the advantages of OLS regression is its ability to estimate the proportion of variation within the dependent variable that can be explained by the cumulative effect of independent variables.

The dependent variable at the district level of analysis was the rate at which students with disabilities are mainstreamed in vocational education, by category of disability. The independent variables of community and school factors are the same as those that were used at the student level of analysis in predicting the likelihood that students would be mainstreamed.

In order to utilize OLS regression, both the dependent and independent variables that are included in the model must approximate a normal distribution. A univariate analysis was performed on each variable to determine if the assumption of normal distribution could be met. As a result of this analysis, the following variables were found to be too skewed to include in the regression model without first subjecting them to a non-linear transformation -- school size, per handicapped student expenditures for special education and tuition-other, and
the participation rates of students with disabilities for the categories of emotionally disabled (ED), mentally retarded, deaf and blind, or multiply handicapped (MR&M), and "other" (OT). Each of these variables was subjected to a non-linear transformation until they best approximated a normal distribution. It should be noted here that for those variables for which a non-linear transformation was performed, a curvilinear relationship would be indicated for each of the variables found to have a statistically significant effect upon the dependent variable.

A process of stepwise regression was used to estimate the effects of community and school variables on the rates at which students with disabilities are mainstreamed, for each of the four categories of disabilities. Stepwise regression was conducted manually by removing one independent variable at a time from the regression model. In each case of removal, the independent variable with the largest t test score was eliminated until the adjusted coefficient of determination (Adj. R-squared) revealed the most parsimonious model. Parsimony was determined by the effect the removal of each variable had on the Adj. R-squared. The regression model representing the best fit is that model for which the Adj. R-squared no longer increases with the removal of an additional independent variable.

In each of the initial regression models the dependent variable was the mainstreaming rate of students with disabilities, by category of disability, in vocational education. The independent variables included school size, sending/receiving school status, community wealth, per pupil expenditure for regular education, per handicapped student expenditure for special education, and the participation rate of students with disabilities, by category of disability, in vocational education. Coefficients, standard errors, and t tests for each of the final regression models are provided in Table 4. A description of the results the final
regression models are provided below.

Factors that Influence the Rate at which Students with Learning Disabilities are Mainstreamed

Each of the community and school factors -- except that of per pupil expenditure for regular education -- contributed to the final regression model, which explained 22% of the variation in the rates at which students with learning disabilities are mainstreamed. Removing per pupil expenditure from the model increased the explanatory power of the model from 20% to 22%. Of the 22% of variation explained by the new model, approximately 80% of the variance is explained by two variables -- sending and receiving school status and the rate at which students with learning disabilities participate in vocational education.

As was found to be the case at the student level of analysis, students with learning disabilities from receiving districts were more likely to be mainstreamed than their sending school peers. In addition, the model revealed that as the rate at which students with learning disabilities participate in vocational education increased, the rate at which these students were mainstreamed decreased. These two variables explained 17.8% of the total variance in the mainstreaming rate of these students. The individual effects of the remaining community and school variables contributed to the strength of the final model, despite the lack of statistical significance of the individual coefficients.

As was mentioned earlier, students from the receiving school are more likely to have greater flexibility in their program enrollment options than do sending school students who are more likely to experience scheduling problems due to the need to meet graduation requirements, scheduling conflicts with course offerings at their home school, and the time in the day that is lost to travel time. In addition, teachers, counselors and caseworkers at the receiving school are more likely to be more familiar with the vocational programs, vocational teachers, and vocational special needs personnel than are educators at the sending school due
Table 4. The Effects of Community and School Variables on the Rates at which Students with Disabilities are Mainstreamed in Vocational Education.

<table>
<thead>
<tr>
<th>Independent Variables</th>
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<th>MR &amp; M</th>
<th>OT</th>
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<td>-</td>
<td>-</td>
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<td>-</td>
<td>-</td>
</tr>
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<td>-</td>
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<tr>
<td>Expenditure/Special Ed.</td>
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<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Participation Rate</td>
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<td>-14.67</td>
<td>-.7739</td>
</tr>
<tr>
<td></td>
<td>6.14**</td>
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Significance of the Model

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<td></td>
<td>.0350**</td>
<td>.1209</td>
<td>.0958</td>
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</tbody>
</table>

* P > .01
** P > .05

NOTE: The variables for mainstreaming for the categories LD and MR & M were non-linearly transformed to accommodate the OLS assumption of a normal distribution.
to the fact that the programs are offered at the same school.

One explanation for the negative effect of increased participation rates for students with disabilities in vocational education is that as the participation of any group increases, so does the size and diversity of that group. For students with disabilities in vocational education this diversity may include a wider range of ability levels and a greater likelihood that students with more severe learning disabilities are enrolled in vocational education -- which is responded to on the part of the school as the need for a more differentiated curriculum, including separate course work and classrooms for a portion of these students. Lower participation rates imply smaller numbers of students with special needs who may therefore be more easily and readily absorbed into regular vocational programs than larger numbers of these students.

The negative effect of participation rates on the rates at which students with disabilities are mainstreamed might also be an indication of a resistance on the part of vocational teachers and administrators to have "too many" of these students in their regular vocational programs. This resistance may come from a fear among teachers and administrators that the program will become stigmatized if these students are found in the programs at incidence rates higher than their natural proportions. The resistance may also be the result of concerns that the teacher cannot handle the teaching demands of attending to a greater diversity of student needs if higher proportions of students with disabilities are enrolled in a mainstreamed setting. Therefore, as the participation rate of students with disabilities goes up, the need to place more of them in separate vocational settings may be seen as a means of addressing these concerns.

**Factors that Influence the Rate at which Students with Emotional Disabilities are Mainstreamed**

The same two variables that contributed to an explanation of variations in the rate at
which students with learning disabilities are mainstreamed were also found to have the
greatest effect on the mainstreaming rates of students with emotional disabilities -- sending
and receiving school status and the participation rate of these students in vocational education.
Unlike the regression of community and school variables on the rates at which students with
learning disabilities are mainstreamed, the initial regression model for students with emotional
disabilities was not statistically significant. It was only after the elimination of community
wealth, per pupil expenditures and per handicapped student expenditures that the model
attained statistical significance. In addition, the model was only able to explain 10% of the
variance. While the sending or receiving school status of the district was not found to be
statistically significant, this variable contributed one percentage point (10% of the total
explained variance) to the explanatory power of the final regression model.

Nine percent of the variance in the rate at which students with emotional disabilities
were mainstreamed was explained by the participation rate of students with emotional
disabilities in vocational education. This nine percent represents the 90% of the total variance
that is explained by the final model. As predicted, as the rate at which students who were
emotionally disabled participated in vocational increases, the rate at which these students were
mainstreamed went down. The reasons for this would be the same as those discussed above
for students with learning disabilities.

**Factors that Influence the Rate at which Students who have Mental Retardation, who are Deaf
and Blind, or who have Multiple Handicaps are Mainstreamed**

With regard to variables that effect the mainstreaming rates of students who had
mental retardation, who were deaf and blind, or had multiple disabilities, 60% of the variance
was explained by three variables -- school size, community wealth, and the participation rate
of students from this group in vocational education. While the initial regression model
explained 51% of the variance at a level of statistical significance, when the variables
sending/receiving school status, per pupil expenditure, and per handicapped student expenditure for special education were dropped from the model, the explanatory power of the model increased nine percentage points. While the individual coefficient for community wealth was not statistically significant, retaining this variable in the model increased the explanatory power of the model six percentage points over the model that would have resulted had this variable been dropped. As was found in the student level analysis, community wealth had a positive effect on the rate at which students with disabilities were mainstreamed in vocational education.

The results of this regression indicate that school size, community wealth, and the participation rate of these explains over half of the variation found in the rate at which they were mainstreamed in vocational education. As was mentioned earlier, larger schools tend to be more heterogenous, are more likely to engage in educational tracking practices, including the tendency to offer separate classes for students with disabilities. In addition, as was the case for previous disability groups, the rate at which students who are mentally retarded, deaf and blind, or multiply handicapped are mainstreamed decreased as the rate at which they participated in vocational education increased. The reasons for this are also assumed to be the same as those offered for the other two groups.

Factors that Influence the Rate at which Students in the Disability Category of "Other" are Mainstreamed

Similar to students who were emotionally disabled, the initial regression model of community and school variables on the rates at which students who have a disability contained within the category of "other" were mainstreamed was not found to be statistically significant. Eliminating all of the independent variables except community wealth resulted in a model that was statistically significant, but explained only 10% of the variation in the rate at which these students were mainstreamed. The regression model indicated that the rates at which students
in this group were mainstreamed was higher in wealthier communities than it was for students
with physical disabilities who were from school districts located in poorer communities.
Students in this category were the only disability group for which the individual coefficient
for community wealth was found to be statistically significant at the district level of analysis.
This category is also the only group for which the rate of participation in vocational education
was not found to significantly related to the rate at which these students were mainstreamed.

One explanation for the effect of community wealth on the rate at which this group,
whose disabilities are primarily physical, are mainstreamed in vocational education may be
that parents in wealthier communities tend also to be more educated, and parents who are
more educated may be more likely to lobby successfully for a mainstreamed placement for
their child. Unlike the other disability categories, students with physical disabilities are less
likely to experience the cognitive disabilities that are associated with students with learning
and developmental disabilities, and are therefore less likely to be separated from their non-
disabled peers for purposes of academic tracking.

Summary of Findings

Community and school factors identified as ones that influenced the rate at which
students with disabilities were mainstreamed in vocational education were, at best, difficult to
isolate. Factors that were found to be statistically significant at the student level of analysis
proved to be weak predictors at the district level of analysis. This could be the result of the
dramatic decrease in the sample size that resulted from moving to an aggregate level of
analysis. As such, the results of these analyses provide limited information with regard to
increasing our understanding of community and school factors that influence the rate at which
students with disabilities are mainstreamed in vocational education. The one exception to this
was the effect that the participation rate of students in vocational education had on the rate at
which students with disabilities were mainstreamed. This variable was the only one for which the individual coefficient was found to be statistically significant for three of the four disability groups.

While the primary research questions addressed by this study center on the characteristics of the school and community that influence the rate at which students are mainstreamed, given the strong relationship between participation and mainstreaming rates, the issue of access to vocational programs by students is one that requires further investigation. Higher rates of mainstreaming at some schools may be the result of schools denying access to those students with disabilities who are the most difficult to serve in a mainstreamed setting. In addition, the increase in participation of students with disabilities in vocational education has been at the forefront of discussions regarding both the declining image of vocational education, as well as the challenges that are being faced by vocational educators who are being asked to serve a wider range of student abilities in their programs. If higher rates of mainstreaming are associated with lower rates of participation among students with disabilities, investigating factors that effect the participation rates of students with disabilities in vocational education may be important to understanding the greater context of issues that are related to the rates at which these students are mainstreamed in these programs.

**District Level Data Analysis: Community and School Variables and the Rates at which Students with Disabilities Participate in Vocational Education**

Among the research questions that arise with regard to the participation of students with disabilities in vocational education that may be explained by community and school factors are: (1) what are the community and school characteristics that effect the participation rates of students with disabilities in vocational education?, and (2) to what extent does the availability of STEP increase the rate at which students with disabilities participate in
vocational education? To investigate these issues, OLS regression was used to test the effects of community and school variables on the rates at which students with disabilities participate in vocational education.

It is predicted that the availability of STEP programs will significantly effect the rate at which students with disabilities are served in vocational education, so this variable was added to the list of community and school factors to be included in the initial regression models. A dummy variable was created to accomplish this. School districts for which STEP is available as a vocational program option for students with disabilities was coded 1, and school districts for which STEP is not available as a vocational program option were coded 0. A correlation matrix of the independent variables revealed a moderate correlation of .35 between the availability of STEP and community wealth.

Stepwise ordinary least squares (OLS) regression was used to test the effects of community and school variables on the rates at which students with disabilities participate in vocational education for each of the four categories of disability. In addition to the availability of STEP, the community and school variables included in the initial regression models were the same as those used in testing the effects of community and school variables on the rates at which students with disabilities are mainstreamed in vocational education. The results of the final regression models achieved as a result of stepwise regression procedures appear in Table 5.

Community and School Variables and the Participation of Students with Learning Disabilities

Approximately 26% the variation in the rates at which students with learning disabilities participate in vocational education was explained by the initial model. Eliminating the effects of school size and community wealth increased the explanatory power of the model approximately two percentage points, and provided the more parsimonious model wherein the
effects of sending/receiving school status, per pupil expenditures, and per handicapped student expenditures were found to be statistically significant. The availability of STEP, while not statistically significant, contributed positively to the explanatory power of the model.

The combined effects of these community and school variables explained approximately 28% of the variance in the participation of students with learning disabilities in vocational education. The participation of students with learning disabilities in vocational education is greater for those students who came from a receiving school, were from a less wealthy community with lower per pupil expenditures for regular education, and greater per handicapped expenditures for special education. The sum effects of these factors imply that issues of social class may explain higher participation rates of students with learning disabilities in vocational education. Poorer communities are more likely to have a greater proportion of lower and working class residents whose children are less likely to be college-bound, and who are therefore more likely to see a value to the enrollment of their child in vocational education.

The effects of receiving school status on the participation of students with learning disabilities can be seen, in part, as the result of increased availability and access to vocational education that is provided to students who attend high schools at which an AVC is located. As mentioned earlier, receiving students are less likely to experience the kinds of difficulties in accessing vocational education that are experienced by students from sending schools.

**Community and School Variables and the Rates at which Students with Emotional Disabilities Participate in Vocational Education**

Only 15% of the variance in the rate at which students with emotional disabilities participate in vocational education was explained by the initial regression model. Eliminating the variables per handicapped student expenditure and sending/receiving school status produced a model that explained 18 percent of the variance in the participation rate of
Table 5. The Effects of Community and School Variables on the Participation of Students with Disabilities in Vocational Education.

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<tr>
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<th>ED</th>
<th></th>
<th>MR &amp; M</th>
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<td>.0000</td>
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<td>.0001</td>
<td>.0001</td>
<td>.0001</td>
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<td>-</td>
</tr>
<tr>
<td>Per Handicapped Student</td>
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<td>-</td>
<td>-</td>
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Significance of the Model

<p>| | | | | | | | | |</p>
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<td>.0118*</td>
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* P > .01  
** P > .05
students with emotional disabilities at a level of statistical significance. Among the remaining variables of school size, community wealth, and per pupil expenditures, community wealth was the only variable for which the individual coefficient was statistically significant. Approximately 75% of the total variance was explained by the final model.

School size and community wealth were negatively associated with participation rates of students with emotional disabilities while per pupil expenditures for regular education was positively associated with the participation of these students. However, the cumulative effect of these variables explained only 16% of the variation. Sending/receiving school status was not found to be a factor that effected the rate at which these students participate in vocational education.

Community and School Variables and the Rates at which Students with Mental Retardation, are Deaf and Blind, or have Multiple Disabilities Participate in Vocational Education

The initial regression model explained 33% of the variance in the rate at which students in this group participate in vocational education. A more parsimonious model increased the proportion of variance explained by the cumulative effects of community and school variables by only one percent, and was achieved through the elimination of the variable sending/receiving school status. Of the remaining variables in the final model, the only two variables found to have an individual coefficient that was statistically significant were the availability of STEP and per handicapped student expenditures.

The participation rate of students with mental retardation, who are deaf and blind, or have multiple disabilities in vocational education was significantly greater if STEP is available to this group as a vocational program option. In addition, greater per handicapped student expenditures for special education also significantly increased the rate at which these students participated in vocational education. Poorer communities, communities with greater per handicapped student expenditures for special education, and lower per pupil expenditures for
regular education also contributed to greater participation rates for these students. You may recall that, with the exception of the availability of STEP, similar factors were associated with the participation of students with learning disabilities. Again, these factors appear to be related to issues of social class wherein poorer communities are more likely to enroll students with disabilities in vocational education than are wealthier communities.

In addition, the higher participation rates of students from sending schools may be explained by the fact that the barriers of scheduling that are associated with sending school students is less of a factor for students with more severe disabilities, since these students are the least likely to be pursuing educational plans that require them to meet graduation requirements. In the absence of the barriers imposed by course requirements needed for graduation, students with more severe disabilities from sending schools have greater flexibility in their schedules which allow them to participate in vocational education.

**Community and School Variables and the Rates at which Students in the Disability Category of "Other" Participate in Vocational Education**

The initial regression model on community and school variables that affected the rate at which students with "other" disabilities participated in vocational education explained 35% of the variance in participation rates. The model improved slightly with the elimination of the variables per pupil expenditures and sending/receiving school status. Only one of the remaining variables -- that of school size -- had an individual coefficient that was statistically significant.

The cumulative effect of the variables in this final model explained 36% of the variance in the rate at which students with "other" disabilities participate in vocational education. Students in this group who are from larger schools have lower participation rates in vocational education than do their peers from smaller district. In addition, schools in poorer communities and those with greater per handicapped student expenditures for special
education are more likely to have higher participation rates of students from this disability group than are wealthier communities with less per handicapped student expenditures for special education.

Summary of Findings

The availability of STEP. The availability of STEP as a vocational program option contributed to the explanation of variance in the rates at which students with disabilities participated in vocational education, regardless of the category of disability, and had the strongest positive effect for students identified as having mental retardation, the deaf and blind, or as having multiple handicaps. The availability of STEP was predicted to have a positive influence on the rates at which students with disabilities participate in vocational education due to the additional program and placement options that STEP provides. It appears as though the lack of STEP as an alternative vocational placement option for students with disabilities serves to reduce the program options made available to students with disabilities, which raises questions and concerns with regard to issues of equal access to vocational education for those students who reside in school districts that are served by AVC that do not offer STEP.

School Size. The effect of school size had a negative effect upon the rates at which students with disabilities participate in vocational education, with students with disabilities from larger school districts showing lower rates of participation in vocational education. One explanation for this is that larger schools are able to offer a greater variety of educational programming to all students, including students with disabilities. Smaller schools, on the other hand, have less program options available to them and may use the AVC in their region as a means of expanding program options for students with disabilities. The question arises with regard to whether or not the vocational program needs of students with disabilities in
larger schools are being served. The flip side of this question is whether smaller schools are using the AVC as an means to reduce the number of students with disabilities in classes at the home school by sending greater proportions of these students to another district under the guise of serving the vocational needs of these students.

Sending/Receiving school status. The only disability group for which sending/receiving school status of the district had an effect upon the participation of students in vocational education was that of students with learning disabilities. As discussed earlier, students from receiving schools have greater flexibility in accessing vocational programs than do students from sending schools due to the proximity of the AVC. Course credits needed to meet graduation and college entrance requirements may pose a barrier for some students wishing to access vocational programs due to the fact that vocational programs consume two class periods a day for receiving students, and three class periods a day for sending students due to travel time. Students with learning disabilities are more likely than their peers with more severe disabilities to have an educational plan that includes meeting high school graduation or college entrance requirements. Sending school students with learning disabilities will therefore be subject to the constraints posed by these requirements with regard to accessing vocational education.

It was speculated that one of the reasons that sending school students with more severe disabilities are less affected by barriers posed by these constraints to accessing vocational education is that these students are more likely to have an educational plan that does not include having to meet graduation or college entrance requirements. The constraints posed by these requirements, however, does not explain the higher participation rates of students with physical disabilities among students from sending schools.

Community Wealth. Community wealth was found to be a factor that contributed
negatively to the participation of students with disabilities in vocational education for three of the four disability groups, having no significant effect on the participation of students with learning disabilities. The effects of this variable are attributed to issues of social class and the stigma that is associated with enrollment in vocational education. Wealthier communities tend to have a greater proportion of residents with higher educational attainment who hold similar expectations for their children. Both graduation requirements and the course requirements for students who have educational plans that include pursuing a college degree present barriers to the enrollment of these students in vocational education. In addition, the stigma associated with vocational education as being non-academic and designed for lower achieving students may serve as a barrier to students with disabilities enrolling in vocational education for those students who’s parents hold negative attitudes toward vocational education. In addition, it should be noted that community wealth and the availability of STEP may exhibit symptoms of multicollinearity. When investigating the relationship between the two using logistic regression techniques, the relationship between the two was found to be statistically significant with AVC located in regions with wealthier communities less likely to offer STEP as a vocational program option. The findings with regard to the positive effect of community wealth on the rates at which students with disabilities are mainstreamed may in fact be the result of the lack of availability of STEP as a vocational program option for students with disabilities in these districts. STEP, of course, was not included in the regression models used to estimate the effects of community and school variables on the rates at which students are mainstreamed due to the fact that, by definition, AVCs that do not offer STEP mainstream all students with disabilities who are enrolled in vocational programs.

Per student expenditures for regular education and special education. Per pupil expenditures for regular education was found to have a positive effect upon the rates at which
students who are emotionally disabled, have mental retardation, are deaf and blind, or have multiple handicaps participate in vocational education, a negative effect upon the participation rates of students with learning disabilities, and to have no effect on the participation rates of students in the disability category of "Other." The individual coefficient for this variable for students with learning disabilities was the only one that was statistically significant. The variable "per handicapped student expenditures for special education" was found to have a positive effect on participation rates for every disability group except that of students with emotional disabilities. The confounding effects of these two variables on the participation of students with disabilities in vocational education is difficult to sort out. Initially it was hypothesized that these two variables would be indicators of the community's value and commitment to education in serving the needs of students. It was also anticipated that these measures would be highly correlated with community wealth, which is not the case. It is difficult to draw any meaningful conclusions from the results of these two variables on the rates at which students participate in vocational education.
CHAPTER VII

DETERMINING THE EFFECTS OF SYSTEM CONSTRAINTS: RESEARCH METHODOLOGY

The purpose of this chapter is to provide a description of the research methodologies that were employed in (1) analyzing the effects of system constraints on the participation and placement of students with disabilities in vocational education in New Hampshire, and (2) determining the extent to which the data provide support for assertions that the educational processing of students with disabilities in vocational education reflects the institutional construction of students with disabilities as deviants, and the reproduction of social class statuses. System constraints refers to factors associated with organization and culture of the school that influence the enrollment of students with disabilities in vocational education and decisions regarding the placement of these students in a mainstreamed or separate vocational environment. Utilizing the qualitative methods of observations and interview data analysis, the purpose of this portion of the study is to investigate the more salient characteristics of the school and community that affect decisions regarding the enrollment and placement of students with disabilities in vocational education. As such, this portion of the study is designed to investigate the organizational and cultural characteristics of schools and communities that are less accessible through the use of quantitative methods of measurement and analysis.

This study suggests that an analysis of the extent to which factors associated with system constraints affect patterns of participation and placement of students with disabilities in vocational education in New Hampshire will provide valuable information with regard to the extent to which STEP programs function as a barrier to the mainstreaming of these students.
This study suggests that an analysis of the institutional processing of students with disabilities provides a deeper understanding of the organizational, socio-political, and cultural forces that operate within the school as a social institution and the ways in which these forces give rise to the creation of different status groups within the school and community. In addition, this study suggests that an analysis of the factors associated with system constraints can provide a basis upon which to conduct an analysis of the extent to which theories of deviance, stigma, social reproduction, and minority group status can be appropriately applied to the ways in which schools make decisions regarding the enrollment and placement of students with disabilities in vocational education.

The first section of this chapter provides a description of how the interview sites and categories of interview subjects were selected, and the method used in conducting the interviews. In addition, a short demographic profile of each of the sites included in this study is also provided: the six interview sites may be regarded as a set of case studies. The second section of this chapter provides a description of the interview guides used in collecting data relative to the presence of factors associated with system constraints. In addition, the relationship between the content of the interview guides and the factors associated with the four categories of system constraints identified as a result of a review of the literature is provided.

The third section of this chapter provides a description of how the data collected via the interviews that were conducted with the interview subjects were analyzed, as well as a discussion of a series of the methodological and ethical concerns that were taken into consideration in development of the research design, the analysis of the data, and presentation of research findings.
Description of the Research Sample

This section provides a description of the methodology used in selecting the six school districts at which observations and 24 interviews with school personnel were conducted in collecting the data that was used in this portion of the research study, as well as the rationale and procedure used in selecting the school personnel that were interviewed. In addition, a demographic profile of each of the schools, and the communities within which the schools are located, is presented.

Sample Size and Methodology

Twenty-four interviews were conducted at six of the 26 school districts in New Hampshire that offer regional vocational education through an area vocational center (AVC) that is attached to their local high school, with four interviews conducted at each of the six sites. Since the primary research questions center around factors associated with the use of STEP programs by these centers in serving students with disabilities, four sites were selected from the list of the 11 school districts with AVCs that offered STEP as a vocational program placement option in 1992 and two sites were selected from among the list of 12 school districts with AVCs which did not offer STEP as a vocational placement option.

The sampling procedure used in selecting the six school districts was both random and purposive. First, the superintendents of each of the school districts that host an AVC were sent a letter asking them if they were willing to allow staff in their school district to participate in the interview portion of this study. To ensure the selection of four sites that offered STEP and two sites that did not offer STEP, the school districts were first stratified on the basis of whether or not they offered STEP from among the list of school districts whose superintendents had indicated a willingness to participate in the interview portion of this study. All but one of the 26 superintendents contacted agreed to participate.
In the selection of the six school districts, an attempt was made to obtain a sample of school districts with demographic characteristics that might represent extreme examples of schools and communities on a variety of measures. This was done in the interest of set of being able to construct a set of institutional "ideal types" as they might relate to the organizational and cultural factors found to be associated with enrollment and placement patterns. As such, the six interview sites selected do not provide a representative sample in the statistical sense, but rather provide a set of case studies that may or may not reflect the organizational or cultural characteristics and practices of other school districts in the state.

Two school districts from each of these two lists of school districts (those that offered STEP and those that did not offer STEP) were selected on the basis of their cumulative point ranking, highest to lowest, on six demographic variables. These variables were: 1) proportion of high school students enrolled in vocational education, 2) the participation rate of students with disabilities in vocational education, 3) the weighted per capita income of the community, 4) the per pupil expenditure for instruction, 5) the per handicapped student expenditure, and 6) the rate at which students with disabilities in vocational education were mainstreamed. Each of the school districts were given one point apiece for each of the variables for which they appeared in the ranking among the top or bottom three districts. The two school districts in each of the two categories of schools (STEP and No-STEP) that obtain the greatest number of cumulative points on the basis of their ranking in the top three or bottom three on each of the six variables were selected to be included as interview sites. The remaining two sites selected for the category of schools that offer STEP were then selected at random from the remaining list of school districts with AVCs that offered STEP.\footnote{One of the school districts selected at random from among those that offered STEP was dropped from the study and replaced with another school district that was selected at random from among the list of remaining school districts offering STEP. The reason for dropping the}
Demographic Profiles of Sites Selected

A demographic profile of each of the six school districts, and the communities within which they are located is provided below. In addition to the narrative summaries, demographic profiles containing information relative to demographic variables for the school and community, including high school and vocational enrollment data for each of the six sites are also provided. (See Tables 6 & 7 on the following pages.)

Site A. School District A is located in a rural community of approximately 14,000 people. This community, which had relied heavily upon manufacturing as its primary economic base, was particularly hard hit by the economic decline of the late 1980s. The average weighted per capita income for this community in 1989 was $11,855, the lowest of all of the communities in the region, the average per capita income of which was $14,606 the same year -- roughly the same as that of the state average, which in 1989 was $14,978. The population of the community was described as a mix between low income, lower middle and middle class.

The high school, while very old, appeared to be clean and well kept, with several bright, attractive bulletin boards hanging in the hall of the main entrance. In 1992, the average daily attendance at the high school, grades 9-12, was 715 -- roughly half that of the state average for high schools hosting an area vocational center (AVC). At 38%, the high school dropout rate for this district was cited by one administrator as being one of the highest in the state.

The school district was the fact that three of the four interview subject categories contained persons who were new employees of the school district and therefore less likely to be able to provide valid data on the processes and procedures of student placement within the school district due to their short tenure with the district.

12 Current population estimates for towns referenced in this chapter are 1989 estimates and were provided by the New Hampshire Office of State Planning.
<table>
<thead>
<tr>
<th>STATE AVERAGE</th>
<th>SITE A</th>
<th>SITE B</th>
<th>SITE C</th>
<th>SITE D</th>
<th>SITE E</th>
<th>SITE F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population of Community</td>
<td>9314</td>
<td>13,800</td>
<td>12,500</td>
<td>23,283.</td>
<td>19,885</td>
<td>12,000</td>
</tr>
<tr>
<td>Total High School Enrollment</td>
<td>678</td>
<td>715</td>
<td>980</td>
<td>1,345</td>
<td>1,097</td>
<td>1,097</td>
</tr>
<tr>
<td>Vocational Enrollment</td>
<td>318</td>
<td>150</td>
<td>335</td>
<td>474</td>
<td>395</td>
<td>123</td>
</tr>
<tr>
<td>% from Sending Schools</td>
<td>16.7%</td>
<td>2%</td>
<td>18.5%</td>
<td>23%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>% of Students with Disabilities Enrolled in Vocational Educ.*</td>
<td>27.4%</td>
<td>15%</td>
<td>18.2%</td>
<td>53.5%</td>
<td>37.6%</td>
<td>26.4%</td>
</tr>
<tr>
<td>Weighted Per Capita Income</td>
<td>$14,978.00</td>
<td>$11,855.00</td>
<td>$18,896.00</td>
<td>$14,343.00</td>
<td>$15,189.00</td>
<td>$17,439.00</td>
</tr>
<tr>
<td>Average Per Capita Income for Communities in the Region</td>
<td>$14,984.00</td>
<td>$14,606.00</td>
<td>$16,267.00</td>
<td>$14,343</td>
<td>$13,396.00</td>
<td>$19,473.00</td>
</tr>
<tr>
<td>Per Student Expenditure</td>
<td>$5,830.00</td>
<td>$6,926.00</td>
<td>$6,242.00</td>
<td>$6,401.00</td>
<td>$5,277.00</td>
<td>$5,952.00</td>
</tr>
<tr>
<td>Per Handicapped Student Expenditure</td>
<td>$4,742.00</td>
<td>$4,493.00</td>
<td>$3,416.00</td>
<td>$3,416.00</td>
<td>$3,416.00</td>
<td>$3,416.00</td>
</tr>
<tr>
<td>% of Students with Disabilities Receiving Additional Services in Out of District Placements</td>
<td>10%</td>
<td>53%</td>
<td>20%</td>
<td>7.0%</td>
<td>1.4%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

* Includes students with disabilities from receiving districts only.
Table 7. Demographic Profiles of Interview Sites on Vocational Enrollments and Rates of Mainstreaming.

<table>
<thead>
<tr>
<th></th>
<th>ST.AVE.</th>
<th>SITE A</th>
<th>SITE B</th>
<th>SITE C</th>
<th>SITE D</th>
<th>SITE E</th>
<th>SITE F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total High School Enrollment</td>
<td>678</td>
<td>715</td>
<td>980</td>
<td>1345</td>
<td>1097</td>
<td>1221</td>
<td>1058</td>
</tr>
<tr>
<td>Number and % of Students With Disabilities</td>
<td>186/15.6%</td>
<td>80/11.2%</td>
<td>143/14.6%</td>
<td>129/9.6%</td>
<td>165/15%</td>
<td>193/15.8%</td>
<td>199/18.8%</td>
</tr>
<tr>
<td>% of H.S. Stud. in Voc.Educ.*</td>
<td>27.3%</td>
<td>20.5%</td>
<td>9.4%</td>
<td>28.7%</td>
<td>35.2%</td>
<td>30.4%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Number and % of Students w/Dis. in Vocational Education *</td>
<td>41/27.4%</td>
<td>11/15.4%</td>
<td>24/18.2%</td>
<td>69/53.5%</td>
<td>63/37.6%</td>
<td>48/26.4%</td>
<td>24/13.1%</td>
</tr>
<tr>
<td>Number and % of Students w/LD in Vocational Education</td>
<td>29/28%</td>
<td>-0-</td>
<td>14/16.3%</td>
<td>47/52.2%</td>
<td>43/37.7%</td>
<td>42/30.2%</td>
<td>22/14.2%</td>
</tr>
<tr>
<td>Number and % of Students w/SED in Vocational Education.</td>
<td>4/22.1%</td>
<td>2/14.3%</td>
<td>7/29.2%</td>
<td>10/47.6%</td>
<td>7/50%</td>
<td>1/12.5%</td>
<td>1/5%</td>
</tr>
<tr>
<td>Number and % of Students w/MRM in Vocational Education</td>
<td>5/42.9%</td>
<td>9/34.6%</td>
<td>1/16.7%</td>
<td>10/91%</td>
<td>8/57%</td>
<td>1/12.5%</td>
<td>0%</td>
</tr>
<tr>
<td>Number and % of Students w/OTH in Vocational Education</td>
<td>2.5/13.1%</td>
<td>-0-</td>
<td>2/13.3%</td>
<td>2/28.6%</td>
<td>4/14%</td>
<td>4/14.3%</td>
<td>1/7.7%</td>
</tr>
<tr>
<td>H.D. Mainstreaming Rate**</td>
<td>64.5%</td>
<td>8.3%</td>
<td>65.4%</td>
<td>46.4%</td>
<td>77.4%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>L.D. Mainstreaming Rate</td>
<td>84.5%</td>
<td>100%</td>
<td>68.8%</td>
<td>53.2%</td>
<td>88.4%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>E.D. Mainstreaming Rate</td>
<td>78.5%</td>
<td>0%</td>
<td>57.1%</td>
<td>60%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>M.R. Mainstreaming Rate</td>
<td>8.5%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>12.5%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Other Mainstreaming Rate</td>
<td>68.8%</td>
<td>0%</td>
<td>100%</td>
<td>50%</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Participation rates included here reflect receiving school students only.
** Mainstreaming rates included here reflect both sending and receiving school students.
The per student expenditure for this district in 1992 was $6,242, slightly higher than the statewide average of $5,830. The per handicapped student expenditure for the same year was $4,493, slightly less than the statewide average of $4,742. The number of students with disabilities receiving additional services was 20%, less than half of the statewide average of 53%. The percentage of out-of-district placements for students ages 15-21 in 1992 was 7.0%.

The region this district serves has two AVCs, which serve a total of four secondary school districts. The AVC is a relatively new facility and is not attached to the high school but is located within walking distance. The inside of this building was bright, airy, clean and well kept. Enrollment in vocational programs in 1992 was 150, representing a participation rate of high school students in vocational education of 21%. Only 2% of the students enrolled in vocational education at this center were students from one of the sending districts.

In 1992, the participation of students with disabilities in vocational education from the receiving district was 11% -- approximately 60% less than the state average of 27.4%. Of the total vocational enrollment, less than 8% were students with disabilities, one of the lowest percentages in the state. The mainstreaming rate of students with disabilities in vocational education at the AVC was 65.4%, slightly higher than that of the statewide average.

**Site B.** School District B is located in a rural-suburban community of approximately 12,500 people. The community is characterized primarily by serviced-based industries, is home to a prestigious prep-school, and has an attractive downtown area lined with specialty shops. While the social class composition of the community was reported as mixed, the presence of the prep-school and a hospital, and the general appearance of town buildings and area homes suggests a greater incidence of middle and upper-middle class professionals than most New Hampshire communities. The average weighted per capita income for this community in 1989 was $18,896, roughly 25% above the state average and the highest of all
of the communities in the region. The average weighted per capita income for all communities was $16,267, with one of the area communities having a low of $13,608.

In 1992, the average daily attendance at the high school, grades 9-12, was 980 -- approximately 20% lower than the state average for high schools hosting an AVC. The per student expenditure for this district in 1992 was $6,926, approximately 20% above the state average of $5,830. The per handicapped student expenditure was $3416, $1,326 less per year than the state average of $4742. Out-of-district placements for this district is 1.4%, substantially less the state average of 10%.

The inside of the school building was in need of interior renovations and a fresh coat of paint. The building was dark and somewhat drab. There was a general lack of freshness or vitality in the furnishing and wall hangings. For the most part, the walls were relatively bare with the exception of handmade fliers urging students to vote for "so and so" in the next class election.

This school district is the only one in the region with an AVC, and serves a total of seven secondary school districts. At approximately twenty years of age, the AVC facility is one of the oldest in the state. Enrollment in vocational education at this center in 1992 was 335 students, 72% of which were students from a sending district -- the highest ratio of sending to receiving school students of any AVC in the state. In 1992, the participation of students with disabilities in vocational education from the receiving district was 18.2%, approximately 9 percentage points below that of the state average of 27.4%. Of the total vocational enrollment, only 7.8% were students with disabilities, one of the lowest percentages in the state. The mainstreaming rate of students with disabilities in vocational education at the AVC was 65.4%, slightly higher than that of the statewide average.
Site C. School District C is located in a community of approximately 22,383 people. The economic base of this community is characterized by primarily light manufacturing and service industries. Located near one of the state's three public four year colleges, the social class composition of the community reflects a mixture of largely working class and middle class professionals. The average weighted per capita income for this community in 1989 was $14,343 -- the highest per capita income of the seven school districts served by the regions AVC, but slightly less than the statewide average, which in 1989 was $14,978.

Per student expenditures for this district in 1992 was $6,401, slightly higher than that of the statewide average of $5,830. The per handicapped student expenditure for the same year was $11,374, approximately two and a half times that of the statewide average of $4,742. In 1992, the number of students with disabilities receiving additional services in this district was 83%, one and a half times higher than the statewide average of 53%. The rate at which students with disabilities are identified in this school district is 9.6%, which is 61% less than the statewide average of 15.6%. The percentage of out-of-district placements was 5.8%, almost half that of the statewide average.

The high school is large and relatively attractive both inside and outside. The architecture of the building is such that it is difficult to tell how old the building is. The hallways are wide, clean, and well lit. Posters and bulletin boards decorate the hallways, and are well maintained. In 1992, the average daily attendance at the high school, grades 9-12, was 1,345 students, slightly higher than the statewide average for districts hosting an AVC.

This district offers the only AVC in the region. The enrollment of students in vocational programs in 1992 was 474, 88 (18.6%) of which were students from sending schools. Of the total vocational enrollment of 474 in 1992, 69 these students were students
with a disability that came from the receiving district, representing a participation rate of
students with disabilities in this district of 53.5% -- almost twice the statewide average of
27.4%. The rate at which students with disabilities were mainstreamed in vocational
education in 1992, was 46.4% -- 28% less than the statewide average of 64.5%.

**Site D.** School District D is located in a community of approximately 25,000 people.
The community, which is located near the state university, has a relatively diverse economy
characterized by jobs in county government, a variety of service industries, and light
manufacturing. The city is also known to be a bedroom community for people who work in
nearby larger cities. While there are indications of an economic recovery in this community,
there still exist signs of the economic decline of the late 1980s, as several store fronts in the
downtown area have remained vacant.

The weighted per capita income for this community in 1989 was $15,189, the highest
of the seven communities served by this area's vocational region, the average per capita
income which was $13,396. The community population was described as a diverse mix of
low income, middle- and upper-middle class families.

The high school building is large, clean and in good repair. The walls of the
hallways were relatively bare, but the walls inside the classrooms were decorated with charts
and posters, and the rooms were well lit. In 1992, the average daily attendance at the high
school, grades 9-12, was 1,097. Per student expenditures for this district in 1992 was
$5,277, slightly less than the statewide average of $5,830. The per handicapped student
expenditure for the same year was $2,666, almost half that of the statewide average of
$4,742. The number of students with disabilities receiving additional services was 59.4%,
slightly higher than the statewide average of 53%. The percentage of out-of-district
placements in this district is 12.2%, 2.2 percentage points higher than the statewide average.
The percentage of high school students identified as having a disability was the same as the statewide average of approximately 15%.

This school district is one of several in the region that hosts an AVC. Enrollment in vocational programs in 1992 was 505, 119 (23%) of which were students from one of the seven sending school districts in the region -- representing the highest percentage of sending school students served by all of the AVCs in the region. Of the total vocational enrollment in 1992, 63 students were students with a disability from the receiving district, representing a participation rate in vocational education of 37.6% -- approximately 37% higher than that of the statewide average of 27.4%. The number of students with disabilities enrolled in vocational education from sending districts in 1992 was six, representing approximately 10% of the students with disabilities served in vocational education at the district’s AVC. In 1992, the mainstreaming rate for students with disabilities enrolled in vocational education at this district’s AVC was 77.4% -- the highest of any AVC in the state offering STEP as a vocational program option, and 20% higher than the statewide average of 64.5%.

Site E. School District E is located in a rural-suburban community of approximately 19,885 people. This community, which is surrounded by farmland, is located near several relatively large urban communities in the southern part of the state. As such, the community also serves as a bedroom community for people who work in nearby cities.

The weighted per capita income for this community in 1989 was $17,439, the lowest average per capita income of the six communities that are served in this particular vocational region, the average weighted per capita income of which is $19,473 -- substantially higher than the statewide average of $14,978. The local economy appears to be largely dominated by agricultural and service-based industries, with some light manufacturing. The community population was described as a mixture of working class, and lower to upper middle class
families.

In 1992, the average daily attendance at the high school, grades 9-12, was 1221. This district is one of three districts in the region that hosts an AVC. Enrollment in vocational programs in 1992 was 395, only 24 (6%) of which were students from sending districts. However, a new vocational center was built since 1992, and the total vocational enrollment this year was 706, almost twice that of the 1992 enrollments. The number and proportion of vocational students from sending districts also increased between 1992 and 1994 to that of 123 students, or 17% of the total vocational enrollment. In 1992, the participation rate of high school students in this district was 32.4%. In 1993, this percentage had increased to approximately 43%.

Per student expenditures for this district in 1992 were $4,925, approximately 15% less than the statewide average of $5,830. The per handicapped student expenditure for the same year was $2,193 -- less than half that of the statewide average of $4,742. However, the number of students with disabilities receiving additional services was 55%, slightly higher than the statewide average of 53%. The percentage of out-of-district placements was 5.9%, almost half that of the statewide average. The rate at which students were identified as having a disability in 1992 was 15.8% -- basically the same as that of the statewide average of 15.6%.

The high school building is an older building set apart from the new vocational center, though connected by a long corridor on the north side of the building. The high school portion of the building is showing its age, but is clean and relatively well maintained. The hallways are narrow, and somewhat dark. By contrast, the new vocational center is bright, spacious and airy, with skylights, attractive ceramic tiled floors and walls, and contemporary design.
This AVC is one of the two included in the interview portion of this study that does not offer STEP programs as a vocational program option for students with disabilities. Of the total vocational enrollment of 395 in 1992, the AVC served 48 students with disabilities from the receiving school district and 3 from sending school districts. The participation of 48 students with disabilities from the receiving school district represents a participation rate in vocational education of 26.4%, slightly less than the statewide average of 27.4% in 1992. The number of students with disabilities served in 1994 was 105, but in the absence of data with regard to these students’ district of origin, the participation rate of students with disabilities from the receiving school cannot be calculated. In the absence of a STEP program, all of the students with disabilities enrolled in vocational education are mainstreamed.

Site F. School District F is also located in a rural-suburban community in the southern part of the state, and is also not far from several larger cities. The population of the community is approximately 12,000. The average weighted per capita income for this community in 1989 was $20,456 -- slightly above the average weighted per capita income of the six school districts served by the vocational region within which the AVC is located. The community was described as a split between "blue collar" and upper middle class.

In 1992, the average daily attendance at the high school, grades 9-12, was 1058. Enrollment in vocational programs in 1992 was 123, and less than 2% of these students came from sending districts. Per student expenditures for this district in 1992 were $5,062, which is slightly less than the statewide average of $5,830. In the same year, the per handicapped student expenditure was $2,540, slightly over half that of the statewide average of $4,742. The number of students with disabilities receiving additional services in this district was 32.7% -- roughly, 40% less than the statewide average of 53%. The percentage of out-of-district placements was 7.9%, approximately 2 percentage points less than the statewide
This district is one of three that hosts an AVC for the region, and is one of the smaller AVCs. This district offers only five vocational programs -- approximately half the average number of programs offered by most AVCs in the state and is currently in the process of planning for the building of a new vocational facility that will be attached to the high school. The total vocational enrollment in 1992 was 123, with only 11.6% of high school students from the receiving school participating in vocational education - approximately one third that of the statewide average.

Of the 123 students enrolled in vocational education in 1992, 26 of these students were students with a disability, representing 21.1% of the total vocational enrollment -- 55% higher than the statewide average of 13.1% and the highest in the state. Of these twenty-six students, 24 were students from the receiving district, representing a 13.1% participation rate for students with disabilities -- approximately half that of the statewide average of 27.4%. Of the 26 students with disabilities served in vocational education in 1992, 23 (88%) were identified as having a learning disability. The overall enrollment of students in vocational education is approximately one third that of the statewide average of 34.1%. This low participation rate of students in vocational education is at least partially explained by the fact that the AVC offers half the number of vocational programs than most AVCs in the state.

In summary, despite the non-random sampling method used in selecting the sites included in the interview portion of this study, these six sites represent a wide variety of socio-economic and demographic situations characterizing school districts in the state. The sample includes both a mixed variety of communities relative to economic wealth, as well as a wide range of participation and mainstreaming rates among the students with disabilities that were served in vocational education the year from which the enrollment data were drawn.
The Selection of Interview Subjects

A total of four interviews were conducted with high school personnel at each of the six interview sites; one with the high school principal, one with a guidance counselor, one with district staff person responsible for conducting vocational assessments for students with disabilities, and one with a special educator. Guidance counselors and special educators interviewed at each of the sites were selected at random from a list of personnel performing these services that was provided by the school district, with one exception. In the case of the exception, the special educator who was selected was unable to provide information regarding the STEP placement process due to the nature of her responsibilities with the district. In the case of this district, the director of special education was interviewed instead.

The selection of individuals from the categories of principal and vocational assessment was de facto, as each of the school districts employed only one person from each of these categories. There were three exceptions to this selection process in the case of selecting a person responsible for vocational assessment. In two of the cases, vocational assessments were performed by an agency outside of the school district. For one of the school districts, the person interviewed for this study was the district staff person responsible for coordinating vocational services for students with special needs. In the case of the other school district, the person interviewed was responsible for both conducting vocational assessments and providing vocational special needs services in the district for the three years previous to the study. In the third case, the school district did not provide vocational assessments. In the case of this school district, the vocational director was interviewed instead.

The rationale for selecting the subject categories of principal, special educators, vocational assessment, and guidance personnel to provide the data upon which this investigate the effects of system constraints on the enrollment and mainstreaming of students with
disabilities in vocational education in New Hampshire schools is provided below.

With regard to including school principals, previous research supports the notion that the building principal plays a central role in setting the direction and climate in which educational initiatives are implemented within the school, including institutional procedures and policies directed toward the mainstreaming of students with disabilities. In addition, as the school administrator, the principal is also in a position to articulate the philosophy and goals of the school with regard to education and the organizational procedures whereby the goals and mandates of P.L.94-142 are operationalized by the school as an organization.

Special educators were chosen as a primary source of data because special educators often act as the student’s case worker in ensuring that the student’s needs are met. As such, they are the person directly involved in the development of a student’s individualized instructional plan (IEP) -- the process in which information about the student is used and decisions made regarding a student’s program placement.

Vocational assessment personnel were chosen because they are the school personnel responsible for conducting an assessment of the student’s interests and aptitudes as they relate to the vocational program options that are available to the student. They often play an active role in placement decisions that are made depending upon the administrative and procedural arrangements of the school. If, when, and how they participate in placement decisions can be critical to the process of student enrollment in vocational education and the setting in which the student is served.

Finally, high school guidance counselors were chosen as a primary source of data for investigating the organizational processes and procedures whereby students are enrolled in particular courses and programs, including vocational education. Guidance counselors serve in a variety of capacities that may be related to a student’s enrollment and placement in
vocational education, depending upon the organization of the school and the role assigned to
guidance counselors. Typically, guidance serves a central role in advising students with
regard to their high school program and course selection (Khleif, 1966; Reichl, et al. 1992),
including whether or not the student is enrolled in a college prep track, a general track, or a
vocational education track. The role of the guidance counselor in determining the student’s
educational program if the student has a disability may vary dramatically from one school to
the next. However, guidance counselors can provide valuable insight and information with
regard to the educational decision making process as it relates to the type of information that
is used in deciding upon a student’s educational program and the organization of the school
curriculum with regard to academic levels and practices of tracking, as well as how issues of
the student’s social class may affect decisions regarding a student’s program.

The inclusion of only one person from each of the four categories may pose some
limitations upon the reliability of the data in that information from each of these four
organizational vantage points is obtained is site specific. However, the interview guides used
in obtaining the research data for each of these categories of subjects contain a set of core
questions with regard to the institutional treatment and processing of students with disabilities.
As such, the research design provides for a degree of reliability and validity that might
otherwise be lacking if the interview guides did not contain a set of core interview items.
That is, in asking each of the subjects a set of similar questions relative to factors associated
with system constraints, the chances of obtaining data that accurately reflect the organization
and culture of the institution relative to these factors is increased.

System Constraints and the Construction of the
Interview Guides

Drawing upon previous research findings, four categories of system constraints were
developed for purposes of identifying the organizational and cultural factors that facilitate or
constrain the mainstreaming of students with disabilities. These four categories are: organizational constraints, attitudinal constraints, economic constraints, and philosophical constraints. The factors contained within each of these four categories of system constraints provided the basis upon which a set of interview guides were developed and used in conducting face-to-face interviews with school district personnel for purposes of identifying the more salient characteristics of the school and community that affect the rates at which students with disabilities participate in vocational education, and the rates at which these students are mainstreamed.

A summary of previous research findings relative to the organizational and cultural factors identified for each of the four categories of system constraints is provided below. This is followed by a presentation of the set of core questions contained within each of the interview guides.

Organizational Constraints

Organizational constraints refers to factors present within the organization of the school that facilitate or act as barriers to the mainstreaming of students with disabilities. Previous research indicates that the administrative structure of the school; the existence of policies and procedures for determining the placement of students in the least restrictive environment; and the nature and degree of communication, cooperation, and collaboration between various service providers within the institution are all critical factors associated with the likelihood that students with disabilities will be mainstreamed.

For instance, previous research suggests that the following organizational conditions facilitate the mainstreaming of students with disabilities:

(1) clear policies and procedures for determining the least restrictive environment (LRE) for students;
(2) administrative support for the mainstreaming of students with disabilities;
(3) an understanding of the requirements of federal mandates relative to serving
students with disabilities; and

(4) communication, cooperation, collaboration and the sharing of resources among various department administrations.

The mainstreaming of students with disabilities is constrained, on the other hand, by such organizational factors as:

(1) the lack of clear and consistent policies and procedures for determining the placement of students with disabilities in the least restrictive environment (LRE);
(2) administrative structures and institutional behaviors that create barriers to communication, cooperation, collaboration and the sharing of resources among various department staff within the school;
(3) a lack of organizational consensus with regard to interpretations of the legislative mandate of LRE and its implementation; and
(4) school policies or procedures relative to course requirements and curriculum structures (including course leveling or student tracking).

The factors associated with organizational constraints can be seen as falling into three sub-categories: structure, process, and atmosphere. "Structural" factors include the administrative structures of authority and service delivery, administrative policies and procedures for determining placement, and the structure of curriculum and placement offerings for students with disabilities (including the provision of separate course work and classrooms for students with disabilities).

Organizational constraints associated with the sub-category of "process" include: how the concept of LRE is defined and implemented relative to decisions regarding the students placement; the nature and degree of participation of various educators in the development of the student's Individual Educational Plan (IEP); and the nature and degree of organizational communication, cooperation, and collaboration that exists with regard to program goals and objectives; the level of cooperation that exists between departments in providing appropriate services to support a student's placement; and level of collaboration that exists within the institution among service providers in both designing programming and instruction and in providing resources to support services to students.
Constraints associated with the sub-category of organizational "atmosphere" include factors associated with a general feeling of support and encouragement among staff relative to the ability and willingness of the organization to serve the needs of students with disabilities in a mainstreamed setting. Also included are issues related to organizational politics, personality conflicts, and organizational chaos or disorganization that may impede the organization's ability to ensure that the needs of students with disabilities are served in the least restrictive environment.

Attitudinal Constraints

Attitudinal constraints refers to factors associated with the attitudes held by personnel at all levels of the organization toward students with disabilities and their perceived abilities or inabilities; the perceived efficacy of both vocational education and mainstreaming in serving the educational needs of students with disabilities; and the problems perceived to be associated with mainstreaming of students with disabilities in vocational education. Included here are also attitudes held on the part of staff with regard to the school administration, special educators, guidance personnel, vocational education, vocational teachers, and/or vocational administrators as well as those held by the parents of students with disabilities relative to the educational placement process and the placement of their child in a mainstreamed or separate vocational education environment. Among the attitudinal barriers to mainstreaming that have been cited in the literature are negative attitudes held by regular educators toward the mainstreaming of these students in their classrooms, as well as resistance on the part of special educators to relinquishing their role as protectors and mediators for these students. Attitudes toward the efficacy of mainstreaming students with disabilities in vocational programs have also been cited as a factor associated with decisions made by educators as to whether or not students with disabilities should be served in mainstreamed
vocational programs.

Economic Constraints

Economic constraints refers to factors associated with the provision or lack of provision of the resources necessary to facilitate the mainstreaming of students with disabilities. The extent to which economic support is available with in the school district for the mainstreaming students with disabilities is reflected not only in the amount of expenditure for special education staff and services, but the extent to which resources are provided for:

(1) staff development activities for special educators, regular teachers, administrators, and aides on methods of mainstreaming and inclusion;
(2) curriculum and equipment modifications that may be necessary to effectively mainstream students with disabilities;
(3) the provision of an adequate number of properly trained support staff; and
(4) support for teachers to meet regularly with special educators and vocational assessment personnel for purposes of identifying appropriate goals and objectives for individual students, and for modifying program curricula and instructional practices to meet the needs of students with disabilities in a mainstreamed setting.

While there is evidence to suggest that the costs of mainstreaming students with disabilities is less than that of serving these students in separate classrooms, how and where available resources are spent may greatly affect the ability of the school district to provide for the mainstreaming of these students.

In addition, economic factors within the community, including rising local property taxes and the higher costs associated with educating students with disabilities may affect the ability of the community to accommodate the needs of the institution with regard to providing expanded educational services to students with disabilities. This may be particularly true in New Hampshire, where local property taxes provide more than 90% of school revenues.

Philosophical Constraints

Philosophical constraints refers to factors associated with the system of beliefs and attitudes held by individuals within the organization that serve to either facilitate or constrain
the ability or willingness of the organization to mainstream students with disabilities.

Philosophical constraints include systems of beliefs and attitudes held by school personnel, parents, and community members with regard to such things as the purpose and goals LRE as they interface with those providing an education for other students; the value of educational tracking and ability grouping; the value of vocational education in serving students with disabilities, and the efficacy of mainstreaming these students in vocational education.

Included here are also such philosophical notions as belief in the nature of individual intelligence and ability and the role of an educational meritocracy in structuring educational opportunities (and rewards) available to students, versus philosophical notions regarding the responsibility of the institution to provide equal educational opportunities, as well as model and teach social acceptance and tolerance for differences in a democratic state.

In summary, there are a variety of organizational and cultural factors that have been identified as ones that affect program enrollment and mainstreamed placement decisions for students with disabilities on the part of the institution. These factors have been organized and presented relative to four categories of factors — identified here as system constraints. These categories are not mutually exclusive, but overlap and interact with one another. Taken together, the factors contained within these categories reflect the complex socio-political, economic, and cultural context within which decisions regarding the mainstreaming of students with disabilities take place. It is upon the structure and content of the four categories of system constraints identified above that the interview guides used in this study were developed.

Interview Guides

A series of interview guides were developed for purposes of guiding unstructured interviews with school personnel were used in investigating the extent to which the nature and
types of system constraints that exist within school districts in New Hampshire may serve to explain
differences between school districts in the placement of students with disabilities in vocational education in a mainstreamed setting.

Three interview guides were developed and used in conducting interviews with school personnel -- one for principals, one for guidance counselors, and one for both special educators and vocational assessment personnel. The interview guides were designed to elicit information with regard to the system constraints that may exist within the school and community that facilitate or act as barriers to the mainstreaming of students with disabilities in vocational education. Each of these guides included the following types of core questions:

(1) What is the philosophy of the school with regard to the mainstreaming of students with disabilities?
(2) What types of information are used in determining whether a student is placed in a mainstreamed or separate setting?
(3) What are the attitudes of various people within the organization toward students with disabilities?
(4) What are the attitudes of people within the organization and community toward the mainstreaming of students with disabilities?
(5) What are the attitudes of people within the organization toward vocational education?
(6) What are the attitudes of people within the organization and community toward the enrollment of students with disabilities in vocational education?
(7) What are some of the barriers that exist with regard to serving students with disabilities enrolled in vocational education in the mainstreamed environment?

While each interview was structured around these core questions, additional questions were also included in each of the interview guides, depending upon the category of subject being discussed. In addition, interviews were conducted in a way that allowed for the probing of subjects in an attempt to obtain clarification of subject responses, as well as delve into particular issues in greater depth. This interview approach was used in an attempt to ascertain the deeper and more subtle characteristics of the context of the organization and culture of the

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13 Copies of the interview guides appear in appendix B.
school and community as they relate to the enrollment and placement of students with
disabilities in a mainstreamed or separate vocational setting.

The interview guides were field tested for validity and reliability prior to their use.
This was accomplished through interviews and extensive consultation and discussion with
educators, administrators, and guidance counselors at two different school districts. (Neither
of these two districts were among those selected as case study sites.) While the questions
contained within the interview guides were determined to be valid as a result of the field
testing, the reliability of these instruments may have been compromised by the decision to
conduct the interviews in a less structured manner. Had all of the questions been asked in the
exact same order and the exact same way, instead of relying upon a contextual opportunity to
pursue a particular question, the subjects may have responded differently to the questions they
were asked.

Decisions not to follow a direct line of questioning often require that subjective
decisions be made on the part of the researcher in which there is a recognized trade-off
between the reliability and validity of the instrument. In the case of this study, it was decided
that the data obtained through a more spontaneous and semi-structured interview, while
perhaps compromising the reliability of the data, would result in data that were more valid in
that they would allow for a deeper probing of issues as they were identified by the subject.

Analysis of the Interview Data

The data collected via interviews with school personnel were analyzed to determine
the nature of, and degree to which, factors associated with system constraints were present
within each of the school districts, and the extent to which these factors served to explain
differences in the rates at which students with disabilities participate in vocational education,
and the rates at which these students are mainstreamed. In addition, these data were also
analyzed to determine the extent to which they provided evidence that students with disabilities occupy a deviant role within the school, and the extent to which the processing of these students on the part of schools reflects the institutional reproduction of social class and differential social group statuses.

These analyses were accomplished through a process of applying a series of questions to the data that were obtained from interviews at each of the sites and the construction of categories of similarities and differences among the school districts included in the study. The questions used in guiding these analyses are provided below. The questions guiding the analysis of the effect of factors associated with system constraints and the mainstreaming of students with disabilities in vocational education is provided first. This is followed by the questions that were used in analyzing the extent to which the data provide support for the notion that students with disabilities are responded to on the part of the school as deviants, as well as the extent to which the processing of these students reflect the institutional reproduction of social class status.

**Method of Analysis for Determining the Effects of System Constraints**

A series of questions were developed for analyzing interview data obtained relative to each category of system constraints. These questions, when applied to the data obtained at each site, produced a profile of organizational and cultural characteristics for each school. The profiles developed for each site were then compared to the program enrollment data of students with disabilities in vocational education for that district in 1992. These comparisons were then used to identify a series of similarities and differences relative to factors associated with system constraints and the rates at which students with disabilities participate in vocational education, the rates at which these students are mainstreamed, and the relationship between these factors and the use of STEP programs. As such, the analysis of the data
attempts to construct a coherent understanding of the total organizational and cultural context of the school and the effects of factors contained within these contexts on the decision making process whereby students are assigned to separate or mainstreamed environments to receive their vocational education instruction.

The series of questions used in guiding the analysis for each of the four categories of system constraints are presented below.

Organizational Constraints. The questions that guided the analysis of data for each of the interview sites in constructing an institutional profile relative to factors associated with organizational constraints included:

(1) To what extent does there exist a coherent policy and set of procedures for determining what constitutes the least restrictive environment and to what extent are these policies and procedures followed?
(2) How is the concept of a least restrictive environment defined by school personnel and to what extent is this definition shared among administrators and service providers?
(3) To what extent does there exist an organizational environment that is characterized by administrative cooperation, coordination of services, and a sense of shared purpose and goals relative to serving students with disabilities?
(4) To what extent does there exist a set of specified criteria, goals, and objectives relative to determining the placement of students in the least restrictive environment?
(5) To what extent does the structure and rigidity of the curriculum act as a barrier to the mainstreaming of students with disabilities in vocational education?

Attitudinal Constraints. Among the questions that guided the analysis of interview data relative to the influence of factors contained within this category are:

(1) To what extent are placement decisions based upon attitudes regarding the perceived limitations of the student on the part of school personnel?
(2) To what extent are placement decisions based upon the perceived willingness or ability of vocational teachers to integrate students with disabilities in their classroom?
(3) To what extent are placement decisions influenced by the attitudes and beliefs of parents or members of the community (with or without children with disabilities) that a mainstreamed or separate setting is most advantageous for children and/or the organization of the school?
Economic Constraints. Among the questions that guided the analysis of interview data relative to the influence of factors contained within this category are:

(1) To what extent are resources made available to support the mainstreaming of students with disabilities?
(2) To what extent are the additional supports of full time aides needed to mainstream students with more severe disabilities made available to assist with the mainstreaming process?
(3) To what extent have staff development activities been provided to regular educators on issues of mainstreaming students with disabilities?
(4) To what extent are curriculum modifications, special equipment, and technical support provided to enhance the capacity to mainstream students with disabilities?
(5) To what extent are the economic resources made available to teachers for purposes of allowing time in the day for service providers to meet, coordinate, and plan for the modification of curricula and instruction that may be necessary to mainstream students with disabilities?

Philosophical Constraints. Among the questions that guided the analysis of interview data relative to the influence of factors contained within this category are:

(1) Does the school practice educational tracking of students on the basis of ability, what are the reasons given for this practice, and what are the underlying philosophical values and beliefs that are reflected in these practices?
(2) What is the perceived value of vocational education in serving the needs of students with disabilities?
(3) What are the conditions perceived to be necessary to achieve the purpose and goals of mainstreaming students with disabilities, and
(4) What are the conditions under which vocational education is seen as valuable to students with disabilities and how does this relate to the setting within which the student is educated in vocational education?

The organizational and cultural profiles that resulted from applying these questions to the data were then analyzed to determine the similarities and differences that existed among school districts. These similarities and differences were then analyzed to determine if there was any correspondence between similar organizational and cultural characteristics contained within these profiles, the rates at which students with disabilities participate in vocational education, and the rates at which these students are mainstreamed.
Social Reproduction and the Social Construction of Deviance, Stigma, and Minority Group Status

The organizing concepts upon which an analysis of the data for this portion of the study was based included those of social reproduction, deviance, stigma, and minority group status. A series of questions were developed and used in analyzing the interview data for purposes of determining the extent to which there was evidence to support the assertion that the sorting, processing, and placement of students with disabilities in vocational education reflects the institutional reproduction of social class and the social construction of deviance, stigma, and minority group status of students with disabilities.

Among the questions that were used to guide an analysis of the interview data in determining the extent to which the placement of students with disabilities in vocational education reflected organizational practices and cultural attitudes that support the theoretical frameworks proposed by this study were the following:

1. To what extent can the placement of students in vocational education be seen as a process whereby students are aligned with one another on the basis of their parents' social class standing?
2. To what extent do placement decisions made with regard to assessment and the assignment of students with disabilities to separate classrooms reflect the social construction on the part of the institution of students with disabilities as deviants, and to what extent are these practices described in ways that reflect how the institution conceptualizes students in terms of an "ideal client?"
3. To what extent do the justifications given for the differential processing and treatment of students with disabilities reflect the institutionalization of the hegemonic notions of the purpose of education, work, and meritocracy?
4. To what extent do justifications offered for the placement of students with disabilities in a separate setting reflect the social construction of their status as a stigmatized and minority group?
5. To what extent does the concern offered on the part of educators and education administrators that the mainstreaming of students with disabilities in vocational education serves to further stigmatize vocational education?

The extent to which support for the theoretical assertions that social deviance, social stigma, social class, and social status are created and recreated by the organization and culture of the school is examined. Finally, the extent to which the enrollment and placement of
students with disabilities in vocational education reflect the dominant ideological beliefs of
American society as they relate to the purpose and goals of education and the educational
treatment of students with disabilities is also explored.

**Summary of the Methodology used in Determining the Effects of System Constraints**

The methods used in investigating the relationship between organizational and cultural
system constraints and the placement of students with disabilities in vocational education was
that of observations and interview data analysis. The data obtained through 24 face-to-face
interviews conducted with educators and administrators at six different school districts in the
state were analyzed. Guiding this analysis were a series of questions designed to identify
similarities and differences of factors relative to the four categories of system constraints, and
the relationship of these factors to the rates at which students with disabilities were enrolled in
vocational education and the rates at which these students were mainstreamed. This analysis
provided the basis upon which a set of institutional ideal types were constructed.

The interview data were analyzed to determine the extent to which students with
disabilities occupy the role of deviants within the school, and the extent to which the
institutional practices of sorting and processing of these students reflect the reproduction of
social class, stigma, and minority group status. This analysis was guided by a series of
questions aimed at determining the extent to which a study of the placement of students with
disabilities in vocational education provided support for the theoretical assertions upon which
deviance and social reproduction theory are based. Necessarily embedded in this analysis was
an investigation of the extent to which organizational structures, attitudes, and procedures
reflect the dominant cultural values of American society as they relate to the purpose and
goals of education, and secondary educational institutions.
Methodological Concerns

There are several methodological concerns relative to the validity and reliability of the data that was obtained as a result of face-to-face interviews with school personnel that deserve discussion. The first concern pertains to the dual professional roles I occupied at the time of this study -- one as a social researcher and the other as an administrator responsible for the development and implementation of vocational program policies in New Hampshire Department of Education.

Regarding the potential threat to the validity of the interview data posed by my professional responsibilities with the state Department of Education, it was decided that I must be able to assure school district personnel that any information I obtained as a result of my interviews remained strictly confidential. This decision won the support of my immediate supervisor as well as the then Commissioner of Education.

Prior to conducting each interview, the interview subjects were given a contract of assurance (that was signed by the both of us) that their identity, the identity of the school district, and any information I obtained as a result of my interview with them, and any observations I made at the school while conducting the research, would remain strictly confidential. Despite this contract with each of the interview subjects, it is difficult to know if the interview subjects responded to my asking of the interview questions differently than they would have responded to a researcher asking the same questions who did not work for the state agency responsible for ensuring compliance with federal and state educational policies.

Among the observations I made that suggest to me that the validity and reliability of the data were not compromised by my employment status with the Department of Education were the following: (1) all parties involved agreed to, and signed the contract of assurance of
confidentiality; (2) school personnel at three of the six interview sites openly described practices at their school district that were in violation of federal mandates as they relate to determining the least restrictive environment in which students with disabilities are placed, (3) all of the subjects interviewed appeared to be relaxed, as well as spontaneous and candid in responding to questions during the interviews, and (4) several interview subjects offered personal and professional opinions that they acknowledged might be considered "politically correct" in some educational circles.

The flip side of concerns regarding my employment status with the Department of Education pertains to issues of research objectivity. It is difficult to know the extent to which my job responsibilities, and the tacit knowledge I have acquired as a result of my work at the department, may have influenced the collection of interview data. That is, it is difficult to know if, or the extent to which, my familiarity with, or closeness to, the research subject may have compromised my ability to approach the research subject without bias. While being too close to or too familiar with the subject of inquiry can result in research findings that contain bias, a closeness and familiarity with the subject can also provide the researcher with a knowledge base that could well enhance the validity of the questions that the researcher asks.

One additional issue that may or may not have compromised my ability to approach the collection and analysis of the interview data with the same level of objectivity that might have been obtained by another researcher is the that of my own educational experiences as a child with learning disabilities. A reflexive statement is provided in Appendix E describing how reflections upon my own educational experiences in the course of conducting this research express my developing feelings of ambivalence toward P.L. 94-142.

The circumstances detailed above as they relate to possible concerns regarding the validity and reliability of the data are herewith provided in the interest of a more critical look
at the research methods and findings. After much reflection upon the methods and procedures used in carrying out the collection of interview data, I remain confident that these circumstances did not pose serious threats to the validity or reliability of the research findings. However, I also feel that I have an ethical responsibility to make the reader aware of any possible threats to the validity, reliability, and therefore generalizability, of the research findings.

**Ethical Concerns**

Some of the information obtained in the course of conducting the interviews in this study revealed illegal and unethical practices on the part of some school districts, which presented an ethical dilemma for me. I found that in honoring the contract assuring that the identity of interview sites and interview subjects would remain confidential, my professional responsibilities as a state employee charged with ensuring that federal policies are carried out by school districts, as well as my personal responsibilities as a public citizen, were compromised. Knowing that some schools were engaging in practices that were not only illegal but, in many cases, against the best interests of children, without being able to act upon this information was difficult for me.

However, I also knew that had I not been willing or able to ensure the confidentiality of individuals and school districts, it would not have been possible for me to obtaining valid data from the interviews with school district personnel. As such, the decision to ensure the confidentiality of subjects participating in this research represents an example of the types of trade-offs that are sometimes necessary in conducting social science research.
CHAPTER VIII

SYSTEM CONSTRAINTS: BARRIERS TO THE
THE PARTICIPATION AND MAINSTREAMING OF
STUDENTS WITH DISABILITIES IN VOCATIONAL EDUCATION

This chapter presents the results of an analysis of the interview data relative to determining the extent to which factors associated with "system constraints" influence the rate at which students with disabilities participate in vocational education, and the rates at which these students are mainstreamed. System constraints refers to the organizational, attitudinal, economic, and philosophical factors that operate within the school and the community within which the school is located, that influence both the enrollment of students with disabilities in vocational education, and decisions made with regard to whether these students receive their vocational education in a mainstreamed or separate setting.

The data upon which this analysis is based resulted from 24 face-to-face interviews conducted with school personnel at six school districts in New Hampshire. The interviews were designed to elicit information with regard to a series of organizational, attitudinal, economic, and philosophical factors (referred to here as system constraints) believed to affect the rates at which students with disabilities participate in vocational education and the rates at which they are mainstreamed. The presentation and discussion of the analysis of data is provided in terms of the similarities and differences among and between the six school districts included in the interview portion of this study relative to factors associated with system constraints and the participation and mainstreaming rates of students with disabilities in vocational education.

Three categories of school districts emerged as a result of an analysis of factors associated with system constraints found at each of the interview sites relative to the
enrollment and mainstreaming of students with disabilities in vocational education. These categories are: (1) schools with high rates of participation and mainstreaming of students with disabilities in vocational education, (2) schools with low participation rates of students with disabilities, but high rates of mainstreaming, and (3) low participation rate of students with disabilities in vocational education and average rates of mainstreaming.

The first section of this chapter provides a discussion and analysis of the similarities and differences among school districts within each of the three categories relative to the effect of factors associated with each of the four categories of system constraints on the participation and mainstreaming of students with disabilities. The second section of this chapter provides a discussion and analysis of similarities and differences between these three categories of school districts relative to the effects of system constraints on the participation and mainstreaming of students with disabilities, and the third section of this chapter provides a summary discussion and analysis of the research findings as they relate to the overall socio-political context of the school relative to serving students with disabilities in vocational education.

A discussion of how these findings relate to issues concerning the use of STEP programs in New Hampshire in serving the vocational education needs of students with disabilities in the least restrictive environment, and the extent to which the institutional processes and procedures whereby students with disabilities are placed in vocational education reflect the social reproduction of class and the social construction of students with disabilities as deviants is presented in the final chapter of this study.

Similarities and Differences Between School Districts with High Rates of Participation and Mainstreaming of Students with Disabilities in Vocational Education

This section of chapter eight provides a discussion and analysis of the similarities and differences in factors associated with system constraints between school districts with high
rates of participation and mainstreaming of students with disabilities in vocational education for the school districts included in the interview portion of this study. Three of the six school districts at which interviews were conducted were found to exhibit these enrollment characteristics. In addition, these three school districts shared a number of similarities associated with organizational and cultural factors believed to facilitate both the enrollment of students with disabilities in vocational education, and the placement of these students in a mainstreamed setting. A discussion of the similarities and differences between these three sites proceeds with a discussion of the participation and mainstreaming rates of students in 1992, followed by a discussion of the similarities and differences between these districts relative to the organizational, attitudinal, economic, and philosophical factors found to exist at each of these three sites.

Enrollment and Mainstreaming Rates of Students with Disabilities

The school districts included in this category are sites C, D, and E. Of these three school districts, both sites C and D offered STEP as a separate vocational program for students with disabilities. Site E did not offer STEP. Therefore, all students with disabilities enrolled in vocational education are served in a mainstreamed setting. In 1992, the average participation rate of students with disabilities in vocational education in New Hampshire was 27.4% and the rate at which these students were mainstreamed was 64.5%. The participation and mainstreaming rates of students with disabilities at these three institutions were the only ones included in the interview portion of the study that were above the statewide average.

In addition to sharing the characteristics of a high rate of participation in vocational education among students with disabilities and the rates at which these students are mainstreamed, these districts also shared many similarities with regard to organizational, attitudinal, economic, and philosophical factors previously identified as facilitating the
mainstreaming of students with disabilities.

Organizational Factors

Organizational factors affecting decisions to place students with disabilities in a separate or mainstreamed setting were identified in chapter seven as falling into three categories -- structural, process, and/or atmosphere. Among the *structural* organizational factors shared by these school districts previously associated with high rates of participation and mainstreaming of students with disabilities are:

1. policies and procedures for determining a student’s placement in vocational education;
2. administrative structures of authority and responsibility with regard to the provision of special education and vocational education services for students with disabilities; and
3. the availability of alternative vocational and job training programs within the district which are designed to serve the school-to-work transition needs of students with disabilities.

While none of the three sites had formal written policies or procedures for determining a student’s placement (other than references to the existence of an individualized educational plan (IEP) team which is charged with meeting the LRE mandate of P.L.94-142), all three sites conducted and utilized more than one form or procedure of vocational assessment, and involved educational personnel from both vocational and special education in the IEP development process. Vocational assessments at these three sites included the use of standardized assessment instruments, as well as more "authentic" assessment practices which included the use of vocational career exploration courses where students are observed and assessed with regard to their interests and skill levels in these courses. Multiple types of information were used by the IEP team in determining the student’s interest and program placement.

In addition, these three sites had clearly delineated administrative structures of authority and responsibility with regard to the provision of special education and vocational
education services for students with disabilities that included a close working relationship among key players within the institution. These key players typically included the building principal, the vocational director, the director of special education, and in the case of site E, the director of guidance services. While not all sites included a close working relationship with the building principal, all three sites exhibited a close working relationship between the vocational administration (and staff) and the special education administration (and staff). That is, staff within these departments were in regular and daily contact with one another in negotiating and providing service delivery to students with disabilities. These districts appeared to lack the types of departmental boundaries that were found to exist at school districts in the other two categories.

Finally, these three school districts were the only ones included in the interview portion of this study that provided a wide range of alternative district supported programs aimed at providing vocational and job training programs for students with disabilities. These alternative programs included summer job-training, basic skills training, and work-site based programs. Work-site based programs were provided primarily to students with more severe developmental disabilities. In addition, sites C and D offered alternative high school programs which, according to the subjects interviewed, served a significant portion of students with emotional disabilities.

One of the primary structural differences found among these three school districts was the degree to which the structure and flexibility of vocational program curricula determined a student’s placement. At site E, all students with disabilities received their vocational education in a mainstreamed setting. At this site, both the program’s curriculum and instruction were modified to accommodate the needs of individual students. Site C provided little or no curriculum or instructional modification in their regular vocational programs. At
this site, students were not mainstreamed until it was determined that the student had reached a minimum level of basic skills proficiency to be mainstreamed without needing additional support or curriculum modification. Site D, on the other hand, offered four levels of vocational programming for students with disabilities. These four levels were:

1. a completely separate (STEP) vocational program setting, with support and modifications provided;
2. a split program of STEP wherein half of the program was delivered in a separate program and half of the program (typically the hands-on portion of the program) was provided in a regular vocational program setting, with support and modification;
3. a vocational program that was provided to the student in a mainstreamed setting with some support and modification; and
4. a regular vocational program setting, without support but perhaps with some modification.

Students with disabilities entered at any level with the expectation that they would progress toward a fully mainstreamed setting. All students were reported as enrolled in a STEP program if they were in any of the first three instructional program levels. That is, a student was only reported as a non-STEP student if they did not need support to participate in the program. The level at which a student entered and exited was determined solely upon the basis of the vocational program competencies the student had attained and the level of support needed in advancing to the next level. Students who the institution had determined to be so severely disabled as to never be able to learn a significant portion of the competencies identified for any one of the vocational programs available participated in a work-site or community based program.

These differences in vocational program structures are important ones. For site E, there were no barriers to the mainstreaming of students with disabilities that were created by the structure of the curriculum. This was due to the ability and willingness of the institution

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14 The term "support" used here refers to the assistance that was provided to students on the part of a special educator, or aide.
to make the program modifications to allow for the participation of all students with
disabilities in a mainstreamed setting. For site C, the fact that the institution was not able or
willing to provide modifications to the structure or content of the vocational program operated
as barrier to the mainstreaming of students with disabilities who could not participate
successfully in a program that was designed and structured at a level beyond their immediate
capability. Site D, on the other hand, provided some flexibility with regard to the structure
and content of the program's curriculum for students with disabilities in facilitating the
eventual mainstreaming of students with disabilities. Placement decisions were driven both by
the structure and content of the competencies taught in the program, as well as the
modifications and support that were needed to support the student in the least restrictive
vocational environment. The goal was always the eventual mainstreaming of that student.

These three school districts also shared several similarities with regard to factors
associated with organizational policies and practices that facilitated the mainstreaming of
students with disabilities. Among the factors found at these three school districts included:

1. an institutional consensus with regard to what constituted the least restrictive
environment for students with disabilities;
2. the participation of key service providers, including educators, in the
development and implementation of a student's IEP;
3. consensus with regard to the goals and objectives of the student's program;
4. collaboration, communication, and the sharing of resources in providing
services and instruction to students with disabilities in vocational education; and
5. an institutional atmosphere characterized by support and encouragement on the
part of the administration and a general lack of political or personality conflicts
that could impede cooperation within the organization.

While there were differences between the three districts with regard to what
constituted the least restrictive environment, there did appear to be institutional consensus
within each of the institutions in this regard. For site E, the least restrictive environment for
students was a mainstreamed setting, regardless of the structure and content the vocational
program's curriculum or the nature or degree of the student's disability. For site C, the least
restrictive environment is one in which the student can successfully participate without the modification of a program’s curriculum. For site D, the least restrictive environment was defined as that environment within which the student could succeed (with or without support and/or modification as needed), within the boundaries in which the curriculum and instruction could be modified by the institution. That is, while support and some adjustments could be made in providing a mainstreamed setting, the student had to function at a level at which they could successfully complete a portion of the program’s curriculum.

All three sites included the involvement of key service providers in the development and implementation of the IEP process. However, none of the three schools consistently included the involvement of vocational teachers in the development of every student’s IEP. While two of the sites included the student’s guidance counselor as a member of the student’s IEP team, the participation of guidance counselors appeared to be spotty and relatively passive despite the fact that at all of these sites’ guidance counselors were assigned guidance responsibilities for students with disabilities. Guidance counselors appeared to have less influence, power, or control over decisions made with regard to the enrollment and placement of students with disabilities. All of the guidance counselors in these districts implied that they deferred to members of the IEP team in decisions regarding course placement.

Despite the inconsistent involvement of vocational teachers in the development of the student’s IEP at these sites, vocational assessment personnel and special educators were both highly involved in ensuring that vocational teachers were familiar with the content of a student’s IEP, and provided technical assistance and support in developing with teachers the curriculum, instruction, and equipment modification that may have been necessary in implementing the student’s IEP. In addition, these sites each exhibited a relatively high degree of collaboration, communication, and the sharing of resources in providing services
and instruction to students with disabilities in vocational education. There was very little
evidence of departmental territorialism, as staff evinced a common commitment to a common
set of goals and objectives in serving the total educational needs of students with disabilities.
These goals and objectives included not only the learning of job related skills, but strong basic
and more advanced academic and social skills as well. In addition, many of the departments
at these sites shared resources in providing teachers, aides and specialists, and access to staff
development activities.

The general institutional atmosphere at each of these sites appeared to be ones that
were characterized by support and encouragement on the part of the administration for serving
the needs of students with disabilities. In addition, there appeared to be a general lack of the
types of internal political and turf battles or personality conflicts that could otherwise present
barriers to the ability of an institution to achieve effective programming and services for
students.

The organizational factors found to be present within these school districts were
among several of the factors previously identified as ones that facilitate the mainstreaming of
students with disabilities. Many of the factors identified as organizational are the structural
manifestation of factors contained within the remaining categories of system constraints:
attitudinal, economic, and philosophical. Not surprisingly, these three districts with high rates
of participation and mainstreaming of students with disabilities in vocational education share
in common many of the same attitudinal, economic, and philosophical characteristics.

Attitudinal Factors

Several similarities and differences existed between sites C, D, and E relative to
attitudinal factors associated with the enrollment and mainstreaming of students with
disabilities in vocational education at each of these sites. With regard to the extent to which
placement decisions were based upon attitudes regarding the perceived limitations of students with disabilities on the part of school personnel, sites C and D were found to have similar attitudes that differed from those found at site E. A commitment to the practice of encouraging all students with disabilities to enroll in vocational education, and the fact that all students were served in a mainstreamed setting, indicates an absence of attitudinal barriers to access and mainstreaming not found at sites C and D.

Several of the attitudes held by school personnel at sites C and D indicated that the perceived limitations of some students with disabilities affect enrollment and placement decisions on the part of school staff. However, these attitudes differed between the two sites. At site D, there was an attitude that students whose disabilities were so severe that they could not attain any of the competencies contained within the programs curriculum should not be enrolled in vocational education programs, including STEP. This reflects an attitude on the part of the school that there are some students whose limitations are such that the institution cannot, and perhaps should not, accommodate in a high school setting. However, site D also acknowledged that the school should make every effort to provide for the modification of curriculum, instruction, and settings necessary to assist the students toward functioning in a mainstreamed setting.

In this sense, site D can be seen as being both curriculum- and student-centered. That is, while STEP programs were designed around the needs of each individual student, the enrollment of a student in each level of vocational programming available depended upon the boundaries set by the institution with regard to the flexibility of the program's curriculum. It is, however, important to note that for every student who was enrolled in a vocational program, a mainstreamed setting was identified as an end goal. According to one of the subjects interviewed, this goal was accomplished for every student who chose to remain in the
program.

Site C differed significantly from site D in this regard. Mainstreaming was not a goal that was identified for all students with disabilities enrolled in vocational education at this institution. It was the attitude of more than one subject interviewed at this site that, due to the limitations of some students, not all students can, or should be, mainstreamed. This attitude was expressed on the part of the director of special education in terms of what was best for the student relative to the student’s attainment of their individualized program goals.

One of the things about inclusion that people fail to understand is that kids need to be taught to their own potential. You place kids in a program, in an area, in a situation where they can receive instruction to their full potential. If that’s in [an] auto [program] with 15 other kids and an aide - great, or if that’s working on the car in a room next door with an aide. If that’s where the kid is going to learn the most, that is where that kid should be. The whole special ed system was intended to create a program for a kid and we have done that. Now they are saying that if this kid isn’t [mainstreamed] every waking minute of the day that it’s wrong -- well it isn’t. These inclusion folks would have you including these kids in chemistry. Well, maybe they can hold the bunsen burner, or something like that, but the kid has ended up wasting five hours a week in that class because he still doesn’t know chemistry and he hasn’t learned socialization because they don’t let them talk or socialize in class.

Clearly, the attitude that was held on the part of the special education director at this site reflects an attitude that some students possess limitations that prevent them from being mainstreamed. However, for this person, this attitude was couched within the context of attending to the educational interests of the student. It should also be noted, however, that it was at this site that students were not placed in a mainstreamed setting unless it has been determined that the student had the ability to succeed in a mainstreamed setting without providing additional support in the form of an aide or special educator, thus reinforcing the attitude found at this site that it is the limitation of the student, as opposed to the institution, that prevents the mainstreaming of some students.

An analysis of the extent to which placement decisions were affected by a perceived
The willingness or ability of vocational teachers to integrate students with disabilities in their classroom at these three sites revealed similarities between sites D and E which were different than that found at site C. Sites D and E both indicated a willingness and receptivity on the part of vocational educators to accepting students with disabilities in their mainstream programs. This attitude appeared to be the result of two primary factors: (1) the provision of technical assistance and support for teachers in the mainstreaming of students with disabilities, and (2) the education and training of teachers relative to serving students with special needs.

Interviews conducted at site C, on the other hand, revealed evidence that there was resistance on the part of some teachers to accepting students with disabilities in their programs, as evidenced by the director of special education in response to a question in this regard.

"Resist may be a little harsh. Concerned that they will infiltrate their course? Maybe one or two."

When asked to clarify what he meant by "infiltrate," the director said that what he really meant was that the "teachers have some pace problems" in that they worry about whether the student will be able to "keep up" with the course work, and that they are concerned about whether "they could meet the kid's needs." This resistance on the part of teachers, according to the vocational assessment person at this district, depended on the individual teacher. She indicated, however, that "now that the numbers are down in voc. ed., they are more eager than they were before." According to this educator, resistance among teachers was decreasing as teachers were becoming better informed about the student's interest and abilities prior to the student enrolling in the program and relied more heavily upon consultations with special educators. It appeared as though the strongest factors associated with a lack of resistance on the part of vocational educators to the mainstreaming of students with disabilities included the provision of information, technical assistance, staff development, and support for teachers in the mainstreamed setting.
With regard to the extent to which placement decisions were influenced by the attitudes and beliefs of parents or members of the community relative to whether a mainstreamed or separate setting was selected as the most advantageous to children and/or the organization of the school, there was no evidence in the data to suggest that these were factors that affected enrollment or placement decisions. Subjects interviewed at these sites were similar in their statements that parents and the community appeared accepting of the placement practices of the school.

In summary, the primary attitudinal factors associated with the mainstreaming of students with disabilities centered around attitudes regarding how the perceived ability of the student interfaced with the structure of the vocational curriculum and the willingness or ability of the institution to accommodate the needs of students with disabilities in a mainstreamed setting. The attitudes of vocational teachers toward the mainstreaming of students with disabilities at sites E and D did not appear to be a barrier toward the mainstreaming of these students, while the attitudes toward the purpose of mainstreaming appeared to present a greater barrier to the mainstreaming of students with disabilities at site C than did resistance on the part of vocational teachers. The provision of technical assistance and support for mainstreaming appeared to be closely related to a lack of resistance to mainstreaming among vocational teachers, while there was little evidence that attitudes held on the part of parents or community members influenced placement decisions.

**Economic Factors**

Findings related to the effects of economic factors on the mainstreaming of students with disabilities in vocational education were somewhat inconclusive. While, as indicated above, there appeared to be a strong relationship between the provision of staff and various support services and activities and the mainstreaming of students with disabilities in vocational
education in these districts, there were significant differences found in the expenditure of funds to support these activities between the three sites. For instance, both the per student expenditure and per student expenditure for students with disabilities at sites D and E in 1992 (the two sites where mainstreaming rates were the highest) were below statewide averages, with the per student expenditure for students with disabilities at these sites close to half that of the statewide average. These same categories of expenditures on the part of site C, on the other hand, were above statewide averages, with per student expenditure for students with disabilities at this site over twice that of the statewide average. On the surface, it would appear as though higher expenditures may be negatively associated with the mainstreaming of students with disabilities. However, this observation was made with a great deal of caution in spite of the support this observation offers for previous research findings relative to the economic advantages of mainstreaming as being less costly than that of serving students with disabilities in separate classes.

The reasons for exercising caution in drawing conclusions with regard to economic factors are based partially upon the interview data. First, the student expenditure data cited here do not reflect expenditures for services provided through the use of federal vocational funds, which are not reported to the state Information Services Bureau. Interview data obtained at all three of these sites revealed that federal vocational funds were used extensively in providing the types of services associated with the mainstreaming of students with disabilities in vocational education, including those for special education services, aides, and staff development. Therefore, the levels of funding for serving students with disabilities that were used in this research do not reflect actual expenditures for services provided to students with disabilities in vocational education. Given the fact that these school districts served large portions of students with disabilities, and provided them with additional support and services
that required economic support, the positive relationship found between high rates of mainstreaming and low expenditures for special education should be interpreted with caution.

In addition, the expenditure data used in this study do not necessarily reflect expenditures for staff development, activities, or services that may have been provided as a result of grants or cooperative agreements between the school district and other agencies. Therefore, the only conclusion that could be safely drawn from the data with regard to the effects of economic factors on the mainstreaming of students with disabilities at these districts was that economic factors did not appear to create barriers to the mainstreaming of students with disabilities in these three districts.

**Philosophical Factors**

Among the philosophical similarities and differences found between these three school districts relative to philosophical factors that affected the mainstreaming of students with disabilities are: (1) a commitment to the philosophy and goals of mainstreaming, (2) the notion that students must somehow earn the right to be mainstreamed, and (3) the purpose and goals of vocational education in promoting the school-to-work transition for students with disabilities.

Site E was the only site among the three that expressed a philosophical commitment to serving all students with disability in a mainstreamed setting, and the only site at which subjects interviewed made reference to a commitment on the part of the school district to the philosophy of "inclusion." For sites C and D, there was evidence to suggest that, while there was support among educators and administrators for the philosophy and goals of mainstreaming, a mainstreamed setting did not necessarily represent the least restrictive environment for all students at all times. For these two sites, the least restrictive environment was that which accommodated the needs of the student relative to the student's educational
plan and the setting that would best provide for the acquisition of the knowledge and skills outlined in the objectives contained within in the student's IEP.

Site E acted in ways to conform to the needs of the student in a mainstreamed setting, while at sites C and D, the student had to conform to the structure and needs of the institution in order to access a mainstreamed setting. At site D, the notion that curriculum and setting was something that a student earned was evinced more than once. With regard to the placement of a student in STEP, each level was determined by the student's IEP team relative to student's ability (as assessed by the team) to attain a portion of the knowledge and skill competencies that were identified for the vocational program and the level of support the student needed to attain those competencies.

We develop a student's IEP from an established set of competencies which equates to the curriculum. We don't establish an IEP by inventing new competencies that are not part of the program.

This is true with regard to course placement in non-vocational programs as well,

[Course placement] is very much based on prerequisites. Kids need to earn what they want to take and there is a process for moving up. We don't have a tracking system, we have ability levels. A student has to get certain grades in their previous classes in order to move up into the next level.

At site C, the placement of students with disabilities in a mainstreamed vocational program required that the student demonstrate his or her ability to succeed in that setting without support. This philosophy was evidenced by the fact that the only students with disabilities placed in a mainstreamed setting are those whom the institution had determined required no additional support in order to succeed in a regular program.

All three of these school districts engaged in some form of ability grouping or course leveling courses offered at the high school. The reasons given for this practice centered around the notion that students should be placed in educational environments that are geared toward their academic ability. The attitude and philosophy underlying these practices center
upon the notion that different students need different exposure to different educational content and environments on the basis of their intellectual ability -- as ascertained by the student's past performance in other courses.

One of the philosophical similarities found between these three school districts was the belief in the value of vocational education in promoting better school-to-work transitions for students with disabilities. This was reflected in the encouragement on the part of all three school districts that students with disabilities participate in some form of vocational education exploration, if not a two-year vocational program.

The value (or lack thereof) of mainstreaming students in vocational education appeared central to these goals at sites D and E, while at site C mainstreaming was not seen as central to this transition. According to the director of special education at site C, mainstreaming was not possible or necessary for those students "whose outlook is to be a dishwasher or a janitor." At site D, while students with disabilities so severe (according to the school district) that it was determined that they could not participate in even a STEP program, according to one of the subjects interviewed, these students "should be mainstreamed as quickly as possible into a school-to-work transition program [in the community]."

At site E, the purpose and goal of the school's entire vocational and academic programs were explained in terms of facilitating a successful post-school transition for all students, regardless of whether or not the student has a disability. This philosophy was evident in speaking with all of the subjects interviewed at this site. For instance, when asked what the role of guidance services was at this school, the guidance counselor interviewed responded that their role was to help students "prepare for life after high school." The notion that the mainstreaming of students was an important aspect of assisting students with this
transition was evidenced by the responses on the part of the special educator and vocational assessment person which focused on the value of helping students develop the social and emotional coping skills individuals need to succeed in a work-place environment. Reference was also made on the part of these individuals to the skills and attitudes that were developed on the part of non-disabled students with regard to a willingness to provide support and assistance to students with special needs, and in communicating to those students whose disabilities included behavior problems what was acceptable and unacceptable behavior.

In summary, the factors associated with system constraints that facilitated the mainstreaming of students with disabilities were largely found to be present among the three school districts with the highest rates of participation and mainstreaming of students with disabilities in vocational education that were included in the interview portion of this study. The primary factors identified above serve to validate previous research findings. These include the organizational factors of: (1) structured policies and procedures for determining a student’s placement; clearly delineated structures of authority and responsibility with regard to the provision of services for students with disabilities; (2) a level of institutional consensus with regard to what constitutes the least restrictive environment; (3) the participation of key service providers in the development and implementation of a student’s IEP; (4) institutional consensus with regard to the goals and objectives of the student’s program; (5) collaboration, communication, and the sharing of resources in providing services and instruction to students with disabilities in vocational education; and (6) an organizational atmosphere that is characterized by support and encouragement on the part of the administration, as well as a general lack of political or personality conflicts within the organization.

The primary attitudinal factor identified as presenting a barrier to the full and total mainstreaming of all students with disabilities in vocational education was the notion that the
limitations of some students with disabilities prohibited them from being allowed to participate in a mainstreamed setting due to the structure or content of the program's curriculum. Negative attitudes on the part of vocational teachers toward students with disabilities and the ability of teachers to meet the needs of these students in a mainstreamed setting did not appear to be as significant a factor as that of the structure of practices noted above. There was no evidence that the attitude of parents or members of the community were a factor that affected placement decisions made at these districts.

With regard to economic factors, there was some evidence to suggest that there may exist a negative relationship between high expenditures for services associated with the provision of special education and the rate at which students with disabilities were mainstreamed in vocational education. This relationship, however, was viewed with caution. This caution was issued in light of evidence that there appears to be a strong positive relationship between the mainstreaming of students with disabilities in vocational education and the provision of support services, staff development, and technical assistance on the part of the school district, all of which indicate what could be considered to be a significant commitment of resources. There is evidence to suggest that a large portion of these resources, however, may come from federal vocational funds which were not included in the expenditure data included in this study.

The primary philosophical difference found between the three sites was the institutional conceptualization of what is meant by the "least restrictive environment." For the one school district practicing full inclusion, LRE was conceptualized and defined in terms of creating educational environments wherein all students with disabilities can be educated in a mainstreamed setting. The conceptualization and operationalization of the concept of LRE at the other two districts, on the other hand, was the product of an assessment of the following
three criteria or conditions: (1) the ability of the student, as assessed by the school district, (2) the range and/or variety of educational programs and environments available within the school district, and (3) the structure and content of the vocational program's curriculum.

Two ideal types of school districts emerged from these analyses -- schools that provided "unconditional" mainstreaming and those that provided "conditional" mainstreaming. Unconditional mainstreaming, or full inclusion, was found at site E, where the decision of whether or not to mainstream students with disabilities in vocational education was not based upon conditions related to an assessment of the student's ability or the ability of the program or institution to accommodate the needs of the child. All students were mainstreamed in all of their programs, with modifications and support provided to the teacher and/or student as needed. The second ideal type, as exemplified by the other two sites, also exhibited high rates of participation and mainstreaming of students in vocational education, and share similar organizational, attitudinal, economic (provision of resource) factors. However, sites C and D are differentiated from the district practicing full inclusion in that the mainstreaming practices at these two sites were conditional. That is, these school districts exhibited mainstreaming practices that provided for the mainstreaming of students with disabilities on the basis conditions characterized by an institutional assessment of the student's ability, the curriculum content of the vocational program, and the ability or willingness of the institution to make modifications and provide support for accommodating students with disabilities in a mainstreamed setting. These two ideal types stand in sharp contrast to the remaining school districts included in the interview portion of this study, as indicated in the next section.
Similarities and Differences Between School Districts with Low Rates of Participation and High Rates of Mainstreaming of Students with Disabilities in Vocational Education

This section provides a discussion and analysis of the similarities and differences in factors associated with system constraints between school districts with high rates of participation and mainstreaming of students with disabilities in vocational education for the school districts included in the interview portion of this study. While only one of the six school districts included in the interview portion of this study were found to exhibited these enrollment characteristics, interviews conducted at a second site revealed problems with the reporting of students as enrolled in STEP which resulted in the decision to include a second school district in this category. Similar to the findings discussed in the previous section of this chapter, these two school districts shared a number of similarities associated with organizational and cultural factors that created barriers to the participation of students with disabilities in vocational education.

Enrollment and Mainstreaming of Students with Disabilities in Vocational Education

The two districts identified as having low rates of participation among students with disabilities in vocational education and high rates at which students given access to vocational education were mainstreamed were sites A and F. Enrollment data submitted by Site A reflected a participation rate of 15% in 1992 (almost half that of the statewide average of 27.4%), and a mainstreaming rate of 8.3% (the lowest in the state). However, interviews conducted with subjects in this school district revealed that the STEP program offered in this district was not a vocational program, but was rather one in which students with moderate and severe disabilities are placed for the larger portion of their school day. The program provided no vocational training; therefore the students enrolled in this program were not enrolled in
vocational education.\textsuperscript{15} Eliminating the enrollment of these students resulted in a zero participation rate of students with disabilities in vocational education from the receiving school district, and a mainstreaming rate of 100\% for the one student identified as having a learning disability who was enrolled from one of the sending school districts.

Site F also did not offer a STEP program, and had never reported any vocational enrollments in a STEP program. The participation of students with disabilities from the receiving district in 1992 was 13.6\%, approximately half that of the statewide average. Of the 26 students with disabilities enrolled in vocational education from the receiving district, 24 were students with learning disabilities.

The similarities and differences of factors associated with the four categories of system constraints which may serve to explain the low participation rates of students with disabilities in vocational education in these districts are discussed below.

**Organizational Factors**

Among the structural organizational factors found to be present at both of these school districts were:

1. a lack of clear policies and procedures for determining what constitutes the least restrictive environment for students with disabilities;
2. a failure to provide vocational assessment services to students with disabilities;
3. a lack of understanding with regard to legislative mandates as they relate to serving students with disabilities;
4. a lack of clear lines of authority and responsibility within the organization relative to providing educational services to students with disabilities; and
5. the use of separate classrooms for educating students with disabilities.

Both of these sites were in violation of federal mandates as they relate to providing services to students with disabilities in the least restrictive environment. While both schools provided a continuum of placements for students with disabilities for their academic

\textsuperscript{15} For more details on why this is the case, please refer to the description of problems with the use of vocational enrollment data that appears in Appendix D.
programs, both of these districts served the majority of students with disabilities in separate classes, and pull-out programs.

With regard to the provision of vocational assessments, educators, and administrators at site F admitted to not meeting the mandate of the law by not providing vocational assessments. While site A claimed to conduct vocational assessments on students with disabilities, the high school principal in this school district conceded,

We don't have a vocational assessment program here, really. We have what I would call a phoney piece of paperwork that I think was created to meet the essence of the law that I don't think anyone does...

The lack of vocational assessments for determining a student’s interest and aptitudes for enrollment in a vocational program in these two districts reflects a general failure to regard vocational education for students with disabilities as a valuable option for these students. And the lack of alternative program options for these students implies a general lack of attention and concern on the part of these school districts to attend to the "school-to-work" transition requirements of the law as well. No reference was made at either district with regard to the requirements of the law, or the obligation of the school, in this regard.

The lack of participation of students with disabilities in regular vocational programs in this district was explained by the principal at site A as being the result of barriers imposed by the administration at the vocational center and their interpretation of new vocational program standards. However, the principal went on to point out that there was a lack of similar barriers to students wishing to access vocational education at a nearby vocational center.

[The other AVC in the region] seem to not have anything standing in the way of our kids entering their programs. [Our center] feels that they will lose funding if they don't accomplish all of the competencies that have been listed. If we put children in there that aren't going to be able to pass all of those standards then we are possibly going to lose that funding. So our biggest barrier comes in getting them into [our] programs if they have what is perceived as a lower ability or their chance for success is less than optimum. [The other AVC] welcomes them. Of course we are paying tuition [to send
students] over there. We have had to take the second choice of some of the students because the first choice was at [our center] and they were turned down.

While the federal vocational legislation does require states to set standards for vocational programs, the failure to meet these standards could in no way result in a loss of funding. In fact, the new federal vocational legislation requires that priority of the use of funds allocated for program improvement be given to programs with the highest proportions of students with special needs.

The lack of understanding, or awareness, of federally mandated requirements in serving students with disabilities was also found among educators and administrators at site F. At this district, no educational objectives were included in a student’s IEP for courses or programs in which the student was enrolled in a mainstreamed setting, either academic or vocational. That is, the IEP for each student addressed the special needs of the student only for those classes that were separate classroom settings for students with disabilities. This implies that (1) either all students with disabilities in this district were served in a separate setting at some point during their day, or (2) they did not have an IEP.

In addition to a failure on the part of the organization to ensure several of the basic provisions mandated by both P.L.94-124 and the Carl D. Perkins Vocational and Applied Technology Act (under which both of these schools received funding), subjects interviewed at both of these school districts revealed organizational problems associated with unclear lines of administrative authority and responsibility. In both cases, these problems appeared to be created, or at least exacerbated, by the fact that the vocational directors in these districts worked directly under the district superintendent, as opposed to under, or with, the high school principal. In addition, the vocational administrators in both of these school districts indicated that they felt it was not the responsibility of the vocational center to provide support
services for students with disabilities enrolled in vocational education, and that this responsibility should be left to the special education department.

Factors associated with structural organizational barriers to the serving of students with disabilities in vocational education were further validated by factors associated with barriers to serving students with disabilities in the least restrictive environment. Factors found to be present in these school districts in these regard included:

1. a lack of organizational consensus with regard to criteria for identifying students with disabilities;
2. a lack of organizational consensus with regard to the purpose and goals of LRE;
3. organizational policies, procedures and behaviors that were characterized by a general lack of communication, cooperation, or coordination of services for students with disabilities; and
4. political antagonism and animosities among individuals and departments.

With regard to the identification of students with disabilities, these two sites exhibited significant differences in the rates at which students with disabilities were identified, the rates at which students were placed out-of-district, and the percentage of students with disabilities that received additional services that warrant mentioning.

First, the rate of out of district placement for site A in 1992 was 10.9%, slightly higher than the statewide average of 10%, while the rate of out-of-district placement at site F was 19.1%, almost twice that of the statewide average. Second, the percentage of students with disabilities that received additional services at site A in 1992 was 20% -- less than half that of the statewide average of 53% -- while the percentage of students that received additional services at site F the same year was 32.7%, also less than that of the statewide average.

The rate at which students were identified as having a disability in 1992 at site A was 11.2%, approximately two thirds that of the statewide average of 15.6%. The rate at which students were identified as having a disability at site F the same year was 18.8%,
approximately 20% higher than the statewide average. According to the vocational special
needs person at site A, at least 40% of the students she served who weren’t identified as
having a disability in this district would be identified as having a disability in other districts
within which she has worked.

All I know is that the number of coded students in [this district] is tiny. I’ve
seen children who can barely read and write who aren’t coded... [and for
those who are coded] many of the students don’t have advocates. Their
parents are uneducated and they don’t demand services. Where I [worked
before] parents demanded services. You’re dealing with a population of people
in this city some of whom can barely read or write, they don’t know their
rights.

At site F, the special educator in this district also expressed concern over the district’s
identification of students with disabilities.

We’re talking low I.Q.’s, environmentally deprived, language deficits, and
behavioral problems, you name it. These are not LD kids many of them,
these are just slow learner kids... they’re all coded LD, but the way I have
always understood the true definition of an LD student they’re supposed to be
of average or above average intelligence and have a process deficit.

No criteria existed at either of these school districts with regard to determining the
least restrictive environment for students with disabilities. At site A, these decisions were
made by the IEP team. When asked about the placement of students in the STEP program,
the special educator simply stated that they were placed there to receive "basic skills"
training. Despite the fact that this person had placed students in this program as part of their
IEP, she was unable to describe the content of the curricula. With regard to site F, the
special educator in charge of separate programs for students with disabilities described the
placement process in her classes this way,

I am not sure that there is any policy other than, of course, they all have the
right to the least restrictive environment... Most often the kids that I have on
my case list and the kids that I service in my room get yanked out [of other
classes] for a variety of reasons whether it’s their behavior or other
limitations, or the teacher not able or willing to deal with them anymore. For
the most part there is no written policy other than the federal law that says
they have got the right to be in there... I get kids who should be in the mainstream whether a C level class or something else. It's a crap shoot a lot of the time.

Despite the lack of criteria for determining a student's placement in these districts, the reliance upon separate programs to serve these students was evident. Organizational policies, procedures, and behaviors in these two districts were characterized by a general lack of communication, cooperation, or coordination of services for students with disabilities reflecting departmental territorialism and dis-association. The departments of vocational education, guidance, and special education each viewed one another as providing separate services that were not connected to the types of services they were responsible for providing the same students.

Another primary factor present at both these two districts was an organizational atmosphere characterized by political antagonism and departmental animosities. At site A, the high school and vocational administrations appeared to be at odds with one another with regard to the lines of authority, and the departments of special education and guidance expressed a comfortable distance from vocational education in general. Morale in this district was described as low, while the tension between teachers and the community was described as high.

At site F, the conflicts between the vocational director and the high school administration, guidance, and special education appeared to center around conflicting lines of administrative authority between the high school and vocational center, as well as the personality of the vocational director and assumptions and accusations with regard to his political "agenda." According to the principal,

You could write a whole dissertation on just the personality issues here....more than any other issue, besides [the] budget, that is exactly what I had to work with last year... When the new director entered the building he offended the better part of the established academic environment, the whole
professional staff, including his own teachers. I feel like I am caught in the middle. The fact that he sits at the right hand of the Superintendent has created more problems.... One way or another we have to learn to work together but outside this set of offices, he is clearly an outsider.

According to the guidance counselor,

I think a year ago the faculty felt very threatened because the vocational director here did not do his homework, he did not go in and talk to the teachers to bring them along. He sat up on high and told them and it really upset them....[Attitudes toward the vocational director are] not very positive. It hurts him having his office down at the Superintendent's office...because they see him as being part of the superintendent' office and not having a real investment in the high school or his own department. His department does not feel as though he is their department head. He lacks direction, he often does not know what is going on in his own department. And he's sexist to every female that works in this building, he is condescending to us, and he is condescending to the female students. He's his own worst enemy.

And, the special educator had this to say,

I think that guidance and special ed are fairly in tune now...but I am afraid to say I think it is because there is a feeling of somewhat animosity to this new tech center and what it's all about and the way it is being presented. [The new vocational director] really thinks that as far as the special education piece, that guidance and special ed are going to take care of it and I don't know how [they will]. If we are having as many difficulties as we have had already, what are we going to do in a brand new place where we have even more state of the art equipment and more [program] offerings? There is a real division between guidance, special ed, [the principal] and [the new vocational director] with this new tech center. I don't see any of the special kids in any of these tracks.

Operating within the organizations were a variety of attitudes and beliefs with regard to the abilities of students with disabilities, the purpose and goals of a least restrictive environment, and the ability of the institution to accommodate the needs of students with disabilities.

Attitudinal Factors

Embedded within institutional policies and procedures that affected the processing and treatment of students with disabilities were the attitudes and beliefs of educational practitioners with regard to not only students with disabilities, but what constitutes the least restrictive
environment for these students. For both of these school districts, the placement of students with disabilities in separate classrooms for a large portion of their education and the support for these placements on the part of the special educators interviewed for this study reflects an institutionalized attitude on the part of the school district that these students are perhaps best served in a separate setting.

With regard to site A, where students with disabilities were placed in a separate program called STEP, the vocational special needs person expressed the following:

It didn't take me long to realize that in [this district], the students who are coded and in STEP programs are severely disabled students for whom, in many cases, I don't believe vocational education is appropriate.

However, the resistance on the part of the institution toward enrolling students with disabilities in vocational education at this district was partially due to the attitude held by the previous director of vocational education with regard to students with disabilities. According to the vocational special needs person who worked under the previous vocational director,

When I came [here] the [vocational director] I was working for let me know in no uncertain terms that he didn't want "those" students -- he called them derogatory names -- in his vocational programs because if they were there, then other students wouldn't want to be in those programs... He called them "droolers" in front of the guidance counselors.

It is difficult to know the extent to which vocational teachers themselves hold negative attitudes toward students with disabilities or the enrollment of these students in their programs, due to the lack of a history of an enrollment of these students. At site F, while attitudes toward students with disabilities in vocational programs on the part of vocational teachers appeared to be more positive, some instructors were more receptive and willing to make curriculum and instructional modifications for students with disabilities than others.

But we don't see [resistance] as much with the voc teachers. The last couple of years has been a little better because I think the staff have been more open and they are getting more and more used to taking the kind of kid who is limited and they're more willing to ask us for help.
However, resistance on the part of the vocational administration to enrolling students with disabilities in vocational education in this district was apparent. When referring to why more high school students don't enroll in vocational education, the vocational director had this to say:

What is perpetuating it, in the minds of many, as far as the negative connotation of vocational education, and forgive me for saying this, is the numbers of special needs kids who are in voc ed. I think they belong there but at the same time people will look at them and say 'well gee maybe this is not a high quality program because look who is in it.' You don't see special needs kids in a college bound English class or a Physics class.

While the participation of students with disabilities in vocational education in this district is considered low at 13.1%, the proportion of the total vocational enrollment who are students with disabilities was almost 20%, the second highest among the six districts included in the interview portion of this study. This was in part due to the limited number of vocational programs offered in this district that constricts the overall participation of students in vocational education.

While the limited number of programs offered in vocational education may act as a barrier to some students with disabilities accessing vocational education, the attitude held on the part of special educators that students with disabilities need to be isolated and protected from the mainstream environment may also act as a barrier to more students with disabilities enrolling in vocational education. According to the special educator,

It makes more sense for them to be in this safe environment... it has always been that way and we have pretty much met with some success. [Students] are able to do what they need to do at their own level and they are functioning in this comfort zone and they are going to get a standard diploma because [the separate class for students with special needs] is assigned a [high school credit] course just like the other classes we have. They are here because of their ability and aptitude.

At site A, the special educator interviewed for this study indicated that separate, pull-out programs were used for most students with disabilities, but that many of them were
mainstreamed most of the day. She was, however, not able to tell me what the STEP program provided students with disabilities or why these students were placed in these programs for the majority, if not the entirety of their school day, other than that it was the decision of the IEP team.

The cultural climate and atmosphere that existed within these two school districts were ones wherein the education of students with disabilities was viewed as separate and distinct from that of non-disabled students. Not only were these institutions organized in ways that separate the provision of educational services for students of different abilities and aptitudes, the attitudes of educators with regard to this situation appeared to be resigned to a continuance of such practices as either necessary or passively pragmatic.

An analysis of the economic conditions of the schools, and communities within which these two schools reside, with regard to the possible effects of economic factors relative to the enrollment of students with disabilities at these sites may provide some insight as to the socio-political and economic conditions that support, or at least tolerate, the historical treatment of students with disabilities at these school districts.

**Economic Factors**

Sites A and F exhibited economic factors that were both similar and different with regard to the economic conditions of the school and the community within which these schools reside. While similar in size, Site A was the poorer of the two communities. With an average per capita income of $11,855 in 1989, the relative income wealth of the community was almost half that of site F which registered an average per capita income of $20,456. Contrary to what might have been expected, per student expenditures for both regular and special education at site A in 1992 were slightly less than twice the expenditures for the same services at site F the same year. This was particularly surprising in light of
significant differences between the two districts in both the percentage of students receiving additional services (20% and 32.7%, respectively) and the percentage of students with disabilities who were placed out-of-district (10.9% and 19.1%, respectively).

While site A is a poorer community, per student expenditures were above those of the statewide average, while at site F, the wealthier of the communities, the per student expenditure was below that of the statewide average. While per student expenditures for students with disabilities at both school districts were below the statewide average, they were the lowest at site F. However, despite these differences in levels of funding, the structure of the educational programming made available to students with disabilities on the part of these two schools did not appear to be significantly different, the primary difference being that of access to vocational education for some students with disabilities at site F that was not available to students at site A.

The community Site A, still reeling from the decline in manufacturing that occurred in the mid to late 1980s, was characterized as primarily comprised of families described as working poor or blue collar. The high costs of education had set the community at odds with the school.

People are mad at [the town] because [it] collapsed under them and that anger is aimed at everybody. People who used to make very good money and had very good positions don't any longer... Most of them were [in] machine tool and they were well paid. They are now working two or three jobs in the service industry making $5.00 per hour. [They're angry with] anyone who takes that money out of their pocket and because of the way in which we [fund education] with those very visible school district meetings, the schools become a critical component.

Two of the subjects interviewed at site F indicated that there was a reluctance on the part of the district to request additional funding for special education, but that most of the requests made to the school board entailed requests for out-of-district placements. The primary recipient of out-of-district placements in this district was an alternative high school.
located within the confines of the town which served primarily students with emotional and learning disabilities, which accounted for the high percentage of out-of-district placements in the district (according to the principal). In addition, the willingness on the part of the school district to use the facility can be seen as an indicator of a willingness on the part of educators and administrators to separate and exclude these types of students from the mainstreamed high school environment.

According to the subjects interviewed at site A, additional resources were needed for the hiring of aides and for staff development for teachers. Subjects interviewed at site F, on the other hand, indicated that while some additional resources would have been helpful in terms of providing more aides, the majority of subjects felt as though the level of funding provided for special education was relatively adequate, and were surprised to find that the per student expenditure for special education at their district was well below the statewide average. It is important to note, however, that the perception among staff in this district that there was strong support in the community and with the school board for funding for special education appeared to be based upon the fact that the previous special education director had been so successful in getting the school board to support a large number of out of district placements. (At 19.1%, the rate of out-of-district placements in this district in 1992 was almost twice that of the statewide average). As the vocational director in this district noted,

We are putting kids in out-of-district placements that we should be handling ourselves and it is costing us so much money to put them out there and it would cost us so little if we were to deal with them ourselves, but we don’t have the facility or staff.

The priority for the use of funds to serve students with disabilities in this district appears to have been placed on removing these students from the school community. It appears as though the economic barriers to serving more students with disabilities in vocational education are the result of the distribution of available economic resources, rather than a lack of
economic resources.

There was little evidence to suggest that economic barriers were among the more significant factors affecting the participation of students with disabilities in vocational education at these two sites. While there existed a general lack of the types of services found to be associated with high rates of participation and mainstreaming of students with disabilities, the failure to serve more students in a mainstreamed setting (vocational or otherwise) appeared to be the result of organizational, attitudinal, and philosophical factors rather than economic factors. Additional support for this finding was found in the fact that site E, which practiced full inclusion, had per student expenditures that were lower for both regular students and students with disabilities than either of these two sites.

**Philosophical Factors**

Both site A and F engaged in some form of educational tracking, course leveling, and/or ability grouping. The reasons given for this practice were (1) the need to challenge students at a level to which they could find success, (2) the need to protect students with disabilities from having negative experiences in a mainstreamed program, and (3) the need to distribute rewards for academic achievement on a basis that is fair to higher achieving students.

The primary values and beliefs that provided the basis of justification for educational tracking and ability grouping of students appeared to be that (a) individual students have different levels of intellectual ability, and (b) that the educational content and delivery should be geared toward students on the basis of their ability.

The assessment of individual ability at sites A and F were conducted, and course placement decided (by guidance counselors with the input of students and parents), primarily on the basis of student grades and teacher recommendations. This was true for students with
disabilities as well, although the student's IEP team exercised the greatest amount of authority when it came to student placement. In addition to this, some formal, standardized assessments were conducted at site F, which provided a basis for placing students.

At site F, when asked why more students with disabilities were not mainstreamed, the principal referred to the two primary perspectives that operated within his district in this regard:

From the teacher's perspective, the kids don't have the skills and shouldn't be in here. From my perspective and probably from special ed, the teacher didn't have the skills [to teach them]... [The teacher's] feeling is "I am not a special ed teacher." On the special ed teachers part, they don't want [students with disabilities] out into a regular ed environment for fear that they won't succeed. They are leery of letting go.

The perceived need to protect students with disabilities from both the neglect of negative attitudes of teachers in the mainstreamed setting, and the failure these students might experience if placed in a mainstreamed setting reflects a philosophical need to address the immediate socio-emotional needs of the child, not necessarily the educational needs of the child as they relate to exposure to mainstreamed curriculum content and experiences.

The notion that there is an institutional need to distribute educational rewards (in the form of course credit and grades) on a basis that is fair to higher achieving students was one of the reasons given for the practice of ability grouping at site F, and one that was implied at site A. While this institutional attitude and behavior was cited by the special educator as one that creates a barrier to the mainstreaming of students with disabilities, it is also one that she found to be philosophically unjustifiable.

What we hear most often from the teachers who are really used to dealing with the upper level kids is [that] it's not fair to the other kids and that it brings the scores of their SATs down, and these other kids have worked hard and these kids are that much smarter and these kids [with disabilities] can't even do blah, blah, blah, and they are getting the same diploma. So there is that whole issue of fairness, which is really a crock because I think fairness is making sure everyone gets what they need.
One factor found to be lacking at both of these districts was an understanding, awareness, or commitment to addressing the school-to-work transition needs of students with disabilities. This was absent not only in the lack of participation of students with disabilities in vocational education, but a limited awareness among special educators and guidance counselors at these districts with regard to not only the content, purpose, and goals of vocational programs offered at the AVC in their district, but a lack of understanding and awareness of the federal requirements on the part of schools in this regard. The philosophical goals of educating students with disabilities in these districts, therefore, did not appear to move beyond the boundaries of providing educational programming that would allow them to graduate. Graduate to what? is a question that many of these educators were unable to answer. While there was an awareness that the students being served in these separate classrooms were in all probability not going on to college after high school, questions regarding post-school opportunities for these students were not being addressed by these institutions.

The philosophical values and beliefs implied by the lack of attention or concern to the post school experiences these students would face suggest that the purpose and goals of educating students with disabilities in these districts was narrowly confined to protecting the students with disabilities from failure by teaching them only the knowledge and skills that the institution feels they can learn relative to the basic content of a regular high school curriculum in order that they would graduate with a diploma or certificate of completion.

In summary, these data indicate that organizational and cultural barriers found to exist in the two school districts exhibiting low participation rates of students with disabilities serve to support previous research findings. A variety of organizational factors associated with the failure to adequately provide access to vocational education for students with disabilities in a
least restrictive environment were found to exist in these two districts. These factors include:
a lack of clear policies and procedures for determining what constitutes the least restrictive
environment for students with disabilities; a failure to provide vocational assessment services
to students with disabilities; a lack of understanding with regard to legislative mandates as
they relate to serving students with disabilities; and a lack of organizational consensus with
regard criteria for both identifying students with disabilities as well as criteria for determining
the least restrictive environment. Both of these districts used separate classrooms and
facilities, as well as pull-out programs for educating students with disabilities, both of which
reflect more traditional practices in serving students with disabilities.

A lack of clear lines of authority and responsibility, organizational policies, or
procedures within the organization relative to providing educational services to students with
disabilities appeared to contribute to the low rates at which students with disabilities were
served in vocational education. There was a general lack of communication, cooperation, or
coordination of services for students with disabilities at these districts, which appeared to be
exacerbated by a series of organizational conditions, including political antagonism and
animosities among individuals and departments, and negative attitudes held on the part of
vocational administrators toward serving students with disabilities in vocational education.

Attitudinal and philosophical barriers that existed within these districts included
traditional attitudes and beliefs regarding the inherent limitations of students with disabilities
and their need for protection, as well as the need to align students with curriculum structures
on the basis of the student’s ability. In addition, the separation of responsibilities on the basis
of the category into which the student fell reflects an attitudinal and philosophical approach of
organizational specializations wherein people assume responsibility for categories of students,
as opposed to assuming responsibility for all students.
Low Participation of Students with Disabilities and Average Rates of Mainstreaming in Vocational Education

Only one of the school districts (site B) included in the interview portion of this study exhibited low rates of participation of students with disabilities in vocational education, but an average rate of mainstreaming. In addition to the differences in the enrollment and placement of students with disabilities at this district that serve to place this district in a category of its own, this school district also exhibited several differences from school districts contained within the other two categories that serve to set it apart.

Enrollment and Mainstreaming of Students with Disabilities in Vocational Education

The participation rate of students with disabilities in vocational education in this district in 1992 was 18.2%, one of the lowest in the state. The mainstreaming rate of students with disabilities the same year was 65.4%, approximately the same as the statewide average of 64.5%. However, there are several problems with the data upon which these rates are based that make it difficult to know the actual rate at which students with disabilities are enrolled in vocational education, due to the lack of reliable data on the disability status of sending school students. The lack of reliable data on sending school students in this district takes on particular significance in light of the high proportion of students in vocational education who come from sending districts. In 1992, sending school students represented 72% of the total vocational enrollment at in this district -- which was over four times the statewide average of 16.7%. In 1992, of the 243 sending school students enrolled in vocational education at the center, only two of (less than one percent) these students were

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16 This district has reportedly had difficulty obtaining the SPEDIS numbers for students with disabilities from sending schools enrolled in vocational programs at the center. Without a SPEDIS number to identify the student as having a disability, the statewide data collection system defaults the student’s disability status to that of a non-disabled status on the enrollment record. Therefore, the participation rate of students with disabilities from sending schools reported by this district may be significantly higher than that which is indicated by the enrollment data used in this study.
reported to have a disability. However, interviews with school personnel in this district indicate that the actual percentage of students enrolled in vocational education from sending schools is closer to 50%. While problems associated with the enrollment data make it difficult to draw conclusions about the participation and mainstreaming of what may be the majority of students with disabilities served by vocational education in this district, there is ample interview data upon which to draw conclusions relative to the enrollment and placement of students with disabilities from the receiving district.

Several organizational and attitudinal factors were found to be present in this school district that could serve to explain the low rate at which students with disabilities from this district participate in vocational education. First, the high school staff and administration disassociated themselves from operation and administration of the vocational center. This disassociation was reflected in many ways, including the fact that the high school staff and administration identified their relationship to the vocational center as that of a "sending school," as opposed to the "receiving school." This disassociation was also found in the practices of school personnel who recommend particular programs and classroom settings for students with disabilities and arrange for services for these students. For instance, similar to what was also true of the relationship between that vocational center and other sending schools, there was no sharing of staff between the vocational center and the high school, the high school was responsible for conducting its own vocational assessments, for requesting an allotment of enrollment space for their students, and for making student placement recommendations.

An additional structural factor that appeared to contribute to the low participation of students with disabilities in vocational education in this district was the availability of alternative programs and services made available by a local non-profit agency that provides
job training and assistance with employment to persons with disabilities. The district also contracted with this agency to conduct vocational assessments on students with disabilities. The results of these assessments were used by the student’s IEP team in determining the student’s educational program, and the setting within which the program will be provided. Students with disabilities were typically not encouraged to enroll in vocational education programs that are offered at the center for reasons that will be discussed later. For those students who were enrolled in vocational programs, vocational educators are typically not involved in the IEP process, although they were invited and encouraged to attend.

Similar to other districts, this high school offered a variety of academic course levels. The placement of students in courses was based primarily upon past grades and the recommendations of teachers, although the student’s parents could veto course level placements. According to the guidance counselor, the parents’ demands were, in most cases, accommodated. Similar to site A, administrators and staff at this high school believed that the state required that mainstreamed vocational education programs be made accessible to 11th and 12th grade students only. One of the consequences of this belief was the placement of 9th and 10 grade students with disabilities in STEP programs, which are accessible to students beginning in the 9th grade. While the program goals and objectives of STEP were identified by staff as including the preparation of students for a mainstreamed vocational program, the staff that were interviewed indicated that many, if not most, students did not matriculate into a regular vocational program. There was little communication between staff at the vocational center and high school staff in the departments of guidance and special education, and the relationships appeared strained.

The primary barrier to serving more students with disabilities in vocational programs in this district appears to be the negative attitudes held on the part of high school staff toward
at least some vocational programs and teachers, as well as the administration of the vocational center. The perceptions and attitudes held by persons in positions of making enrollment and placement recommendations help serve to explain the low rates of participation of students in vocational education.

The vocational school, as far as the teachers and morale, has been known to be somewhat up and down. A lot of the people [teachers and administrator] have been there for a long time.... There are some programs that are popular to students and there are ones that we know could be a little bit better.

One of the persons interviewed for this study held the position of vocational special needs coordinator at the center before the position was eliminated (one year previous to the study).

[The] high school does not want to be affiliated with the vocational center... [because of] mismanagement. They're an embarrassment to education. They are very unprofessional. [The vocational center] has a very bad reputation....[The vocational teachers] approach students with a very negative attitude. They yell and swear at students to get things done. They leave their classrooms unattended. The staff is negative towards each other... They humiliate the students, and this is encouraged by the management....From working there I know that I don't want to place students there. If a student wants to go there I cannot stop them, but I don't recommend it.

Similarly, the special educator who was interviewed revealed that she too was reluctant to recommend vocational programs to her students.

Special ed kids who have been placed there have failed and they have had very poor experiences, and so guidance, regular teachers and special ed teachers are not inclined to refer them. There [were] not a lot of [teachers with] special ed background. We weren't dealing with anyone certified in special education. The teachers weren't prepared and they weren't willing to accept the students any earlier than their junior year. STEP was a catch-all... The barriers that I used to see are being recognized. The barrier last year was that I refused to place a student in STEP and watch them for four years get the same instruction and graduate with no integration [into] the community.

Among the concerns expressed by both the former vocational special needs person and the special educator with regard to enrolling students with disabilities in vocational education were the lack of attention paid by vocational instructors to the student's IEP and the inability, or unwillingness, of many of the vocational teachers to accommodate students with special
needs. The special educator seemed particularly concerned with the legal ramifications if a student's IEP objectives were not met and the risk that is run in "ending up in due process hearings." These concerns did not appear to hold true with STEP programs, however. All of the staff interviewed at this site supported the use of STEP as the least restrictive environment for most of the students who were placed there, referring to STEP as a "safer" environment for the student. However, the student's physical health and safety was rarely mentioned, but rather their need for individualized attention, development of basic skills, and self-esteem.

Most teams recommend a STEP program not so much for behavior [of the student] as for that extra support and help. They want the student to get that extra help and build their self-esteem... When there are different levels of learners in the vocational classes the higher functioning students will pick on the lower. The competitiveness is almost encouraged in vocational education.

According to this educator, one of the functions of STEP was to protect the student from what are perceived to be the potentially damaging effects of a mainstreamed vocational environment. In addition, both of the special educators interviewed indicated that they believed that they did not support the notion that all students are best served in a mainstreamed environment, vocational, or otherwise; and that students with severe disabilities were best served in a community based job site, as opposed to a school-based program. These two specific philosophical beliefs and attitudes can both be seen as barriers to the serving of a greater number of students with disabilities in a mainstreamed vocational setting.

The resistance to enrolling students with disabilities in vocational education did not appear to be the result of vocational instructors not wanting these students in their classes. In fact, according to the former vocational special needs person, vocational teachers wanted these students. The reasons for wanting these students, however, may have been economic.

[Vocational teachers] wanted handicapped students because they could fill the programs and they could get extra supports -- supports like aides, resource support, emotional support for the students. We had so many handicapped students [in vocational education] that this was the group that would fill their
classes…. There was an economic payoff with Perkins money. The money went more to the classes that had handicapped students.

Despite the recognition that support for students with disabilities were available for these students and their teachers, this person also suggested that one of the economic barriers that existed with regard to better serving students with disabilities in vocational education was the inappropriate, or unwise, use of funds for program improvement.

What I said to [the vocational director] two years ago was that - we are not going to buy anymore "stuff" with that Carl Perkins money. We're going to turn that money into services and people for kids because that's what we needed. When I saw all the computers and stuff there, I just wanted to choke him because it is not where the needs are. Kids need more assistance -- the computers did not help. We're not really hot on [the vocational director] because we want more services for kids than we want stuff.

According to the special educators interviewed, there had recently been efforts to provide staff development and training for vocational teachers relative to better serving students with disabilities. However, there was no indication given that these initiatives would result in changes to current placement practices within the district on the part of these two particular special educators.

In summary, a variety of organizational, attitudinal, and philosophical factors were found to be present in this district that presented barriers to accessing mainstreamed vocational programs by students with disabilities. The primary barrier appeared to be the negative attitudes held on the part of high school staff toward at least some of the programs and staff at the vocational center. These attitudes appeared to arise out of concern that mainstream vocational teachers lack the education, training, or expertise necessary to adequately address the needs of students with disabilities. These attitudes and beliefs appear to contribute to a greater reliance upon STEP programs. In addition, this district relies heavily upon the services provided by the non-profit agency located within the community, allowing a greater degree of independence from the services provided at the vocational center.
than that which is available to school districts in the surrounding towns.

The heavy reliance of sending school districts upon the vocational center can be explained, at least in part, by the lack of alternative programs available to serve students with special needs in the smaller towns and districts. According to the former vocational special needs coordinator, the lack of alternative programs often resulted in students with disabilities receiving inappropriate educational programming and placements.

Sending schools are desperate for placements. Small high schools are limited to what they can give a handicapped student, and sometimes I think they have no choice. I've seen teachers, parents and schools all try to reason with the management in the vocational school [to improve vocational programs and services] but nothing has changed. The sending schools have tried to get these programs to change and get this place to change. It's a Catch 22, they need a place for these students and so they still send them even though they reluctantly send them. Some sending schools would even put their students in STEP because all the mainstream classes were full and they needed a placement.

In this sense, the vocational center could well be viewed as a dumping ground for those students who are seen by their home school districts as difficult to serve. Again, with a lack of reliable enrollment data to investigate the participation and placement of students with disabilities in these programs, the actual participation and placement patterns of student populations served in vocational education at this center are difficult to ascertain.

Summary of Findings

An analysis of the data relative to the effects of system constraints on the rates at which students with disabilities were enrolled in vocational education and the rates at which these students were mainstemmed serve to largely validate previous research findings. Barriers associated with organizational, attitudinal, economic, and philosophical constraints were found in three of the six school districts exhibiting low participation rates of students with disabilities, while factors associated with facilitating the enrollment and mainstreaming of these students were found in the three school districts exhibiting these enrollment and
placement patterns. As such, the six school districts included in the interview portion of this study fall into two ideal types -- effective schools and practices, and ineffective schools and practices.

Broadly stated, "effective schools and practices" were schools in which (1) policies and procedures for the provision of programs and services to students with special needs were consistently implemented; (2) there was a relatively high level of organizational cohesiveness, characterized by cooperation, coordination, and collaboration among staff; and (3) an organizational culture that was characterized by a shared sense of common purpose and goals relative to providing a wide range of instructional and educational program opportunities to a wide range of students.

"Ineffective schools and practices," on the other hand, are schools that were characterized by (1) a lack of clear policies and procedures for providing services to students with disabilities in vocational education; (2) organizational chaos, political in-fighting, and departmental territorialism that was characterized by a lack of clear lines of authority and responsibility, and the lack of effective communications between staff at different levels within the organization; and (3) a lack of organizational consensus with regard to the purpose and goals of the institution relative to serving the needs of all students within the school.

Among the organizational factors characterizing effective schools and practices were those school districts with clear policies and procedures for determining a student’s placement in vocational education that also tended to have a relatively high degree of organizational consensus with regard to the purpose and goals of vocational education for these students. In each of the three school districts exhibiting high rates of participation and mainstreaming of students with disabilities in vocational education, the organizational structure, procedures, and atmosphere of the school promoted the integration of students with disabilities in a mainstream
environment. In addition to having policies and procedures for determining a student's placement, these schools provided a continuum of vocational curricula, classroom, and instructional environments coupled with instructional and placement practices that were directed toward placing students in the least restrictive environment.

Among the organizational barriers identified for those school districts with ineffective schools and practices were a lack of clear and consistent policies for determining the enrollment and placement of students with disabilities in vocational programs, the lack of a continuum of program placement options, a lack of organizational consensus with regard to the purpose of vocational programs in serving the needs of students with disabilities, and a lack of organizational cooperation or collaboration among educational service providers. In addition, evidence of organizational conflict, political antagonism, and/or departmental disassociation was also found at each of these three sites. These personal and political animosities produced organizational attitudes and behaviors that acted as barriers to cooperation, collaboration, and the sharing of resources among various departments and service providers.

Attitudes held by teachers, guidance counselors, and school administrators toward students with disabilities and the purpose and goals of educating students in the least restrictive environment were positive and the schools appeared to be organized around these principles. Teachers and staff in these schools appeared to work cooperatively in providing services to the students across departments. In addition, vocational programs and vocational teachers in two of the three schools were held in higher regard than those in school districts where the participation of students with disabilities in vocational education was not as high. For all three of these districts, the participation of high school students in general was also higher than that of the other districts.
The overall organizational atmosphere and culture in these three districts reflected well established organizational structures of authority that were supportive of teachers, staff, and programming. There did not appear to be the level of intra-department antagonisms or political territorialism that was found in the other three school districts where the participation of students with disabilities in vocational education was low.

An analysis of the effects of economic constraints on the participation of students with disabilities and the rates at which they are mainstreamed in vocational education were inconclusive. For instance, no relationship was found between expenditures for special education and the enrollment or placement of students with disabilities in vocational education. While there was some evidence to suggest that the provision of staff development activities for vocational teachers on the philosophy, strategies, and techniques of mainstreaming students with disabilities was positively related to higher rates of mainstreaming, no correlation was found between the provision of these activities and higher expenditures on the part of school districts. In fact, per handicapped student expenditures of two of the three districts with high rates of participation and mainstreaming were significantly below the statewide average, while the same expenditures for the third district were over twice that of the statewide average. The percentage of students receiving additional services for these three districts were at, or above, the statewide average, while the percentage of students receiving additional services in the three districts with low participation rates of students with disabilities were lower than the statewide average. However, it should also be noted that the use of school reported expenditures for special education as measure of economic investment or commitment to providing special education services is not necessarily a valid one due to differences in the reporting practices of school districts. For instance, it was noted by one subject that schools will report expenditures under their special education
budget as a way to protect programs and services that are not necessarily related to special education because administrators feel that the special education budget is one that is more easily defendable to tax payers and school board members in that special education services are federally mandated.

Three distinct philosophical approaches to the mainstreaming of students with disabilities emerged as a result of an analysis of the data. The first approach, that of the full mainstreaming of all students with disabilities, was found at one site, and the participation rate of these students was high. The philosophical approach in this school district was that a mainstreamed setting is considered to be the least restrictive environment for all students. The mainstreaming, or inclusion, of these students is accomplished through appropriate modifications to the curriculum, instruction, and environment. This philosophical approach reflects the notion that mainstreaming may require changes in institution arrangements and behaviors in order to meet the student’s needs.

The second philosophical approach was found to exist at one of the other three sites at which the participation and mainstreaming of students with disabilities was high. This approach could be described as one in which decisions to mainstream students proceeds from the notion that mainstreaming requires both the environment and the student to change. This school district offers a continuum of educational environments for students with disabilities through which the student progresses toward a mainstreamed setting. In this approach, support is provided to both the student and the teacher in moving the student toward functional independence in a mainstreamed setting.

The third philosophical approach that was found to operate in the remaining four school districts was one in which mainstreaming occurred only if and when the institution decided that the student could function in the program without direct support, thereby placing
the onus of change and accommodation upon the student. In one of the four districts in which this philosophy operated, a continuum of program environments and support were provided to students. It is only when the student had demonstrated evidence of their ability to function in a mainstreamed setting that the student was placed in a mainstream program. The primary difference between this school district and the remaining three districts operating with the same philosophy was the lack of a continuum of placement environments that were made available to students. In these remaining three districts, there existed only separate programs and mainstreamed programs, with no combination of program options in between. Students were placed in separate settings (in the case of school districts offering STEP) or mainstreamed programs on the basis of an assessment on the part of the institution that the student could function in the program without any modifications to the curricula or environment. This philosophy proceeds from the stance that it is the student who must accommodate the structural arrangements of the institution in order to be mainstreamed, as opposed to the institution accommodating the individual needs of the student.

All of the school districts included in the interview portion of this study engaged in some form of ability grouping for the academic portion of the student’s high school educational career. The underlying philosophical assumptions of this practice being that individual students have different intellectual capacities that require they be exposed to different academic content and levels of abstraction. In providing course "leveling" (ability grouping), schools feel that they can challenge students at a level that is appropriate to their ability. It was difficult to ascertain whether school personnel conceptualized individual ability as being the result of innate qualities of intelligence the individual possessed, or ability as being the result of individual effort or differential exposure to particular environments -- such as social class or poor educational experiences. Nonetheless, the notion that some students
require different curriculum in separate environments as a result of their abilities was a philosophical assumption underlying these practices.

In addition, however, it should also be noted that several of the subjects interviewed evinced an awareness that the school as an institution was structured in such a way that it was not capable of meeting the needs of all students. As one educator put it,

The curriculum, the makeup, the dynamic [of the classroom]... I think what we are seeing is that these students that do not have the severe disabilities who are square pegs trying to fit into these round holes and we are finding that we don't have a lot of options.... It could be their disability, it could be their background, it could be psychological - it could be multifaceted reasons that for whatever reason the structure of public education doesn't fit them. I am seeing more and more of those students and it is not a reflection of any lack in them. There are just folks that are of different learning styles. I am finding that there are not a lot of alternatives.

In summary, school districts that are characterized by clear goals and objectives in serving the needs of diverse populations and the provision of alternative programming that create bridges and links to mainstreamed programs can be seen as more effective institutions in terms of their ability and willingness to provide educational opportunities for all students. While perhaps still falling short of what may be considered ideal educational institutions, these schools stand in stark contrast to schools that lack a commitment to changing the structure, environment, and delivery of traditional secondary education in America in ways that address the educational needs of all students. The findings of this study support the notion that organizational and attitudinal issues related to institutional cooperation, collaboration, and the sharing of resources and a common sense of purpose, as well as philosophical and administrative support for the attainment of organizational goals play predominantly in the creation of effective educational structures that serve the vocational needs of students with disabilities.

The decision to place a student in a STEP program or a mainstreamed vocational
program lies primarily with the student's IEP team. Few schools make these decisions on the basis of a set of established criteria. In some cases, these decisions are made by IEP teams on the basis of extensive student assessment information relative to the student's skills, interests, and aptitudes, and the structure of the array of program options available within and outside the school. In these cases, vocational teachers and/or vocational assessment specialists often serve on the IEP team. However, personnel at some school districts indicated that consideration was often given to the extent to which they felt the teacher in the mainstreamed program would be able or willing to address the educational objectives outlined in the student's IEP. Still, in other cases, other than simply stating that placement decisions were left up to the student's IEP team, which took into consideration such things as the student's ability (which was often based upon performance in prior classes) and the level of curriculum content of courses and programs offered at the school, the subjects interviewed appeared either unable or unwilling to articulate the decision-making process in any greater detail. As a result, I was often unable to discern specifically how most placement decisions were made.

The failure of this study to better identify the placement process may well be due to the design of the research. Had I been more familiar with the content, structure, and process of designing IEPs, perhaps different probing questions would have been asked that would have elicited more detailed information. However, the level of vagueness and the amount of ambiguity offered by subjects when asked to describe how the least restrictive environment was determined may well reflect what Hargrove (1983) cites as one of the primary barriers to implementing the mandate of LRE -- that is, the lack of a clear definition of what is meant by "the least restrictive environment." In the absence of clear criteria for determining what constitutes the least restrictive environment, school districts and educators are left to construct their own operational definitions for what is meant by the legislative mandate. My research
findings indicate that there are significant variations in the rates at which students with disabilities are mainstreamed in vocational education from one school district to the next, and that these variations are largely the result of differences in factors associated the organization and culture of schools.

As Berman and McLaughlin (1975) observed, the key to the successful implementation of the requirements of P.L. 92-124 lies in the bureaucratic organization and culture of local school systems. In the case of determining the least restrictive environment for students, how LRE comes to be defined and implemented appears to depend on a subjective process that includes not only the assessment of a student’s ability to handle the program’s curricula, and in some cases an assessment of the teacher’s ability to effectively meet the student’s needs, but an evaluation on the part of educators and administrators of the options that they see as available to them. As such, it is often in terms of the existing organizational structure and the culture of schools that the parameters for serving students with disabilities come to be defined; thus providing the organizational and socio-political socio-economic context within which the legislative mandate that students with disabilities be served in the least restrictive environment come to be implemented by the schools.

The lack of alternatives to traditional educational environments available to students whose learning styles, interests, and aptitudes deviate from what is considered "normal" reflects not only an organizational, but a cultural inability or unwillingness on the part of educators and administrators in many educational institutions to conceive of alternative educational structures and practices that would address the needs of "minority learner" populations in inclusive environments. As a result, for students who do not respond in acceptable, or expected ways, to traditional curricula and forms of instruction, the institution creates marginalized environments within which these students come to be assigned, and
processed differently on the basis of subjective assumptions regarding their natural abilities and future aspirations.

The next chapter provides an analysis of the extent to which a study of the enrollment and placement of students with disabilities in vocational education provide support for the assertions that schools sort, separate, and process students on the basis of a student’s social class in ways that reproduce the existing social class structure of society, as well as an analysis of the extent to which the identification and placement of students with disabilities on the part of schools reflects a social construction of deviance, stigma, and minority group status for these students.
CHAPTER IX

SOCIAL REPRODUCTION, DEVIANCE, STIGMA, AND MINORITY GROUP STATUS AND THE PLACEMENT OF STUDENTS WITH DISABILITIES IN VOCATIONAL EDUCATION

The purpose of this chapter is to provide an analysis of the data relative to the extent to which the placement of students with disabilities in vocational education can be understood as the result of the social reproduction of social class and the social construction of deviance, stigma, and minority group status on the part of the school. The first section of this chapter provides an analysis and discussion of the extent to which the research data provide support for the theoretical assertion that schools serve to reinforce and reproduce existing social class status and relations; as well as the values, attitudes, and beliefs of the dominant culture. The second section of this chapter provides an analysis and discussion of the extent to which the identification and placement of students with disabilities in vocational education reflects and reinforces the social construction of students with disabilities as a deviant, stigmatized, and marginalized population within the school; and how these processes also serve to reflect and reinforce the dominant values, attitudes, and beliefs of the larger society.

Social Reproduction and Vocational Education

Social reproduction theory asserts that schools play a primary role in the reproduction of social class standing and social class relations from one generation to another such that individual students are afforded differential access to educational experiences, resources, and adult career opportunities on the basis of their social class origins in ways that serve to increase the chances that students will assume the same social class status and standing as their parents. The research findings of this study support these assumptions in the following
ways:

(1) the purpose of vocational education (traditionally) is to prepare students for entry level jobs in low status occupations;

(2) the social devaluation and stigma of vocational education results in a resistance on the part of middle- and upper-middle class parents to allow their child to enroll in vocational education;

(4) the placement of students in vocational education serves to reproduce, or re-align, a student’s social class standing within the school, as well as reaffirm the objective probability that they will not attain higher education, or occupational status and prestige;

(5) efforts on the part of vocational educators to raise the status of vocational education results in a resistance on the part of some vocational administrators to the enrollment of students with disabilities due to the stigma that is often attached to these students as a result of what is perceived to be their lack of intellectual ability and future occupational success; and

(6) the participation and placement of students in vocational education is affected by not only the organizational and cultural context of the individual school, but the socio-economic make-up of the community as well.

The data derived from observation and interviews conducted with school personnel at six New Hampshire school districts suggest that there continues to be a stigma attached to vocational education, and that this stigma can be seen as the result of attitudes and values toward educational achievement and occupational status that are class-based. The stigma attached to vocational education is largely the result of its purpose in preparing students for certain types of adult jobs. The types of jobs for which vocational education has traditionally been seen as preparing students are ones that (1) do not require a college education, (2) tend to be associated with entry level service occupations, or manual trades, and (3) tend to be low paying, low status occupations. As such, vocational education is stereotyped as being for students who lack the intellectual ability, or social and occupational aspiration to pursue higher education, and the professional occupational status high education provides.

In a society that values high academic achievement and professional occupational status, vocational education is not considered to be a valuable educational program option for
students who have the interest and "ability" to attain the additional (higher) education that will ensure them middle-, upper-middle, or upper-class status and standing as adults. That is, vocational education is seen as program of study for students who will not be continuing their education beyond high school -- such as students from lower socio-economic classes, and students with disabilities. These observations are reflected in the data.

As discussed in chapters six and eight, there is evidence to suggest that there exists a relationship between social class and the participation of students in vocational education in New Hampshire. For instance, students with disabilities in communities with greater per capita income were significantly less likely to be enrolled in vocational education than students with disabilities from less wealthy communities. Additional evidence of the social reproduction of class was found throughout the interview data in the form of references to the resistance on the part of middle- and upper-middle class parents to the enrollment of their child in vocational education. The following are among some of the responses offered by interview subjects relative to resistance on the part of some parents to enrolling their child in vocational education which suggest that this resistance is class based.

I think that (vocational education) is kind of stereotypical in many people's minds. We have a lot of parents and a lot of kids who think that voc is something for the 'rednecks' and they don't want to have anything to do with it... I think it is probably a long term situation where kids who typically were not very academically inclined but were very good with their hands were encouraged or elected to take voc courses [to] because they were typically hands-on type of courses. This goes back to the old days of the shop courses and the home ec courses.

Social stigma. I have heard this from parents. I've had kids that I have tried to suggest voc courses and their parents have said, 'absolutely not' because they will be with a different class of people. I think that it is more from parents than from kids. Some kids and parents are looking for the social status of going to a four year school.

We do get some encouragement every once in a while when we find some kids that are taking voc courses are not in the traditional class of people who would usually take voc ed....(like) the more academically oriented kid whose parents have professional backgrounds rather than blue collar backgrounds.
[Resistance to enrolling a student in vocational comes from] middle- to upper-middle-class parents who somehow have felt that vocational education is a step down from what their aspirations for their children are. We have had a lot of kids limping along in this college prep mode who at the end aren’t able to get into a four year college.

The stigma was that the folks that went the vocational route were not typically those who were going to be the intellectuals who were going to go on to college... Sometimes parents have certain thoughts in their minds that their kids are going to go on to college and them going a different route is just not in their mind as being okay.

The devaluation of vocational education on the part of middle- and upper-middle class parents is linked to assumptions regarding the "types" of students who traditionally enroll in vocational education to whom their child will be exposed, as well as assumptions regarding the lack of value of vocational education in providing educational experiences for their child whom they wish to go to college. While there is some status associated with obtaining a high school diploma, a greater amount of status that is conferred upon persons obtaining a college degree due to the greater economic security and occupational status obtaining a college degree often provides. The fact that some parents were more receptive to enrolling their child in vocational education once they know that it could provide their child access to college opportunities, provides additional evidence of the traditional stigma that has been associated with vocational education as a program that limits a student's access to achieving the kind of occupational and social status and prestige that a college education is seen as providing.

Tech-prep\(^9\) is going to be a tremendous thing in establishing a new identity for kids in vocational areas. It is going to give a new status and a new identity to that type of kid and to vocational education.

Once in a while we have to convince the parents that the kid would be much better off taking a vocational program, possibly taking college prep math and

\(^{9}\) Tech-Prep is a four-year program of study that begins with a two-year vocational program that allows a student to matriculate into a two-year technical program at the postsecondary level. In addition to providing an emphasis on attaining a college degree, the program also is designed to raise the level of student knowledge and skills in the areas of math, science, and language arts.
science, but take a tech level of English and let them go to a two year college. I tell them that if they do well there they can transfer to a four year college. When they hear that the kid can go to a two year college and transfer they feel better.

Assumptions regarding the value of vocational education are not only held by parents in the community, but are often held by guidance counselors as well. Several of the guidance counselors interviewed in this study were unfamiliar with the vocational programs offered at the vocational center, the actual content of vocational curricula, or the requirements for enrolling in a program at one of the postsecondary technical colleges in the state. However, most were able to discuss the types of courses a student should be taking if they wanted to go to college.

The notion that students who are college bound are given more guidance and support from counselors is reflected in this statement, offered by one of the vocational personnel that was interviewed.

The guidance office here is a waste. It's a wasteland. They do a wonderful job on the college bound kids, they get their rocks off on the college bound kids. The kids who really need them don't know enough to go there and [guidance personnel] aren't reaching out.

One counselor admitted that taking vocational education could have negative consequences for a student wishing to pursue college.

Often, [vocational education] can be a "red flag" to the [college] admissions person to say, "O.K., they went this route. I need to know more about that voc school and exactly what they did."

The association of vocational education with mediocre or poor academic achievement and lower socio-economic class status has been reflected historically in higher rates of enrollment of students from lower socio-economic class backgrounds who were less successful academically and who were more likely to aspired to the blue collar and service trades of their fathers and mothers. Enrollment patterns in vocational education nationwide reflect
patterns of high enrollments of students from economically and academically disadvantaged backgrounds (USDE, 1994). These course taking patterns of students serve to reflect and reinforce social class distinctions within the school were higher achieving students and students from middle- to upper-middle class backgrounds are ascribed greater social status.

One of the ways in which schools reproduce social class is through the structure of course "leveling," or ability grouping. The process of sorting students on the basis of assessments regarding their ability or potential (which often reflects their social class status), is called tracking. Both tracking and leveling are processes of aligning students (presumably) on the basis of the institutions assessment of the individual's ability, and their social class status.

(Regarding the lower class backgrounds and the likelihood the student will be in a lower ability track...) Subjectively speaking, I would say that's true in single-parent dysfunctional families. The number one predictor for a student's success is the educational level of the mother. You can work backwards from that. We have a lot of rural areas that feed into our schools. A lot of these kids come in and are really down and out. The parents have a low educational level.

There are class differences, absolutely. The math teachers come down and talk about the kids that are in Algebra and they are pulling out their hair and they are talking about kids that are in Algebra 1-B and they have the ability to do it but they just won't do the homework, they don't have the motivation, they don't care. When we are talking about ability between kids in Algebra 1 and Algebra 1-B it is only this much [the subject indicates a small amount] when we are talking about their attitude and their value system toward education and motivation it is this much [the subject indicates a large amount]. A lot of the kids that wind up on that level have the brains but they don't have the enrichment at home, they don't have the encouragement, they might not have support, they don't have money, they might have to work.

We have the most highly leveled and structured school in New Hampshire. But we don't track students, they can opt to take any classes that they feel are appropriate for them, unless they are way out on their choices. A lot of parents demand that their child be in what is called the level one classes, the most rigorous classes. It is a caste system that has been driven by parents not so much driven by academic ability.

The professional groups [parents] know the scoop and they want their children
in the level one classes because they think that their children will be less likely to get into trouble.

Some students have parents that say, "we really want you to go this route" even though it might not be the most appropriate, but they are told early on that they will be going this route. I think that parents have a lot to do with the situation.

This process can be seen as being driven by both the institutions assessment of the student's potential, as well as the parent's social class and their ability to advocate for certain educational programs for their child.

These data speak to the effects of cultural capital and the differential treatment students receive in schools as a result of the student's social class. Cultural capital refers to the class interests and ideologies of the student that are communicated to school authorities through the child's linguistic and cultural competencies -- which reflect the social class background of the student. According to Bourdieu (1977), students from families of the dominant class culture are more likely to who possess the knowledge, skills and attitudes that "the educational system implicitly requires of its students for success in school" (Ibid:12). Since schools embrace and embody the class interests and ideologies of the dominant class, they reward the cultural capital of child from middle- and upper-middle class families.

However, these data also suggest that it is not only the cultural competencies the student is able to communicate to the schools that provide them with a "competitive edge" in obtaining access to higher level courses (and the greater educational opportunities these courses provide), but the political power and influence the parents of students from higher socio-economic classes exercise in ensuring that their student is given access to upper level academic courses, as well as the educational opportunities and social status these courses confer. In this sense, the concept of cultural capital extends beyond the student to the "capital" that parents also are able to exchange in the educational marketplace in securing greater access to the kinds of educational opportunities that will enhance the student's chances
for future educational and occupational success.

In addition, because educational tracking serves to differentially allocate the resources needed to succeed at higher levels academically to different groups through the exposure of students to different curricula and classroom experiences. In this way, tracking can be seen as a means by which students are afforded differential access to the additional cultural and educational capital that is needed to attain future educational resources and rewards. Also, one of the consequences of tracking practices along what are primarily class lines is the social grouping and alignment of peer groups that reflect social class standing and status.

The placement of students in lower tracks results in the lack of exposure to the higher level knowledge and skills necessary to be advanced to a higher ability group, structurally limiting not only the range of schooling opportunities available to the student for academic success, but the peer groups to which the student is exposed as well (Oakes, 1990; 1992). Students are well aware of the value and status that is placed upon educational achievement on the part of schools and the larger society. The placement of a student in a high or low ability group affects the expectations that a teacher holds with regard to the student’s performance and behavior (Rosenthal & Jacobson, 1968), which affect the student’s perception of their intellectual ability, and their self worth. It has been observed, for instance, that students in low ability tracks report lower self esteem than students in higher ability tracks (Oakes, 1985) and that these negative attitudes toward one’s ability become more negative over time as each year passes and they remain in a lower track (Marsh, 1989). In this way, another one of the consequences of a students placement in a lower or higher track is that it generates assumptions about one’s identity.

One of the central concepts to social reproduction theory is Bourdieu’s (1977) concept of *habitus*. Habitus is a class sub-culture, a product of early childhood experiences; it is a
strategy generating principle, enabling people to cope with the unforeseen, a system of
dispositions. Habitus refers to the perception that a person develops of oneself as a result of
the internalization of expectations and assessments of others with regard to the individual’s
ability and future aspirations. This internalized perception of, and disposition towards one’s
place in the social world provides for the individual a kind of anticipatory design for what the
individual can expect to achieve both educationally and occupationally as an adult. The notion
that students enroll in vocational education as a result of having internalized the perception
held by others relative to their ability and future occupational aspirations is supported by the
comments made by several of the subjects interviewed.

The kids, I think, select (vocational education) because of the pure expectation
of it -- their self-concept, if you will, their idea of what is really expected of
them in their so-called social class.

(The students who enroll in vocational education are) the kids that are told,
'You can work good with your hands why don’t you do this?,' kids whose
self-esteem is down around their ankles someplace. Perhaps, they feel this is
all they are able to do or this is what is expected of them.

As MacLeod (1987) points out his discussion of the concept of "habitus":
This conglomeration of deeply internalized values defines an individual’s
attitudes toward, for example, schooling. The structure of schooling, with its
high regard for the cultural capital of the upper classes, promotes a belief
among working class students that they are unlikely to achieve success. Thus,
there is a correlation between objective probabilities and subjective
aspirations, between institutional structures and cultural practices...
Aspirations reflect an individual’s view of his or her own chances for getting
ahead and are an internalization of objective probabilities. But aspirations are
not the product of a rational analysis; rather, they are acquired in the habitus
of the individual (Ibid:13).

Having internalized the assessments communicated to them by parents, teachers,
counselors, peers, and other members of the community with regard to their academic ability
and occupational potentials, lower class and lower achieving students are more likely to view
vocational education as an educational program that is consistent with their abilities and future
occupational aspirations than are students from middle- and upper-middle class families.
Taken together, these data suggest that the tracking of students and enrollment patterns found in vocational education reflect how vocational education operates as a structural means within the school whereby social class distinctions, social class status, and social class relations come to be reproduced. As such, these data support Bourdieu's assertion that the reproduction of social classes is the result of the coming together of objective forces (structural/institutional, i.e. course leveling and student tracking) and subjective ones (cultural, i.e. personal interpretations of dominant values, beliefs, attitudes, and assumptions), whereby "objective structures tend to produce structured subjective dispositions that produce structured actions which, in turn, produce objective structure" (Swartz, 1977:548). That is, who comes to be enrolled in vocational education can be seen as an example of how the institutional structures and cultural practices of schools function in ways that construct a different set of objective probabilities for students on the basis of the individual's social class. In the case of students with disabilities, the tracking of these students into vocational education serves to realign them with a group that is associated with the stigma of school failure, lower class status, and constricted adult aspirations. In this way, the institutional structures and cultural practices of schools function in similar ways, and result in similar consequences, for students with disabilities (cf. MacLeod, 1987).

While not investigated by this study, previous research suggests that there is a greater representation of students from lower socio-economic classes among students who are identified as having a disability. Both social class status and being labeled as having an educational disability results in expectations that are circumscribed by institutional assessments of these students, not to mention the differential treatments to which these students are subjected. The self-fulfilling prophecy of the social reproduction of class can be seen as the result of both the psychological processes of internalized assessments of ability the student
undergoes; as well as the consequences of structural process of differential exposure to the knowledge, skills, and attitudes needed to succeed academically at higher levels.

While Bourdieu (1977) constructs the concept of habitus as referring to a set of subjective dispositions for the individual that are class-based, the concept of habitus can also be applied to students with disabilities who have been tracked into lower level courses throughout their educational career. Children's perceptions of themselves as *dumb*, or *retarded*, for instance, is the result of the child's biography and how they integrate themselves and their experiences of self into the world around them -- including the future aspirations of which they see themselves as capable. However, it is important to point out that, just as a student's habitus can be mediated by a variety of factors and situations that are particular to a child's life, (e.g., race, ethnicity, or religion -- cf. MacLeod, 1987) so can the process of social reproduction. For instance, for those students with disabilities who come from families of middle- and upper-middle class, the institutional treatment the child receives is often different than that which their lower class peers receive due to the ability of parents of higher socio-economic status to negotiate and "manage" the system in meeting their interests and needs. In the words of one educator, quoted earlier:

> Many of the students don't have advocates. Their parents are uneducated and they don't demand services. Where I came from in [another state] parents demanded services. You're dealing with a population of people in this city some of whom can barely read or write, they don't know their rights. I think that they don't understand some of the gobblygoop that instructors and administrators say to them and I think that they are really mystified by the system and they haven't learned to 'play the system.'

The ability of a student's parents to negotiate the system in ways that ensure their child's access to higher level courses or other educational environment in which the school might not otherwise place the student is one of the ways mediating factors affect the subjective dispositions of a student. As Jeannie Oakes (1985) pointed out, the tendency of educational
tracks to align students on the basis of social class results in the alignment of exposure to peers of similar social classes, and the attitudes, beliefs and values of these groups. Concern on the part of parents that their child not be placed in a lower level course, due to the exposure of their child to behaviors or attitudes that are regarded as less than desirable to a positive educational (and presumably social) environment, can be seen as evidence of social reproduction. Educational tracking, including the placement of students in vocational education, can be thought as producing an atmosphere in which there emerge competing status groups within the school. Since there are only a limited number of seats available in upper level courses, access to higher track courses depends upon the ability of students (with the help of their parents) to successfully compete for these placements, and the status that these placements bestow.

The stigma that is attached to vocational education serves to delineate and define the "objective probabilities" of a student's future social class and social class status. As an educational track that is devalued by the institution and certain social classes, the enrollment of a student in vocational education can serve as a signal to the student, the student's educators, and the student's same-age peers a certain lack of status within the school community. However, it should also be noted that while the institutional processes and effects of social reproduction and the social construction of the stigma attached to vocational education may operate to some extent in every school district, these processes and effects may be mitigated and lessened by a combination of organizational, economic, and socio-political factors that are unique to the school or community.

For instance, it is interesting to note that site A, a community that has experienced severe economic hardship and is comprised of primarily working class families, has a relatively high rate of participation of non-disabled students in vocational education. It was at
this site that educators indicated that the demand for vocational education was so high among
students that enrollment in vocational education took place on a lottery basis. These factors
indicate a relatively high value placed on vocational education on the part of students and
parents in the community. However, students with disabilities are effectively denied access to
vocational education -- with no students with disabilities enrolled in vocational education
programs in 1992. Two reasons cited for this was the fact that (1) the previous vocational
director had indicated to the high school administration that federal funding for vocational
education would be withheld if programs failed to meet the performance standards set by the
state, and (2) this same director had expressed "on no uncertain terms" that he did not want
"those" students in his programs for fear that these students would stigmatize the programs.
It may be the case that, in this largely poor and working class community, the exclusion of
students with disabilities in vocational education is the result of attempts on the part of the
community to retain a relative level of status for vocational education. One is reminded of a
saying that at one time was popular in the South, "I may be poor white trash, but at least I
ain't a "nigger!" Similarly, members of this community may have the attitude that "My son
or daughter may be in a vocational program, but at least he/she isn't in "retarded!"

In contrast to this district is Site B, a relatively wealthy community comprised of a
larger proportion of families from middle- and upper-middle class backgrounds, and home to
a prestigious prep-school. In this community, the participation of both disabled and non-
disabled students is one of the lowest in the state. This is the high school that completely
disassociated itself from the vocational center, and where staff expressed disrespect for the
quality of vocational programs and staff. For one educator, the lack of status held by
vocational educators reflects the low status held by vocational teachers who lack the
credentials of higher education.
[Vocational teachers at the center] don’t come from a professional business background, they come from more of a blue collar background. They’re paranoid about not having the professional education. They are defensive about that. They are not educators.

The devaluation and disassociation between the high school and vocational center is also reflected in by the fact that 70% of the students enrolled in vocational education at the vocational center in this district are students who commute to the center from outside the district. This proportion of sending school students is almost four times the statewide average. The high school’s disassociation from the vocational center might well be seen as an attempt on the part of the local high school to retain a level of relative status within the community. That is, the devaluation of, and disassociation from, vocational education in this district may reflect an attempt on the part of the high school to posture an identity that signals to the community, "We’re not a prep-school, but at least we’re not the vocational school."

While one must be cautious in drawing conclusions from an analysis of only two sites, the implications posed by differences found in the socio-economic context of these two sites relative to the participation of students in vocational education deserves mention. These findings, while constrained in their generalizability, support the notion that vocational education and the enrollment of students with disabilities in vocational education is the product of the larger socio-economic context of the community that is served by schools. That is, the exclusion of students with disabilities at Site A may represent an attempt on the part of the school and the working class community it serves to retain a relative level of status for vocational education and the occupations for which these programs prepare students, while the wealthier community, having passed judgement on the quality of education provided at the vocational center creates a situation wherein vocational education is not viewed as valuable for the majority of students they serve, including students with disabilities.

These data suggest that patterns of student enrollment in vocational education can be
understood as an objective expression of the cultural values and beliefs of the school, as well as the larger community. While the status ascribed to vocational education by members of the communities may vary somewhat from community to community, vocational education continues to be viewed in terms of the limited socio-economic opportunity and status it provides. One of the consequences of this is a resistance on the part of parents from higher socio-economic classes to allow their children to include vocational education as part of their child’s high school career.

The data suggest that the enrollment of students in vocational education serves to either reinforce or realign the student’s social status within the school, as well as his or her future occupational role. In the case of students with disabilities, this includes decisions made on the part of the institution as to whether or not the student is placed in a mainstreamed or separate vocational program. A mainstreamed food service program provides students with exposure to a variety of knowledge and skills needed to work in a restaurant, while a STEP food service program may prepare students to be dishwashers. As a form of educational tracking within vocational program areas, STEP programs serve to align students on the basis of what the institution has determined the student is capable of -- with educational programming that offers not only limited, and lower status, occupational options for these students, but lower occupational aspirations as well. For students with disabilities, depending upon the particular disability and the school’s assessment of what the consequences of the student’s disability necessarily implies, this realignment of the student’s status and occupational outlook may or may not have anything to do with the student’s social class. That is, while vocational education may align students initially on the basis of social class, the consequence is the creation of a relatively homogeneous group.

The offering of STEP programs on the part of the institution creates an additional
layer in the strata of social group membership, status, and prestige within the school that allows for the further sorting and separating out of students into different groups. The enrollment of students into STEP not only serves to reinforce or realign their status relative to others within the institution, but also serves to expose these students to a different set of educational skills, competencies, and expectations for achievement that are available to their mainstreamed peers, which in turn may well affect the objective possibilities that are later available to them relative to future educational and occupational achievement.

The processes whereby educational institutions accomplish the social reproduction of social class and social class status is often inexact. As Bourdieu points out, "social class background is mediated through a complex set of factors that interact in different ways at different levels of schooling" (Bourdieu, 1977:496). However, similar to the work of Bourdieu, these research findings, in focusing on the cultural forces that are brought to bear upon individuals as social agents in the socio-cultural reproduction of social class and social class relations within the educational process, provide support for social reproduction. While not always exact in their nature or their outcome, the processes whereby students are sorted and processed by schools are influenced by the structure of educational practices that reflect the dominant cultural values of the community and larger society.

This study suggests that the enrollment of students in vocational education on the part of schools serves to reproduce the values, beliefs, and structural class relations of the dominant culture. It is suggested here that it is relative to these dominant cultural values and beliefs that schools create for themselves an institutional identity, the boundaries that define their institutional integrity relative to the dominant culture. As such, the social construction of students with disabilities as deviants on the part of schools serves to define the boundaries of institutional and group membership, wherein the differentiation of class statuses is not only
reinforced, but justified as well. It is within this context that social reproduction theory and theories of deviance, stigma, and the generation of minority group status can be seen as complementing one another, and the institutional treatment of students with disabilities best understood.

Deviance, Stigma, and Minority Group Status and the Placement of Students with Disabilities in Vocational Education

The purpose of this section to provide a discussion of the ways in which the identification and placement of students with disabilities in vocational education can be understood as reflecting the social construction of students with disabilities as deviants on the part of the educational institution which results in these students being stigmatized as a group and assigned minority group status. In addition, this section provides a discussion of the ways in which these institutional practices serve to reinforce the theoretical assumptions of social reproduction theory.

The structure of the argument that students with disabilities occupy the role of deviants within the school as an institution proceeds from the following assumptions:

(1) Social expectations regarding behavior provide predictability and order to social life;
(2) Behavior that violates such expectations generates an imbalance which requires an adjusitive response from the social audience in order to restore predictability and order;
(3) Therefore, behavior that deviates from societal expectations will be identified, labeled and categorized into a role that functions to maintain group boundaries;
(4) The creation of deviant roles isolates and devalues the occupants in order to reinforce and strengthen group norms and values;
(5) Role assignment occurs as part of an interactive process which is influenced by both the nature of the deviance and the nature of societal reaction toward the behavior and those engaging in the behavior (Rizzo, 1982:3).

Applying these theoretical assumptions to the treatment of students with disabilities on the part of schools, as agencies of social control and social reproduction, the following
observations can be made:

1. the identification and placement of students with disabilities in vocational education serves to define and reinforce a set of behavioral expectations for all students with regard to what constitutes acceptable and successful school performance and future aspirations, which in turn provides order and predictability to social life within the institution;
2. the identification and placement of students with disabilities in vocational education represents an adjutivie response on the part of the social institutions to restore predictability and order within the institution;
3. the over-representation of lower class students in certain categories of disability, and the practice of tracking these students into lower level courses and vocational education, functions to maintain social class and status boundaries within the institution;
4. the stigmatization of students with disabilities by teachers and peers as "dumb," "mentally retarded," "weird," and/or "deformed" devalues students with disabilities and serves to reinforce the dominant norms and values placed on academic achievement and certain types of social behavior; and
5. the labeling of students as having a disability is an interactive process which is influenced not only by the appearance and behavior of the individual, but by the school culture, the social class values of those in positions of authority and decision making, and the social class of the individual being labeled.

The data upon which this study is based provide ample evidence in support of these theoretical observations. That is, the processes whereby many students are identified as having a disability, and the placement of these students in "lower" level courses and separate programs within the school serves to define institutional boundaries and expectations which reinforce existing social classes and class relations (including stigma and minority group status) and the dominate values and beliefs of American culture. Among the most prominent of these values and beliefs are:

1. that academic achievement is the result of a combination of intellectual ability, and personal effort;
2. that intelligence, academic achievement, and occupational achievement are closely linked; and
3. that the rewards of individual achievement and effort are distributed on the basis of merit.

The structure of the argument that students with disabilities occupy the role of deviants within the school as an institution proceeds from these assumptions, and is supported
by accounts offered on the part of subjects relative to the processes whereby the student is
identified as having an educational disability, and the response to these students on the part of
the institution, including both the educational tracking of these students and their exclusion
from participation in a mainstreamed educational environment.

The majority of students with disabilities are students with learning disabilities. For
these students, the disability they experience can be seen as a result of their difficulty with
learning the educational content of the curricula (or simply, the demonstration of knowledge
and skill acquisition) in ways that are similar to their non-disabled peers. Despite the fact that
the classification of a student as having a learning disability requires that the student possess a
disorder associated with receiving or processing information, these criteria are not always
used in identifying, or "coding" as student as having a learning disability. The interview data
suggest that not all students who are identified as having a disability meet the criteria for
identifying students, as set forth in the legislation, and that some of these students are
"environmentally deprived," or exhibit "behavioral problems." Or, as one special educator
put it, "These are not LD kids many of them, these are just slow learner kids."

While one of the purposes served by identifying students as disabled when they do not
meet the criteria is that of providing special services to these students who might not
otherwise receive additional services to succeed in school, clearly for some school districts the
identification process serves as a mechanism for excluding these students from a mainstreamed
classroom. As cited earlier, one special educator conceded:

Most often the kids that I have on my case list and the kids that I service in
my room get yanked out [of a mainstreamed class] for a variety of reasons
whether it's their behavior or other limitations, or the teachers not being able
or willing to deal with them anymore.

Many students are labeled as disabled as a result of their "failure" to respond to their
educational experiences in ways that the "typical" child responds to the same instruction and
educational environment. In this way, the child is seen as deviant and, therefore, in need of special intervention on the part of the institution. These interventions often come in the form of pull-out programs where the child is removed from the classroom for a certain portion of their school day to receive special services, or "treatment," for their disability.

The processes of labeling and the adjutive response of members of the institution include an assessment, or reassessment, of the child’s ability to learn and perform academically. One response on the part of members of the organization is to lower the expectations that are held for the child. For students with disabilities in high school, this differential treatment is often reflected in the practice of tracking these students into lower level ability groups. With students whose educational ability is assessed as being too limited (or their behavior too disruptive) to be in a mainstreamed classroom, the treatment comes in the form of separate classroom instruction for the length of the school day, alongside other students who have been similarly assessed.

For students with emotional disabilities, the labeling process is typically the result of behaviors that fall outside the boundaries of what are considered to be "normal" or acceptable behavior on the part of members of the institution, and/or school community. As one educator put it, "They’re bizarre….Their idea of social order and participating in a regular school environment is not at all close to what is acceptable."

It is in this sense that the removal of these students from the mainstreamed classroom environment, can be seen as an attempt on the part of the institution to maintain a sense of order and predictability in the classroom environment, and in effect also serves to establish the boundaries of what is acceptable behavior and what is not. Sociologically speaking, while the boundaries for what is considered acceptable behavior may depend somewhat on the individual structure, culture, and social make up of the school, the function that the labeling
and placement process serves are the same.

Students who have been identified as having the disability of mental retardation, it is the assessment of their intellectual capabilities (which are often accompanied by socio-emotional developmental delays) that identifies them as deviants within the social and academic environment of the school. In the case of students with physical disabilities (such as being deaf, blind, orthopedically or hearing impaired), the extent to which the student is labeled as deviant may rest upon the extent to which the disability intrudes upon their ability to perform academically or interact socially with their peers, (or the ability of the environment to facilitate their success in this regard).

Deviance theory informs us that it is not the behavior, performance, or appearance of the deviant per se that produces a deviant status for the individual, but rather "the responses of the conventional and conforming members of the society who identify and interpret behavior as deviant" such that the individual is accorded "differential treatment as a consequence of that definition" (Kitsuse, 1973:253). Similarly, the stigma that comes to be assigned to students with disabilities can also be seen as the result of the response of the institution to the student. In the case of the enrollment and placement of students with disabilities in vocational education, the stigma applied to their status can be seen as the result of the socio-political and cultural context of education wherein intellectual "ability", academic achievement, independence, and high occupational aspirations are highly valued, and the lack thereof is devalued.

The processes of labeling students as having a disability, and the educational tracking of these students, can therefore be seen as providing for the maintenance of the social order of the school — one which serves to define the internal integrity of its cultural system of values and beliefs. The provision of separate classes for students with disabilities serves to both
separate and define groups differentially, and assign them differential status and prestige within the organization, and community.

Vocational education and special education share similar locations within the school in that both are assigned low status as a result of the populations they serve. The competition that exists within the school for achieving status and recognition, and the marginalized status that is held by these two groups, is exemplified by concerns expressed by some vocational educators that an increased presence of students with disabilities in vocational serves to further stigmatize vocational education.

What is perpetuating it, in the minds of many, as far as the negative connotation of vocational education, and forgive me for saying this, is the numbers of special needs kids who are in voc ed. I think they belong there but at the same time people will look at them and say 'well gee maybe this is not a high quality program because look who is in it.' You don’t see special needs kids in a college bound English class or a Physics class.

Yes I do (think that the presence of students with disabilities contributes to the stigma of vocational education), especially when you have some people who feel that voc ed is here just to serve the special ed people and we do have some people who think that way... There are some people from (the guidance office) who send kids to the voc center because they’re in special education. There are some people who won’t recommend voc courses for anybody else except special ed and this is true of my colleagues. I can’t help wonder whether some of the spec ed kids in some of the programs have become the focus for other kids who might have gone in there but they say that it is a special ed program and I don’t want anything to do with that... You have to be careful that you don’t start gearing voc programs especially for special ed because then you surely cut off the rest of them.

(Some of) the students’ behavior was odd or out of control and... the teacher started losing (non-disabled) students. The (non-disabled) students said that everyone was making fun of them because they were vocational, now you are making them special ed...These vocational students’ self-esteem is down as it is... Schools are top heavy with handicapped students in vocational education...(As a result) non-handicapped students think that they are being treated as retarded.

The notion that high levels of participation among students with disabilities acts as a dis-incentive to enrolling in vocational education on the part of non-disabled students,
however, is not supported by the data. An analysis of vocational enrollments for the six schools included in the interview portion of this study revealed that the three schools exhibiting the highest rates of participation of students with disabilities (sites C, D, and E) also had the highest rates of participation of non-disabled students in vocational education.

(See Table 8 below.)

Table 8. The Participation of High School Students in Vocational Education: A Comparison of Students at Interview Sites with and without Disabilities.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>0%*</td>
<td>21.4%</td>
</tr>
<tr>
<td>Site B</td>
<td>18.2%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Site C</td>
<td>53.5%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Site D</td>
<td>37.6%</td>
<td>34.6%</td>
</tr>
<tr>
<td>Site E</td>
<td>26.4%**</td>
<td>31.4%</td>
</tr>
<tr>
<td>Site F</td>
<td>13.1%</td>
<td>11.3%</td>
</tr>
</tbody>
</table>

* Note: Site A operates a STEP program that is not a vocational program. The program this district refers to as STEP is a separate classroom in which students with disabilities are "housed" for the majority of their school day. No vocational instruction is provided. Therefore, students enrolled in STEP were removed from the vocational enrollment data used to generate participation rates of students in vocational education for this analysis.

** Note: The participation of students with disabilities used for this site reflect vocational enrollments for the year prior to the opening of the new vocational center. Interview data suggest that the actual participation of students with disabilities in vocational education at site is greater than 75%.

Though not supported by the data, the assumption that the presence of students with disabilities in vocational education serves to increase or reinforce the stigma that is attached to vocational education is worthy of attention, for it represents a concern on the part of
vocational educators and administrators that may signal a resistance on their part to accept these students into their vocational programs.

The research findings of this study serve to suggest that the stigma that comes to be associated with vocational education and students with disabilities are best understood as the result of factors that are associated with the organization and culture of the particular school and its community, as well as that of the larger society. In the case of this study, those school districts with the highest rates of participation of students with disabilities are also those districts with the highest rates of mainstreaming, and are the same three school districts exhibiting organizational and cultural characteristics associated with "effective schools and practices." This is not to say that STEP programs operating in even the most "effective schools" do not serve the same institutional purposes of boundary and group maintenance. However, these findings do suggest that individual schools create and maintain different institutional boundaries, and therefore different institutional identities. The fact that personnel at two of these three school districts defined their schools in terms of "serving the needs of all students" is an example of this.

However, while students with disabilities may in fact be mainstreamed alongside their non-disabled peers, within schools that are structured around the practices of homogeneous grouping, students with disabilities often remain in lower level classes that reflect the same social class and peer arrangements as those found in traditional special education classrooms. Arguments in support of the elimination of educational tracking mirror the arguments offered for the practice of "inclusion," which maintain that heterogeneous grouping is beneficial to both the social and academic achievement of all students.

The primary barrier that constrains the willingness or ability to educate all students with disabilities in a mainstreamed setting appears to be the gap that exists between
ideological claims of equal educational opportunity and the traditional organization and culture of American schools. Traditional values and beliefs regarding the nature of human intelligence and individual intellectual ability suggest that there are limits to what certain individuals are capable of learning. As several researchers have pointed out, the identification of a student as having an educational disability focuses on why the child can't learn, and reflects a clinical and reductionist perspective that has influenced the history of special education programs in the schools. Within this perspective, it is the child that is defective, not the nature of the educational environment. Or, as one school administrator put it, "Philosophically, I would agree with (mainstreaming). Practically speaking, I think that some students are better served in a separate class."

One of the traditional cultural values that operates within schools that contributes to the notion is that of needing to protect students with disabilities. This belief, in turn, contributes to the stigma assigned to students with disabilities as a dis-empowered minority group in need of institutionalized interventions. Despite an acknowledgement that separate classrooms for educating students with disabilities resulted in stigma for these students, educators continued to justify these placements in terms of student needs. They need the security, the attention, the emotional safety of a small group. Some of them get too lost and confused... This whole inclusion movement scares the heck out of me, it really frightens me for some of these kids... because of the vulnerability, losing that place of security. For some kids it is appropriate (to mainstream them), but every kid needs to be looked at case by case. For some it is going to blow their minds. (STEP) gives them a safe place and you can't take that place away from them.

Keeping them in a big program is bad for their self-esteem. When you have a smaller program they can get individualized attention.

The curriculum, the makeup, the dynamic and I think what we are seeing is that these students that do not have the severe disabilities who are square pegs trying to fit into these round holes and we are finding that we don't have a lot of options... (Their "square peg" status) could be their disability, it could be their background, it could be psychological - it could be multifaceted reasons
that for whatever reason the structure of public education doesn’t fit them. I am seeing more and more of those students and it is not a reflection of any lack in them. There are just folks that are of different learning styles. I am finding that there are not a lot of alternatives.

It is interesting to note that concerns regarding the need to protect these students from an institution that is not designed to meet their needs were not accompanied by a more critical examination of the structure and processes of American schooling, despite the fact that some educators were willing to acknowledge the "lack of fit" between schools and the needs of all students.

Another indication of this gap between the purpose and ideology of American education and the reality of the structural opportunities that are made available to students is the fact that most schools indicated that their "regular" teachers did not have the education and training to know how to deal with students with disabilities, and in some cases didn’t feel these students were their responsibility.

It depends on where you sit. From the teachers perspective, the kids don’t have the skills and shouldn’t be in here. From my perspective and probably from special ed, the teacher doesn’t have the skills.

It’s a national issue. Many of our teachers are not prepared to handle all those kids without additional help and/or training. Six or eight handicapped [student] is too much for a teacher without support in there. You need resources in your special ed department to compensate for that kind of a load on your regular ed teacher. It’s unfair to do it without additional resources.

Their feeling [on the part of regular teachers] is 'I am not a special ed teacher.' On the special ed teachers part, they don’t want them out into a regular ed environment for fear that they won’t succeed. They are leery of letting go.

While the movement to mainstream students with disabilities into regular classroom environments has been around to two decades, most teachers have not been educated and trained on how to accomplish the integration of these students. While more colleges and universities than ever before require courses in special education as part of their teacher
preparation programs, these institutions (as well as state teacher certification requirements) have been slow in responding to preparing teachers with the knowledge and skills they need to address the needs of students with disabilities. Schools, in turn, often provide very little if any staff development and training to regular teachers aimed at addressing the issues of not only the up-grading of teachers skills in this regard, but the changing of the attitudes of teachers as well. The fact that institutions do not focus more of their efforts on creating educational environments that provide for the mainstreaming of more students speaks to the value these institutions place on accomplishing the inclusion of these students in the mainstream.

The ways in which the objective (structural) and subjective (cultural) nature of the institution of education come together as a social institution reflects the dominant values and beliefs of the community and larger society -- as expressed through the structure of social institutions and the collective behavior of individuals. One of the objectives of the sociological enterprise is to grasp and articulate the complex and dynamic nature of social institutions, and the effects these institutions have on the lives of individuals, groups, and nations. In the course of this particular sociological enterprise, the complex and dynamic nature of the school as a social institution reveals that the culture of the American educational experience is one that continues to be rooted in age-old notions with regard to the purpose and goals of education, century old notions about the nature of "intelligence" and individual ability and its objective accessibility through testing, and the value and belief in American education as being one that is grounded in equal educational opportunity on the basis of a meritocracy.

These macro level forces of cultural values and beliefs converge with organizational forces at the micro level of the school as a bureaucratic organization that is shaped and constrained by the social, political, and economic realities of the communities within which
schools exist. These observations relate to my research findings in the following way:

(1) implementation of the legislative mandate that students with disabilities be educated in the least restrictive environment is constrained by traditional values and beliefs with regard to individual intelligence and ability;
(2) the traditional structure and culture of schools are not conducive to the mainstreaming of all students with disabilities; and
(3) the educational tracking of students with disabilities can be seen as an organizational response to the conflicts implied by the conditions cited in items (1) and (2) above, as they interface with the ideological assumptions of the American credo.

More recent research and educational practices assume that all children can learn if the learning environment is modified in ways that facilitate the individual's learning. Learning styles research, for instance, supports the notion that people learn in many different ways, and that every individual has a particular learning style preference (Fitzgerald, 1988; Cross, 1992). Applying this theory to notions of individual ability and aptitude suggests that many students may not have learning disabilities, but rather suffer from being subjected to the disabilities of traditional educational environments and practices that simply do not meet their learning style needs. That is, the organization of the traditional classroom and traditional instructional practices of teachers do not facilitate knowledge and skill acquisition for many students.

Educational courses and classroom instructional practices continue to be "curriculum driven." That is, courses and instructional practices are structured around the content of the curriculum, and the traditional institutional need to "cover," or teach, the content of the course curriculum. Course curricula represent the boundaries of the course, and the expectations for what the "typical" student is expected to know and be able to do after the teacher has "covered" the material. As students move into middle school and high school, course curricula become more highly differentiated on the basis of the level of content presented, generating new levels and boundaries for defining what the "typical" student is
expected to consume. Tracking practices are then understood in terms of a new set of criteria for what Khleif (1963) refers to as the "ideal client" as defined and conceptualized by the institution. Tracking aligns students on the basis of these criteria. The criteria, as we have found, rely heavily upon an assessment of the student’s ability and the student’s social class. The practices of curriculum differentiation into tracks or levels reflects an attempt on the part of the institution to group students in a homogeneous fashion, which presumably facilitates more effective teaching and learning.

These research findings provide evidence to suggest that there exist a multitude of factors related to organizational dynamics, and institutional procedures that constrain the ability or willingness of the school to mainstream students with disabilities. Many of these constraints are the product of traditional values and beliefs regarding the structure, content, and delivery of educational curriculum as they relate to how the purpose and goals of education come to be defined for different individuals and groups. The notion that schools provide equal educational opportunities such that educational success is the product of individual ability and effort continues to prevail. In terms of the assignment of students to different courses, these attitudes and beliefs were expressed in terms of the school operating on the philosophical basis of a meritocracy, and the need to retain educational standards -- issues which speak to attempts on the part of the institution to retain a level of institutional integrity. At some schools, students must, in effect, earn their right to certain educational experiences by demonstrating the ability to succeed. The cultural value that is placed upon such notions of merit and the course "credit" that is applied to the successful completion of a course is so strong that institutional conflict has resulted from attempts on the part of some to award "academic" course credit to students with disabilities who participate in courses in which the curriculum content has been modified. This conflict was presented as being, in the
eyes of some, an issue of "fairness." That is, it was the belief of some educators that students with disabilities who had not mastered the same curriculum as the other students in the class should not be entitled to the same course credit that was awarded to those students who had demonstrated competency in an unmodified curriculum. These issues have become a source of conflict for some schools.

Kids need to earn what they want to take and there is a process for moving up. We don't have a tracking system, we have ability levels. A student has to get certain grades in their previous classes in order to move up into the next level.

In some cases (parents) want their son or daughter to be in regular classrooms even though they know that they are not capable of learning in those classrooms. The biggest problem is the grading procedures used by teachers. There is a strong group out there that wants them to get the same diploma that the Algebra II kids get. There are standards that have to be met and some kids can't meet those standards. Kids who can't handle the curriculum at all get a certificate of achievement.

(Students in separate classes for the disabled) are going to get a standard diploma because it is assigned a level course just like the other classes we have. They are there because of their ability and aptitude. Some people are not too happy about the fact that these kids get a diploma and not a certificate of completion... What we hear most often from the teachers who are really used to dealing with the upper level kids is, it's not fair to the other kids and that it brings the scores of their SATs down and these other kids have worked hard and these kids are that much smarter and these kids can't even do blah, blah, blah, and they are getting the same diploma. So there is that whole issue of fairness which is really a crock because I think fairness is making sure everyone gets what they need.

School district personnel in positions of decision making with regard to the education of students with disabilities are college educated individuals who tend to have come from working or middle-class families and traditional schooling experiences who have climbed the ranks and established a measure of occupational success, social status and prestige. By virtue of this, they are more likely to hold the values and beliefs of the dominant culture as they relate to notions regarding the availability of equal educational opportunities, and may therefore be less sensitive or receptive to the institutional barriers and bigotries that are faced
by students of lower socio-economic class and/or students with disabilities in the day-to-day operations of the school. As such, they are also often blind to the ways in which schools are structured and proceed in ways that are antithetical to the ideals of equal educational opportunity.

Summary of Findings

These research findings provide support for theories of social reproduction as they relate to a study of the enrollment of students with disabilities in vocational education in the following ways:

1. Most high schools engage in some form of ability grouping, or tracking;
2. It is assumed that educational achievement is often the result of the education and social class a student’s parents;
3. Vocational education is a form of educational tracking that reflects social class lines and assumptions regarding the academic (intellectual) ability of students;
4. Vocational education is seen by many parents and some educators as an educational option that is primarily for students who (a) do not perform well academically, (b) are from lower socio-economic classes, and/or (c) who have a disability;
5. Vocational education is stigmatized as a result of (a) the types of students it serves, and (b) the perception that it does not prepare students for college, and the occupational status and prestige going to college culturally implies;
6. Parents from middle- and upper-middle class backgrounds are more likely to resist enrolling their student in vocational education than are parents of students from lower socio-economic classes; and
7. Students enroll in vocational education as a result of an internalized assessment what others see to be their educational potential, and future occupational aspirations.

Social reproduction theory asserts that schools embody the social class interests, beliefs, and attitudes of the dominant culture and that it is on the basis of these values and beliefs that schools distribute educational resources and rewards to students on the basis of the student’s social class in ways that function to structurally reproduce the objective probability that students will achieve the same social class as that of their parents. Since children from middle- and upper-middle class families are more likely to possess the social and cultural
competencies of the dominant culture -- ones that schools imply are necessary to educational achievement and future occupational success -- students from families of higher socio-economic classes are more likely to have access to the types of educational opportunities that lead to further education and occupational success. For instance, students from higher socio-economic backgrounds are more likely to be enrolled in upper level courses, which provide them course credentials to enter college -- courses in which students from lower socio-economic classes are less likely to gain access.

The tracking of students with disabilities and students from lower socio-economic classes into vocational programs can be seen as one of the structural aspects of schools that facilitates the alignment of a student's future educational and occupational probabilities with that of their social class background. In the case of students with disabilities, the enrollment of the student in vocational education is the result of similar subjective assumptions on the part of the school relative to the student's limited intellectual or physical ability that signals that alignment of these assumptions with the future educational and occupational possibilities seen to be available to these students. The relative absence of students from middle- and upper-middle class backgrounds in vocational education programs further reinforces the perceptions of parents and educators that vocational education is for primarily for students who lack the intellectual or social potential to aspire to higher education and the higher status professional occupations for which college is designed to prepare students.

The research findings also provided evidence to support the notion that students internalize the assessment of members of the institution with regard to their intellectual and occupational potentials. That is, as a result of their schooling experiences students develop a set of intellectual and emotional dispositions toward themselves that reflect the assessment made by the school of their intellectual ability, and the objective probabilities that they will
attain success. For students with disabilities, both early tracking into lower level courses and their enrollment in vocational education will either serve to reinforce their social class status and lowered aspirations, or serve to realign their status and future aspirations with those of their lower class peers.

Issues regarding the mainstreaming of students with disabilities in vocational education are bound by the same complex set of structural and cultural forces. While one of the ideological educational objectives of mainstreaming is to provide students with disabilities access to the same educational experiences as their non-disabled peers, mainstreaming also provides students with disabilities access to learning and acquiring the skills and competencies that are valued by the institution. Being placed in a separate educational setting labels students with disabilities as deviants, stigmatizes them as a group, and marginalizes them within the social structure of the school community. In addition, separate programs serve to signal to other students within the institution a set of boundaries for what is considered "normal" and/or acceptable on the part of the institution relative intellectual, academic, and social behavior -- that is, the boundaries for whether a student will be included, or excluded from participation in the life of the institution.

The educational opportunities and classroom environments that are made available to students with disabilities are constrained by both the traditional institutional configurations and practices of American schools, as well as the socio-political and cultural contexts within which educational decision makers enact their professional roles and responsibilities in deciding the "appropriate" educational content and environments to which different students should be exposed. Based on the assumptions of democratic idealism, the dominant ideology and belief of American education is that school are designed to provide equal educational opportunities to all students implies that academic success or failure are the result of differences in
individual ability and personal effort. The beliefs, attitudes, and assumptions contained within this ideology of American education represents the hegemonic framework within which the belief and commitment to the ideals of an educational meritocracy rest. While schools establish a set of structural processes and procedures for determining student ability and achievement that appear to be objective (e.g. standardized aptitude tests and grading practices), educational tracking, the structure of the school curriculum, and the educational practices of teachers and administrators reflect the values and interests of the dominant class in ways that mask the structural contradiction between the values and beliefs of American ideology and the actual practices and structural outcomes of schools.

The development and enactment of P.L. 94-142 can be seen as an attempt to secure the rights of persons with disabilities as a disenfranchised, minority group in need of legislative protection. However, this study of the identification and placement of students with disabilities on the part of schools reveals institutional practices that continue to reinforce the status of the disabled as a marginalized group, and that the legislative mandates of P.L. 94-142 have not resulted in educational practices that ensured these students equal educational opportunity, equal membership, or equal status within the social structure of the school community. While the law provides procedures designed to ensure that students with disabilities will be educated in the least restrictive environment alongside their non-disabled peers, these procedures can be implemented in compliance with the law while still not meeting the legislative intention of the law. These research findings suggest that the reasons for this failure of the legislation lies in the socio-political and cultural context of schools and schooling process whereby students are sorted, separated, and given differential access to educational opportunities that reflect the dominant values, beliefs, and attitudes of society regarding the nature of intelligence and individual ability and its relationship to social class,
and the functional limitations that are assumed to be necessarily implied by clinical labels that are attached to students with disabilities.
CHAPTER X

SUMMARY AND CONCLUSIONS

This chapter provides a summary of the research findings, and a discussion of the conclusions that can be drawn from this study of the use of Separate Training for Employment Programs (STEP) in serving the vocational education needs of students with disabilities in the least restrictive environment in New Hampshire. The first section of this chapter provides an overview of the purposes of this study; a description of the research methodology used in conducting the study; and a summary of the research findings. The second section of this chapter provides a discussion of the conclusions that can be drawn from the research findings relative to the limits social policy in effecting institutional change. The final section provides a discussion of how these findings might be useful in guiding the future research in areas of the sociology of education and the study of persons with disabilities.

Description of Research Methodology and Summary of Research Findings

The primary purposes of this study were: (1) to determine the extent to which Separate Training for Employment Program (STEP) functions as a barrier in serving the vocational education needs of students with disabilities in the least restrictive environment (LRE); (2) to better understand how the least restrictive environment for serving students with disabilities in vocational education is defined by educators within the schools for purposes of determining a student’s placement; and (3) to describe the more salient characteristics of the school and community within which schools are located that may help to explain how the requirements of LRE are implemented by school districts in New Hampshire for students with disabilities enrolled in vocational education. In addition, this study sought to investigate the
extent to which the institutional processes whereby students are enrolled and placed in separate or mainstreamed vocational programs provide support for theories of social reproduction, and the social construction of deviance and stigma of these students on the part of schools.

Research Methodology

A series of quantitative and qualitative research methodologies were used in determining the effects of a variety of school and community characteristics on the rates at which students with disabilities are placed in STEP programs, as opposed to a mainstream vocational setting. The sample used in the quantitative portion of this study included the universe of students (1402) with disabilities enrolled in vocational education in New Hampshire in 1992. Logistic and multiple regression analysis were used to estimate the effects of a set of demographic variables associated with characteristics of the school and school community on the likelihood that students with disabilities would be placed in a mainstreamed or separate vocational setting. These demographic variables consisted of measures of school size; community wealth; per student expenditures; sending/receiving school status; and the enrollment of students with disabilities in vocational education, by category of disability. All of these data were derived from a variety of secondary sources.

The sample used in the qualitative portion of this study consisted of observations and 24 face-to-face interviews conducted with school principals, special educators, vocational assessment/special needs personnel, and guidance counselors at six school districts in New Hampshire. These six school districts were not selected at random, but instead represent a set of case studies which were examples of school districts exhibiting extreme characteristics on a variety of demographic variables of interest (e.g., school size, community wealth, and per
student expenditures). The data obtained through the observations and interviews were
analyzed for purposes of identifying the more salient characteristics of the organization and
culture of the school and community which might serve to explain differences in the rates at
which students with disabilities were mainstreamed in vocational education from one school
district to the next. These interviews also provided the data used in analyzing how the
enrollment of students with disabilities in vocational programs could be understood in terms of
the role schools play in the reproduction of social class and the social construction of deviance
and stigma.

Methodological Concerns

There are several methodological concerns regarding the validity, reliability, and
generalizability of both the quantitative and qualitative data used in conducting this study.
First, the interview sites were not selected at random but on the basis of how they ranked on
a variety of demographic variables. This was done in the interest of obtaining a sample of
extreme cases for purposes of constructing ideal types. As a result, it cannot be assumed that
the conditions and practices observed at these six school districts represent those found in
other school districts in the state, which may limit the generalizability of the findings.
Secondly, it was found through the interview process that the vocational enrollment data upon
which this study relied were of questionable reliability due to differences in enrollment
reporting practices from one school district to the next, something which threatened the
validity of using STEP enrollments as a measure of mainstreaming. Therefore, the results of
the quantitative analysis of data should be interpreted with caution. Finally, while I was able
to ensure that the data obtained from interview subjects, and the identity of the school districts
at which these interviews were conducted, would be kept in the strictest confidence, my
employment status as member of the state Department of Education may have nonetheless affected the reliability of the responses offered to me by the subjects interviewed. While there is evidence to suggest that this was probably not the case, this concern must be taken into account in evaluating the research findings.

Research Findings

As a result of the quantitative analysis, the demographic variables of school size, sending-school status, per pupil expenditures for regular education, per pupil expenditures for special education, and the participation rate of students with disabilities were found to be negatively associated with the likelihood that students with disabilities would be placed in a mainstreamed setting. In addition, it was found that community wealth was positively associated with the likelihood that a student would be mainstreamed, and students with learning disabilities and students with emotional disabilities were more likely to be mainstreamed than their peers who had other disabilities.\(^{18}\)

An analysis of the interview data and observations collected at six school districts revealed a variety of organizational and cultural characteristics of the school that may serve to explain differences in the rates at which students with disabilities are placed in a separate (STEP) or mainstreamed vocational program from one school district to the next. This resulted in the construction of two distinct *ideal types* of school districts: "effective schools and practices," and "ineffective schools and practices." Three schools were identified as falling into the category of "effective schools and practices." These three school districts exhibited higher rates of both participation and mainstreaming of students with disabilities in

\(^{18}\) The effects of all of the demographic variables listed here were statistically significant at level of \(P > .001\) or \(P > .005\).
vocational education, as well as the following organizational and cultural characteristics:

(1) a relatively high level of organizational consensus with regard to what constitutes the least restrictive environment;
(2) policies and procedures for the provision of programs and services to students with special needs that are consistently implemented;
(3) a relatively high level of organizational cohesiveness, characterized by cooperation, coordination, and collaboration among key staff;
(4) an organizational culture characterized by a shared sense of common purpose and goals relative to providing a wide range of instructional and educational program opportunities to a wide range of students.

In contrast, the remaining three school districts, which exhibited lower rates of participation and/or mainstreaming of students with disabilities in vocational education were more likely to have the following organizational and cultural characteristics:

(1) a relative lack of organizational consensus with regard to what constitutes the least restrictive environment;
(2) a lack of clear policies and procedures for providing services to students with disabilities in vocational education;
(3) a relatively high level of organizational chaos, political in-fighting, and departmental territorialism, often exacerbated by a lack of clear lines of institutional authority and/or responsibility;
(4) the lack of effective communications between staff at different levels within the organization; and
(5) a relative lack of organizational consensus with regard to the purpose and goals of the institution relative to serving the needs of all students.

None of the school districts made placement decisions on the basis of a set of established criteria. Decisions as to whether a student would be mainstreamed or placed in a separate program relied primarily upon the extent to which the organization of the school was curriculum-driven and the extent to which teachers in mainstreamed courses were perceived as willing or able to successfully meet the educational and emotional needs of the student. More specifically, in most cases placement decisions were driven by the structure of vocational program curriculum as it interfaced with (1) an assessment of the intellectual ability and skills of the student; (2) the ability and/or willingness of the mainstream teacher to accommodate
the special needs of students with disabilities; (3) the ability or willingness of the institution to provide support to the teacher and/or student to successfully mainstream the student; and/or (4) concerns regarding what environment would best meet the student’s need for individual attention and emotional support. In this sense, placements were made largely on the basis of the structure of existing educational environments, rather than upon alternative arrangements that might be possible.

There was a tremendous amount of ambiguity surrounding the process of how a student’s placement was specifically determined. While this may reflect a failure of the research design in terms of not knowing the right kinds of probing questions to ask, this may also well be the result of what Hargrove (1983) sees to be one of the primary problems with implementing the mandate of LRE, namely, the lack of a clear definition for what is meant by "the least restrictive environment." Berman and McLaughlin (1975) contend the key to understanding the extent to which school are able to successfully implement the requirements of P.L.92-124 lies in understanding the bureaucratic organization and culture of the local school. The research findings of this study provide support for their claim — both in the findings discussed above and in the following research findings as well.

An analysis of the institutional processes whereby students with disabilities are enrolled and placed in vocational education provides support for the theories of social reproduction and the social construction of deviance and stigma. This support is provided by the following observations:

1. Most high schools engage in some form of ability grouping, or tracking.
2. It was often assumed that educational achievement is often the result of the education and social class a student’s parents.
3. Vocational education was devalued by many parents, and some educators, as an educational option that is primarily for students who (a)
do not perform well academically, (b) are from lower socio-economic classes, and/or (c) who have a disability.

(4) Parents from middle- and upper-middle class backgrounds were more likely to resist enrolling their student in vocational education than are parents of students from lower socio-economic classes.

(5) The over-representation of lower class students in certain categories of disability, and the practice of tracking these students into lower level courses and vocational education, reflected social class boundaries within the institution.

(6) Students were enrolled in vocational education as a result of an internalized assessment what others saw to be their educational potential, and future occupational aspirations.

(7) The stigmatization of students with disabilities by teachers and peers as "dumb," "mentally retarded," "weird," and/or "deformed" and their placement in separate programs devalues students with disabilities and serves to reinforce the dominant norms and values placed on academic achievement and certain types of social behavior; and

(8) In an effort to raise the status of vocational education, some vocational administrators resisted the enrollment of students with disabilities due to the stigma that was often attached to these students as a result of what was perceived to be their lack of intellectual ability and future occupational potential.

These findings provide support for the theoretical assertions that schools function in ways that: (1) serve to reproduce social class status from one generation to the next such that the enrollment and placement of students with disabilities in vocational education serves to either reinforce or align them with the objective probability that they will attain lower-class status, and; (2) define and reinforce the institutional boundaries for what is considered "normal," desired, and/or acceptable behavior through the development of both educational tracks (including separate classrooms and programs for student with disabilities). In doing so, schools (a) socially construct students with disabilities as deviants, who are stigmatized, and (b) communicate to the community the cultural integrity of the institution. As such, these observations suggest that the enrollment of students with disabilities in vocational education serves to define and reinforce a set of institutional boundaries that provide for a sense of order and predictability for its members.
Taken together, these research findings strongly suggest that the barriers to implementing P.L. 94-142 lie not only in the problems that are posed by the language of the legislation and the bureaucratic and cultural structure of schools, but in the traditional values, attitudes, beliefs, and assumptions that are deeply embedded in the dominant culture of American society.

The Socio-Political and Cultural Context of Implementing Social Policy

This study suggests that it is the socio-political, organizational, and cultural contexts within which schools operate that help to explain the implementation of LRE and other educational policies, and provide a deeper understanding of the types of constraints under which schools attempt to implement the mandates of P.L. 94-142. The organization and structure of schools and the schooling process reflect the underlying beliefs and values of the dominant culture. These values and beliefs maintain that academic achievement is the result of the individual’s intellectual ability and effort, and that the rewards of academic achievement are distributed on the basis of individual merit. While the American credo — and dominant ideological belief — is that schools provide equal educational opportunities to all students, these findings suggest that educational resources and rewards are more likely to be distributed on the basis of social class, and/or the institution’s assessments of the student’s potential relative to future occupational and social class probabilities.

Schools are, if nothing else, political institutions. And as political institutions, schools are operated in ways that reflect the dominant values and beliefs of the ruling class culture. School district personnel in positions of educational decision making are college educated individuals, most of whom probably come from working or middle-class families; who had
traditional schooling experiences (and experienced success), who have climbed the ranks, and
who have established a measure of occupational success, social status, and prestige as
professionals. By virtue of their experiences, they are more likely to embrace the values and
beliefs of the dominant culture as they relate to notions regarding the availability of equal
educational opportunities; and may, therefore, be less sensitive or receptive to the institutional
barriers and cultural bigotries faced by students of lower socio-economic class and/or students
with disabilities in the course of their day-to-day, year-to-year schooling experiences. As
such, most educators (while perhaps good intentioned) are also often blind to the ways in
which schools are structured against many students, and proceed in ways that are antithetical
to the ideals of equal educational opportunity they espouse.

Schools not only distribute educational opportunities, such as access to higher
education and the greater social and occupational status higher education often affords, they
also distribute the social psychological resources that form a student’s sense of self, their self-
esteeem, and future aspirations. The ways in which teachers, peers, and administrators
respond to children differently on the basis of assumptions regarding their innate ability and
aptitude helps to shape a child’s future aspirations.

In addition, these findings indicate the parents of middle- and upper-middle class
students are better able to manage the school system to get their children’s needs and interests
met than are the parents of students of lower socio-economic income and status. This
includes not only being able to push successfully in accessing higher level academic courses
for their child, but in the case of parents of students with disabilities, these parents are also
more likely to demand that the school provide the services they see as necessary in meeting
their child’s needs.
The economics of education also serve to make schools political institutions. Operating in a context of limited economic resources, how the resources available to schools come to be distributed reflects the values of the school and community. Allocating larger expenditures for special education services to students with disabilities, however, does not necessarily mean that greater value is given to providing educational services to these students. In fact, of the six school districts studied, larger expenditures for special education services were found among those schools with the lowest rates of mainstreaming. The distribution of greater economic resources to programs serving students in more segregated environments may well reflect the value that the school and community place on keeping these students out of programs that serve students whom the school has determined show more promise of academic success and further education. As such, committing greater economic resources to programs and services that exclude these students reflects the value the school and community has placed on the need to sort out and separate those students whose school performance does not conform to the cultural value and status that is ascribed to academic success and the potential for future educational achievement.

In addition, the data suggest that there are "pragmatic" and pressing institutional issues, such as class size, skilled and willing teachers, adequate facilities, access to additional professional services for students, and school budgets that function as barriers to the mainstreaming of students. Even a strong philosophical commitment to serving students with disabilities in the least restrictive environment will not ensure that the needs of these students will be met in a mainstreamed setting. Traditional classroom sizes in high school courses of 25-35 students, for instance, are not conducive to efforts to mainstream students with disabilities (and in fact may not be conducive to meeting the individual educational needs of
students in general). Smaller class sizes require more classrooms and more teachers, the economic costs of which are prohibitive for most school districts. In New Hampshire, where over 90 percent of the revenues needed to support education come from local property taxes, issues relative to the economic costs of education are easily politicized and strongly debated -- as most school district budgets in New Hampshire are voted on at town meetings. As a result, the economic issues of educating students with disabilities can easily become politicized. As the administrator in one school district pointed out,

In the five years that I have been here (special education costs) have increased tenfold... It's escalating the cost to the point where it is causing special education to come under extreme scrutiny and public disapproval when there may be ways that that goal can be accomplished without having the extras.... We have a had a tax-payer revolt here and they're trying to cut back the money. We are out of space. I certainly think special ed students need the services that we are talking about and the money, but it is definitely at the expense of other students, especially the way funding is structured in New Hampshire. We need some type of broad based tax in order to make things more equitable.

Issues of equity and fairness are not always clear when economic resources are at stake. Equalizing the distribution of resources, for instance, does not necessarily imply educational equity. Some students may always require additional services and attention in order to find success or equalize the playing field.

Schools must also deal with the political considerations of appeasing local school boards when initiating changes in educational policies and practices, and the allocation of resources to support these changes. School boards are political entities as well, and the personal and political dynamics between school board members, school district personnel, and more powerful members of the community may present barriers to accomplishing support for institutional change (such as the elimination of tracking practices) that these groups may feel
threaten the integrity of the school. These are only a few examples of how the issues raised by this study reflect how school districts and the policies and practices in which they engage are grounded in the social, economic, and political realities of the community.

The findings of this research suggest that implementing the legislative mandate that students with disabilities be educated in the least restrictive environment is constrained by the organizational, socio-political, and cultural context of the school and the community within which the school resides; including the extent to which schools are willing and/or able to address the conflicts inherent between the American credo of equal educational opportunity, and the traditional cultural ideologies, organization and structure of schools. As such, these research findings also suggest that issues regarding the mainstreaming of students with disabilities are bound by a complex set of structural and cultural forces operating in the school, community, and society which are not amenable to change through legislative policies and procedures. Among these forces are prevailing attitudes and beliefs about the nature of individual differences as they relate not only to disability but social class, and the importance of these differences in determining the "appropriate" educational process to which each student is entitled. For students with disabilities, the educational environments that are potentially available to them are constrained by both the traditional institutional configurations of American schooling and the socio-political and cultural contexts within which educational decision makers enact their professional roles and responsibilities in determining the future social and occupational locations of students relative to one another.

In summary, this research suggests that the legislative protections provided to students with disabilities under P.L.94-142 do not ensure that these students will be provided access to equal educational opportunities, equal membership, or equal status within the social structure.
of the school. This study also suggests that educational institutions can comply with federal legislative mandates without ever meeting the intent of the law. While social policy can serve to redefine the boundaries of what is considered appropriate institutional behavior, attitudes and beliefs cannot be legislatively mandated.

There is evidence to suggest that nationally there is a movement towards greater acceptance of persons with disabilities and that this movement has been facilitated by increased interpersonal interactions between the person with disabilities and person who is non-disabled (Katz, Kravetz & Karlinsky, 1986; Bogdan & Taylor, 1987; Bourdieri & Dremer, 1987; Murray-Seegert, 1989). The increased mainstreaming of students with disabilities in schools is a relatively new phenomenon and, increasingly, research findings suggest that there is reason to believe the attitudes and beliefs of the non-disabled will become more positive as interpersonal interaction increases. As one educator in this study pointed out, "When you all of a sudden put a different group of people together with another group of people and, in some cases quite severely limited, it takes a while for other people to accept these people." Another educator indicated, "We are seeing more and more students with disabilities mainstreamed in our classes here. I think students are seeing more of these disabled students in the school and it is becoming more of a 'this is like it is' situation. I am not sure that that stigma can still hold true."

Within the larger context of American culture, one can notice an increased visibility of persons with disabilities occupying roles and engaging in activities that, as little as five years ago, would have struck us as unconventional. It is not uncommon, for example, to see persons with disabilities in commercials, on television shows, and in magazine and newspaper advertisements engaging in activities and promoting products that are unrelated to their
disability. In casting these individuals as ordinary people, as opposed to "a person with a disability," the stigma attached to traditional cultural images of persons with disabilities are likely to change.

The movement to include all students with disabilities in the mainstreamed setting shares many of the same social and cultural objectives of multiculturalism. Both movements grew out of the Civil Rights movement, and both seek the recognition and inclusion of all students (regardless of social class, ethnicity, gender, religion or ability) as valued members of the school community, and in doing so, to elevate the status of those persons and groups who have traditionally been disenfranchised by society and its institutions. Both movements maintain that it is only through increased interpersonal contact between individuals of different groups that each can learn to understand and appreciate one another in ways that create new institutional and community cultures that value individual differences. In addition, both the inclusion and multicultural movements emphasize that the goals of equal educational opportunity require that schools address the needs of all groups, and not just those whose backgrounds and cultures are the most closely aligned with the White, male, Anglo-Saxon values, beliefs, and traditions within which American schools have so long been entrenched.

This research reveals how the larger, macro structure and ideology of American education find expression and actualization at the meso level of the institution of schools. This study of the ways in which students are placed in a mainstreamed or separate environment provides support at the theoretical level for how schools reproduce and legitimate systems of inequality. These processes of social reproduction can be found in the structural, cultural, and socio-political characteristics of schools at the meso level of analysis, as well as through the behaviors, attitudes, beliefs and practices of educators, administrators, parents,
and members of the community at the micro level of analysis. It is worth noting again that one of the common characteristics of "effective schools and practices" in some districts was an organizational culture that was characterized by a shared sense of common purpose and goals relative to providing a wide range of instructional and educational program opportunities to a wide range of students. There is a need for further research on educational reforms that are directed towards bridging the gap between the American credo of equal educational opportunity and the institutional practices of educational decision-makers.

**Suggestions for Further Research**

This study suggests that additional research is needed in several areas of educational practice that would serve to better illuminate specific issues of educational policy and decision making, and the organizational culture of schools within which policies are implemented, e.g. to:

1. assess the extent to which students with disabilities are being served in the least restrictive environment, and the nature of the organizational characteristics and conditions of school within which these students are successfully mainstreamed;
2. determine what the specific needs of school districts are with regard to better serving students with disabilities in a mainstreamed setting;
3. identify the strategies used by school districts having successfully accomplished full mainstreaming practices, and the conditions under which changes in policy and practices occurred;
4. identify the characteristics of those school districts at which there are high participation (and mainstreaming) rates of both disabled and non-disabled students in vocational education which would serve to inform educational administrators and policy makers as to what is needed to maintain equal access to vocational programs for all students;
5. assess whether, and the extent to which, the participation of students with disabilities in vocational education adversely affects the rates at which other students choose to enroll in vocational education; and
6. assess differences in educational and occupational outcomes between students with disabilities who are mainstreamed and those who are placed in separate programs, and the program and school characteristics that facilitate positive outcomes for students who are mainstreamed.
Further research is needed on the contribution of social reproduction theory to understanding the differential treatment of students with disabilities on the part of schools, such as determining the extent to which a student's social class affects: (a) the likelihood that the student will be identified as having a disability; (b) the likelihood that the student will be served in a mainstreamed setting; (3) the educational goals and objectives of the student, and; (4) the likelihood that the student will receive additional services to support them in achieving her/his educational goals. More research is needed to identify the more salient characteristics of the interpersonal and organizational processes whereby educators, and other educational decision makers, assess the intellectual potential of students and the way assumptions and judgements regarding the student's social class affect the sorting and organizational processing of these students on the part of the school.

Further research on the efficacy of the theoretical perspectives of deviance, stigma, and minority group status in understanding the processes whereby schools identify students with disabilities and assign them different treatment is also needed, e.g., to: (1) determine more specifically the types of criteria that are used in identification and selection of students who receive different treatments; (2) how differences in criteria used in making these identifications differ from one school to the next; and (3) the effects of social class on the criteria that are used. Research is also needed in the area of the sociology of acceptance as it relates to the mainstreaming of students with disabilities in schools, and the similarities that may exist between these processes and those of found in schools that have eliminated the practice of homogeneous grouping of students. Among the questions to be addressed by further research in this area are:
(1) What are the effects of mainstreaming on the attitudes of non-disabled students toward their peers with disabilities?
(2) What are the effects of heterogeneous grouping on the attitudes of students toward their peers who come from different family backgrounds?
(3) What are the effects of heterogeneous grouping on the attitudes of students toward their peers who possess different educational aptitudes and interests?
(4) To what extent are these processes similar or different in terms of generating an attitude of tolerance and acceptance of cultural and individual differences?

Finally, it is suggested that persons designing educational policy give greater consideration to the socio-political and organizational contexts within which educational policies are implemented by schools in order that appropriate resources may be directed towards the staff development needs of educators and administrators for purposes of institutional change.
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APPENDIX A

DEFINITIONS FOR HANDICAPPED/DISABLED

Students identified as having a disability are identified on the basis of the following definitions and are reported to the state in one of these eleven categories. These definitions are consistent with those used by the state of New Hampshire 1992, and as they appear in the Federal Register, Vol. 42, No. 163, August 23, 1977.

MENTALLY RETARDED means significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child’s educational performance.

HARD-OF-HEARING means a hearing impairment, whether permanent or fluctuating, which adversely affects a child’s educational performance, but which is not included under the definition of “deaf” in this section.

DEAF means a hearing impairment which is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance.

SPEECH IMPAIRED means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a child’s educational performance.

VISUALLY HANDICAPPED means a visual impairment which, even with correction, adversely affects a child’s educational performance. The term includes both partially seeing and blind children.

SERIOUSLY EMOTIONALLY DISTURBED is defined as follows:

a. A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance, such as:
   - an inability to learn which cannot be explained by intellectual, sensory, or health factors,
   - an inability to build or maintain satisfactory interpersonal relationships with peers and teachers,
   - inappropriate types of behavior or feelings under normal circumstances;
   - a general pervasive mood of unhappiness or depression, and/or
   - a tendency to develop physical symptoms or fears associated with personal or school problems.

b. The term also includes children who are schizophrenic or autistic. The term does NOT include children who are socially maladjusted, unless it is determined that they are seriously emotionally disturbed.
ORTHOPEDICALLY IMPAIRED means a severe orthopedic impairment which adversely affects a child's educational performance. The term includes impairments caused by congenital anomaly (e.g., clubfoot, absence of some member, etc.), impairments caused by diseases (e.g., poliomyelitis, bone tuberculosis, etc.), and impairments from other causes (e.g., cerebral palsy, amputations, fractures or burns which cause contractures).

OTHER HEALTH IMPAIRED means limited strength, vitality, or alertness due to chronic or acute health problems such as heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle-cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes, adversely affecting a child's educational performance.

SPECIFIC LEARNING DISABILITY means 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 handicapped, brain injury, minimal brain disfunction, 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, of mental retardation, or of environmental, cultural, or economic disadvantage.

DEAF/BLIND means concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational problems that they cannot be accommodated in special education programs solely for deaf or blind children.

MULTI-HANDICAPPED means concomitant impairments (such as mentally retarded/blind, mentally retarded/orthopedically impaired, etc.), the combination of which causes such severe educational problems that they cannot be accommodated in special education programs solely for one of the impairments. The term does not include deaf/blind children.
APPENDIX B

INTERVIEW GUIDES

Principals

1. What is the philosophy of this school district with regard to the mainstreaming of students with disabilities? How does this translate into serving students with disabilities in vocational education?

2. What role does vocational education play in this community with regard to the overall education of students? Does the community support vocational education, and if so, how is this support demonstrated?

Do you feel as though this administration supports vocational education? How is this support demonstrated?

3. Do you feel as though there is a stigma attached to vocational education? If so, what do you think is the source of this stigma?

Do you feel as though the mainstreaming of students with disabilities contributes to this stigma? In what way?

4. How would you describe the working relationship between special educators and vocational teachers and vocational assessment personnel?

5. How are vocational assessments conducted in this school district? Who is responsible for them and how are they used to determine a student’s placement in vocational education?

6. How do most teachers feel about the mainstreaming of students with disabilities in their classrooms? Does this include students with severe disabilities?

7. What are the major issues involved in increasing the rates at which students access vocational education? What are the barriers?

8. What are the major school issues involved in increasing the rates at which students with disabilities are served in vocational education? What are the barriers to increasing participation of these students?

9. Did you conduct any activities last year that were directed solely at improving services and instruction of students with disabilities?

10. What are the political dynamics of the school and community that impact the use of vocational education centers in serving students with disabilities?
11. If the state were to inherit several million dollars for the sole purpose of improving the educational opportunities of students with disabilities, how do you think that money could be best put to use?

12. What are the greatest needs of schools districts with regard to serving students with disabilities?

13. If you could change anything about your school district with regard to the way it serves students with disabilities, what would you change?

14. If you could change anything about your school district with regard to vocational education, what would you change?

Special Educators and Vocational Assessment/Special Needs Personnel

1. What is the policy of your school with regard to the mainstreaming of students with disabilities in vocational education? How is this policy implemented?

2. What is the process for determining a student’s career interests and related educational programming needs?

3. What is the process for determining a student’s placement with regard to a mainstreamed or separate vocational education setting?

   Of the different processes and factors you just described, which tends to be given the greatest weight in determining placement and why?

4. Explain the relationship between student assessment, student placement and the student’s school to work transition plan and the dialogue that takes place around the development of this plan.

5. How would you describe the working relationship between special education personnel and vocational placement personnel at this school?

6. What are the institutional factors that are called into play in negotiating a student’s placement in vocational education? (By "institutional" I mean the philosophy, policies, procedures and actual practices that take place in determining a student’s placement).

7. What are the social factors that are called into play in negotiating a student’s placement in vocational education? (By “social” I mean the attitudes and practices of administrators, special educators, vocational personnel, teachers and students that play a role in determining the best placement for students with disabilities).

8. How would you rate the level of support among vocational teachers for the integration of students with disabilities in their classrooms? In your view, how can these attitudes be best understood or explained?
9. In your opinion, what institutional barriers exist, if any, to the full and total mainstreaming of students with disabilities in vocational education?

10. In your opinion, what social barriers exist, if any, to the full and total mainstreaming of students with disabilities in vocational education?

11. In your opinion, what are the needs of school districts with regard to increasing the utilization of vocational programs by students with disabilities?

12. In your opinion, what are the needs of school districts with regard to increasing the rate at which students with disabilities are mainstreamed in vocational education?

**Guidance Counselors**

1. Explain for me the role of guidance at this school.

2. How would you describe the process whereby a student's educational career plan is determined?

3. How do you view the role of vocational education for students within this district? What about with regard to students with disabilities?

4. Do you think that there is a stigma attached to vocational education? What do you think is the source of that stigma?

5. Do you think that the presence of students with disabilities in vocational education contributes to this stigma?

6. How would you describe your relationship (and responsibility to) with the vocational center?

7. Do you advocate that students take vocational education? What kinds of students?

8. What are the major barriers that exist with regard to increasing the rates at which students enroll in vocational education?

9. Is it difficult to schedule student's into vocational programs if he or she is taking the traditional college track?

10. Do you think that vocational programs are effectively and efficiently utilized by students with disabilities?

11. In your view, what are the major issues facing vocational education as they relate to serving students with disabilities?
APPENDIX C

GLOSSARY OF TERMS

AVC refers to Area Vocational Center. In a regional delivery system, such as the one in New Hampshire, vocational education is not provided in all school districts, but is rather made available to school districts within a designated geographical region through Area Vocational Centers. Schools without AVCs send their students to the AVC for the vocational portion of their high school program.

ED refers to the category of students who have been identified as being "seriously emotionally disturbed."

Emotionally Disabled refers to students who have been identified as being "seriously emotionally disturbed." See Appendix A for a more detailed definition of this term.

FAPE refers to "free and appropriate education."

IEP refers to an "individual education plan," which is required for every student identified as having a disability. The IEP contains descriptions of the educational objectives that have been identified as appropriate for the student as well as the nature and types of services to be provided in ensuring that the student's educational objectives are attained.

LD refers to the category of students who have been identified as having "a specific learning disability."

Learning Disabled refers to a student who have been identified as having "a specific learning disability." See Appendix A for a more detailed definition of this term.

LRE refers to "least restrictive environment."

MR&M refers to the category of students who have been identified as having mental retardation, who are deaf and blind, or who have multiple handicaps.

Mental retardation refers to students who have been identified as being "mentally retarded." See Appendix A for a more detailed definition of this term.

OT (Other) refers to the category of students who have been identified as having one of the following disabilities: "hard of hearing", "speech impaired", "deaf", "visually handicapped", "orthopedically impaired", or "other health impaired." See Appendix A for more detailed definitions of these terms.
"Other" (OT) refers to the category of students who have been identified as having one of the following disabilities: "hard of hearing", "speech impaired", "deaf", "visually handicapped", "orthopedically impaired", or "other health impaired." See Appendix A for more detailed definitions of these terms.

**Receiving School** refers to a school district that has an AVC located at their high school. These school districts receive students from other school districts within their geographical region for purposes of providing the vocational portion of the student's high school program.

**Sending School** refers to a school district that does not have an AVC located at their high school but rather sends their students to a regional AVC for the vocational portion of the student's high school program.

**STEP** refers to Separate Training for Employment Programs, which are vocational programs designed to serve students with disabilities that cannot be educated in a regular (mainstreamed) vocational program even if supports are provided.

**Tech-Prep** refers to a four year program of study consisting of two years of secondary vocational education and two years of postsecondary or apprenticeship training leading to an associates degree or industry certification in one of the seven vocational areas of agriculture, business and office occupations, marketing, home economics related occupations, health occupations, and occupations in trades and industry.
APPENDIX D

PROBLEMS REGARDING THE USE OF VOCATIONAL ENROLLMENT DATA REPORTED TO THE STATE

Several inconsistencies and inaccuracies in the reporting of vocational enrollment data are the part of school district were identified as a result of interviews conducted at five of the six interview sites. The nature of these inconsistencies and inaccuracies varied from site to site. A description of these problems with the data are describe below for each of the five sites affected.

Site A

The STEP program in which students with disabilities at this site were reported as enrolled does not meet the state’s definition for what constitutes a legitimate STEP program. Students reported as enrolled in this program do not have vocational program objectives identified for them as part of their IEP, nor does the program offer what would be considered vocational skills. Students in this program are typically placed there for the larger, if not entire, part of their school day — a situation that was described by one educator within this district as a "warehousing" of students with more severe disabilities for whom "vocational education is appropriate." While the program is housed within the vocational center facility, there is little or no contact between STEP teachers and the vocational director or the vocational education staff. It appears as though these enrollments are reported to the state as STEP vocational enrollments for purposes of accessing additional federal vocational funds for the school district. One of the consequences of the reporting of these students as enrolled in STEP is that the participation rates of students in vocational education at this district are lower than the data used in this study indicate. In addition, in the absence of a legitimate STEP
program all of the students enrolled in vocational education at this district are served in a mainstreamed setting.

**Site B**

Problems with the vocational enrollment data reported for this district center upon the reporting of students with disabilities from sending school districts. According to several accounts provided by subjects at this school district, the enrollment of students with disabilities in vocational education from sending districts is much higher than the enrollment data used in this study indicate. This district, which serves the highest percentage of vocational students from sending school districts of any of the state’s area vocational centers (AVCs), has historically experienced problems with obtaining accurate and reliable data on the disability status of students from sending districts. According to personnel at this district, most of the students they serve from sending districts are students with disabilities, but SPEDIS numbers and IEPs on these students are often not provided to the vocational center to be used for enrollment reporting and/or instructional purposes.

The result of this problem with the enrollment data used in this study for this site is that the percentage of students with disabilities from sending districts who are enrolled in vocational education at this district appears lower than what might actually be the case. It is therefore possible that the mainstreaming rates of students with disabilities is higher than that which is reflected in the enrollment data.

**Site C**

Problems with the vocational enrollment data reported by this school district in 1992 also centers around the reporting of the disability status of sending school students. This problem appears to be the result of the fact that the vocational director failed to submit vocational enrollment data to the state prior to the state’s deadline for submitting enrollment
data. This data included information on the disability status of sending school students enrolled in vocational education at the AVC. As a result of missing the state’s deadline for submitting enrollment data, the data used in calculating the rates at which all students with disabilities are mainstreamed in vocational education lacks reliability.

In addition, one of the primary STEP programs offered at this district is not a legitimate vocational program, but is rather in a program that is designed to function as a year-long vocational assessment program. The consequences of this are: (1) the participation rate of students with disabilities in vocational education was actually less than indicated by the data, and (2) the mainstreaming rate of students with disabilities in vocational education is actually higher than the data indicate.

**Site D**

Due to the design of STEP programs at site D, this district reported students as enrolled in STEP if the student starts out in a separate (STEP) program, even if that student is currently mainstreamed with some support in a regular vocational program. Therefore, the mainstreaming rate for Site D is actually higher than what is indicated by the enrollment data used in this study.

**Site E**

The vocational enrollment data for sites E that were used in this study reflects program enrollments for the 1992 school year -- the year prior to the opening of the district’s new vocational center. While the mainstreaming rate for this site which was used in this study is accurate and remains so, at 100%, the participation of students with disabilities in vocational education is higher than what is reflected by the enrollment data. According to interviews conducted at this site, the participation rate of students with disabilities in vocational education is close to 100%.
APPENDIX E

REFLEXIVE STATEMENT

For me, the objective of sociological inquiry is not only to acquire a deeper understanding of the nature of society and social relations, but a deeper understanding of oneself. In the process of conducting this research, I found myself reflecting often upon my feelings and attitudes towards a variety of issues related to the treatment of persons with disabilities on the part of the schools and how my own life may have been different had my own learning disabilities been identified by the various school systems I encountered while growing up in the 60s and 70s.

It wasn't until I reached adulthood that I became aware that I have several learning disabilities, including dyslexia, attention deficit disorder (ADD), and auditory processing problems. While I have developed adaptive strategies to compensate for these disabilities over the years, they remain very much a part of the person I am and the way I experience the world around me. As a result of dyslexia, I have a tendency to transpose words, letters and numbers (primarily from right to left), both when I read and when I write. As a result of the ADD, I have little, short-term memory, poor organizational skills, difficulty "staying on task," and an inability to ignore or filter out distracting noise or randomly connected thoughts.¹ As a result of my auditory processing problems, it is difficult for me to process quickly or efficiently information I receive auditorially, particularly numbers.

As a child, I had a very difficult time with school. I experienced tremendous difficulty

¹ I take Ritalin® as treatment for the ADD -- but it only helps when I remember to take it.
in learning to read, I had difficulty paying attention in class, following directions, and organizing school work. In addition, it was almost impossible for me to perform rote memorization tasks or respond to questions quickly, or remember information received auditorially. I attended three different Catholic parochial schools, in different parts of the country, from first grade through the end of my seventh grade year. During these years, I tested, on average, approximately one year behind my same age peers on standardized aptitude tests. My grades were poor, falling primarily in the low C and D range in most subjects areas, and I often received failing marks in spelling and math facts that required rote memorization. As a result of my "performance" in school, I was considered to be "not very bright," and was responded to accordingly by my teachers and peers.

At the end of my seventh-grade year, my family moved to Europe where I attended schools that were operated by the Department of Defense. I remained in this school system through the end of my 11th grade year. The two high schools I attended were experimenting with many of the educational reforms that were popular in the 1970's, such as the open classroom concept, cooperative learning strategies, and a philosophical approach to educating students that treated children as active learners and creators of knowledge.

In the course of one year, my academic performance went from below average to above average. I received primarily As and Bs in my classes, and teachers responded to me as being a very bright and capable student. In the eleventh grade, I was recommended for, and later inducted into, the National Honor Society. Over the course of these four years, my self concept and future aspirations were transformed. Having internalized the assessment of my teachers and peers, I soon believed that I could do and be anything I aspired to personally and occupationally. Upon graduation, I went on to college where I continued to find
academic success and validation of my intellectual capabilities.

Reflecting upon these experiences in the course of this research, I couldn’t help but wonder how my life would have been different had I remained in a parochial school system -- organized around the traditional practices of lecture and rote memorization, with an emphasis on order, obedience, and conformity. I could also not help but wonder how my life would have been different had I attended public schools in the 1970s and 1980s after the passage of P.L. 94-142. What if my disabilities had been identified by the school system? What if I had been tracked into lower level classes? What if I had been responded to differently by my teachers and peers? How would this have altered the person I was to become -- my self-esteem, my life chances, and the choices I made or saw as available to me?

These reflections, and the resulting speculations about how my life could have been different, have resulted for me in feelings of ambivalence toward the design and implementation of P.L. 94-142. Given my own experiences, and what current research indicates with regard to the negative effects of labeling and the consequences of educational tracking on the basis of these labels, I cannot help but feel fortunate that I was not identified and labeled as having a disability. Yet, at the same time I appreciate, respect, and support the social objectives of the legislation and the need to protect persons with disabilities from discriminatory practices.

However, I also see a variety of problems resulting from attempts to change social institutions through the enactment of legislation that reinforces the same sets of problems in the social treatment of persons who fall outside of what society deems to be "normal" that the law was supposedly designed to eradicate. In creating legislation that requires the identification of individuals and groups on the basis of how they are different from what is
considered normal in order for them to receive differential treatment, the law serves to reinforce the social perception that persons with disabilities are necessarily deficient, and that these deficiencies entitle them access to a different set of services. It also serves to negate the notion that all children require that attention and consideration be given to their unique needs, interests, and abilities. The philosophical and procedural framework of the P.L. 94-142 reflect educational approaches that are child-centered, and provide the kind of legislative protections that should be extended to all students.

Mainstreaming for the sake of mainstreaming is not, in my view, necessarily always in the best interest of the child -- particularly when the appropriate education, training, and support necessary for teachers to successfully facilitate the integration of these students has not been provided. This holds true for any child who could benefit from separate instruction for a portion of their day. The real issue is the stigma that comes to be attached to separate programs when the only children in them are children with severe disabilities, emotional problems, children who are deviant learners, or simply disruptive in class and when the quality of curriculum and instruction in these programs are not designed to meet the needs of students, but rather to accommodate the administrative and organizational needs of adults.

It is difficult to know if the ambivalence I feel toward P.L.94-142, and some of the unintended consequences of its enactment, served to in any way bias the conduct of this research. While I may see myself as an advocate for educational reforms that address the issues of inclusion on the one hand, it is difficult for me to advocate for inclusion of all students when the organization and culture of schools are not prepared to respond in ways that address the needs of all students in a mainstreamed setting. Social change both can and cannot be legislated. Laws do not change the underlying cultural attitudes, beliefs, and
behaviors of individuals, groups, and institutions that give rise to the need for legislative protections under the law to ensure that all people are treated justly by society. The failure of the Civil Rights Act of 1964 to protect the rights of people of color from discrimination is a perfect example of how legislation can only do so much to ensure equal rights and equal treatment on the part of social institutions. Laws do, however, serve to define new social and institutional boundaries for what constitutes the just and appropriate treatment of others, and in doing so serve to accelerate changes that might otherwise go unaddressed by society’s institutions.

These observations leave me torn between the belief that legislation such as that of P.L. 94-142 is necessary, and the belief that because of the ways in which many laws come to be implemented by bureaucratic institutions that these types of laws and social policies end up being detrimental to the overall goals of what legislation seeks to achieve -- in this case, equal educational opportunities for persons with disabilities. What is really needed, is a culture and corresponding educational system that is devoid of social labels, and the layers of subjective assumptions that these labels confer upon children in ways that objectively constrain their potentials and injure their identities as valued members of society; a culture and educational system that values all children, individually and collectively; a culture and educational system that is morally and socially responsible, responsive, and held accountable, providing for the educational, social, and emotional needs and future aspirations of all.