PERCEPTIONS OF STUDENTS WITH DISABILITIES

TOWARD INCLUSIVE REGULAR

EDUCATION CLASSROOMS

Ву

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CHAPTER I

THE RESEARCH PROBLEM

Recorded history documents a recognition of individuals with disabilities. As early as 100 BC, Hippocrates proposed that emotional disturbance was the result of natural causes rather than supernatural powers. Anecdotal writings concerning deviant children began to appear in the eighteenth century. While exceptional individuals of many kinds have been identified by their ordinary fellow human beings since the beginning of recorded history, until the nineteenth century few attempts were made to teach them (Hewett & Forness, 1977). Special education has evolved as a comprehensive attempt to deliver educational services to children with disabilities.

Legislation has provided impetus to the development of educational services. Congress amended the Elementary and Secondary Education Act (1965) to establish a program of federal grants to the states. Congressional priority was to assist states in establishing and improving programs for the education of children with disabilities (Turnbull, 1993). Convergently the Rehabilitation Act (1973) was amended by adding Section 504 which prohibited discrimination on the basis of disability. The Education for All Handicapped Children Act (1975) required participating states to provide

relevant programs for the education of all children with disabilities between the ages of three and eighteen. This law offered federal funds if states would furnish special education within a prescribed format. In 1983, revisions added incentives for preschool programs, early interventions, and transition plans. New federal discretionary programs were established with further reforms in 1986; the purpose was to provide services from birth for children with disabilities (Meyen & Skirtic, 1995). Additional changes in law were provided with the passage of (IDEA), the Individuals with Disabilities Education Act (1990). IDEA emphasized people first language and broadened requirements by which states provided a free, appropriate public education for all students.

One of the six principles of special education law specifies least restrictive placement or environment (LRE), so that children may associate with nondisabled students to the maximum extent appropriate to their needs. This is a Constitutional principle meant to accommodate individual interests. The regulations surrounding the principle of LRE created a presumption in favor of integration. Several reform efforts have advanced this trend towards increased inclusion. The first encompassed research studies which indicated that current special education programs have not had the expected beneficial impact upon the students they serve in terms of academic, self-esteem, or behavioral

skills (Carlberg & Kavale, 1980). The second included litigation under the due process component of special education law.

The Regular Education Initiative (Will, 1986) represented proposals for achieving the spirit of the federal legislation for students with disabilities by extending its rights and resources to all students. new approach was proposed by the Federal Department of Education's Office of Special Education during 1988 and 1989. More recently known as the inclusive education movement (Meyen & Skrtic, 1995), it seeks to integrate students with disabilities by providing them more support for participating in regular education programs. however, those who oppose the Regular Education Initiative (REI) on the basis that full inclusion could mean a loss of hard-won rights and a return to the unacceptable conditions that existed before the passage of the Education for All Handicapped Children Act (Kauffman, Gerber, & Semmel, 1988). During an interview, James Kauffman stated that "while research on special education shows that results for many are disappointing, it is possible for students to do worse, both academically and socially, in inclusive settings than in alternative placements" (O'Neil, 1995, p.9.)

Significance of the Problem

The number of students with disabilities receiving special instruction and services in schools in the United States on any given day is about 4.4 million, representing around 6.5% of the total school-age population (U.S. Department of Education, 1992). These are students who are currently placed in special education programs.

A review of current literature outlined the rationale of the following groups as proponents and opponents of the inclusion issue: researchers, administrators, teachers, and parents. Some researchers argued for the complete dismantling of special education through the abolishment of special education placements and professionals (Stainback & Stainback, 1984). A meta-analysis addressing the issue of effective educational setting found effect sizes that showed a small-to moderate benefit of inclusive education on the academic and social outcomes of special needs students (Baker, Wang, & Walberg, 1995). Others acknowledged that to abolish special education placements in the name of full inclusion was to deprive many of an appropriate education (Fuchs & Fuchs, 1995). School administrators often saw full inclusion as a way to reduce special education costs. President of the American Federation of Teachers has made the point that requiring all children with disabilities to be included in regular classrooms is not only unrealistic, but may be harmful for the children (Shanker, 1995).

Teachers who have been involved in an inclusive program in Delaware reported that the program served both students with disabilities and students without disabilities. One parent of a student with disabilities stated that an inclusive program improved the child's self-esteem and attitude towards studies (Johnston, Proctor, and Corey, 1995). Another parent of a child with disabilities recently testified before Congress that special education placement allowed for constant experimentation to indicate which teaching techniques work (Fuchs & Fuchs, 1995). Research studies have gauged the impact of inclusion on the attitudes of nondisabled students towards peers with disabilities (Baker, Rude, Sasso, & Weishahn, 1994). Little studied are the perceptions of the population of students who have been receiving educational programming in pull-out or resource room programs regarding inclusion.

Problem Statement

The purpose of this study is to describe the perceptions of students currently served in special education programming and students in regular classroom placements toward regular education (inclusive) classrooms. Examining the view students with disabilities take toward regular education may provide insight into the effect of inclusion upon a free, appropriate public education for

them. Ultimately, these students will be most effected by changes in educational doctrine.

In the first century AD the Greek philosopher Epictetus stated that external impressions are a given which cannot be changed, but man has the power to reason and choose how he will react to them. Epictetus believed that men are disturbed not by things, but by the view which they take of them (Stadter, 1980). During the later years of the nineteenth century Alfred Adler (1927), a psychiatrist, stressed social determinants of behavior. Adler merged psychoanalytic theory with social psychology to form his theory of personality. He believed that our reactions and life-style are associated with our basic beliefs and are, therefore, cognitively created. Alfred Adler is credited by Albert Ellis as an influential precursor of an approach towards reeducation known as Rational Emotive Therapy (RET). Developed by Ellis (1962), it is a therapeutic approach that combines components of behavioral theory and cognitive processing. The basic hypothesis of Rational Emotive Therapy is that our emotions stem mostly from our beliefs, evaluations, interpretations, and reactions to life situationS. Piaget incorporated rationalist philosophical views in his discourse on genetic epistemology. He believed that there was a dual relationship between knower and known. As one changes, so does the other. The knower comes to a knowledge situation with his a priori structures which

determine what will be known. Therefore, external reality plays a minor part in knowledge since the knower imposes on it certain structures of his own (Ginsburg & Opper, 1969,). The attributional approach to changes in achievement begins with the idea that perceptions of causation are important determinants of subsequent action (Weiner, 1983). Understanding the basic beliefs and a priori structures of special education students towards inclusion may serve a role in understanding potential success or failure for these students when integrated into regular classrooms.

Definition of Terms

Students with disabilities are categorized within the framework of federal and state regulations. Regulations from the Individuals with Disabilities Education Act (1990) form the basis for state policies and procedures.

Students who are Seriously Emotionally Disturbed (SED):

Those students categorized under federal and state regulations because they demonstrate one or more of the following characteristics over a long period of time, to a marked degree, and with an adverse affect on educational performance:

- 1. An inability to learn, that cannot be explained by intellectual, sensory or health factors.
- 2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.

- 3. Inappropriate types of behavior or feelings under normal circumstances.
- 4. A general pervasive mood of unhappiness or depression.
- 5. A tendency to develop physical symptoms or fears associated with personal or school problems (Oklahoma State Department of Education, 1992, p.53).

Students with Specific Learning Disabilities (LD):

Those students categorized under federal and state regulations because they demonstrate a disorder "in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations (Oklahoma State Department of Education, 1992, p. 54).

Students who are Mentally Retarded (MR):

Those students categorized under federal and state regulations because they demonstrate "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" (Oklahoma State Department of Education, 1992, p. 50).

Students involved in Regular Education (R):

Those students who are not currently, nor have been, served in special education programming.

Inclusion: A concept used to describe the integration of students with disabilities into regular education classrooms. Full inclusion refers to the assimilation of students with severe disabilities. Usually supplementary support is required by special education and supportive services.

Research Question

What are the perceptions of students with disabilities toward the inclusive regular education classrooms they attend, and what are the perceptions of same grade students without disabilities toward inclusive regular education classrooms?

This study will:

- 1. Describe the perceptions of students categorized seriously emotionally disturbed concerning inclusive regular classroom membership.
- 2. Describe the perceptions of students categorized specific learning disabled concerning inclusive regular classroom membership.
- 3. Describe the perceptions of students categorized mentally retarded concerning inclusive regular classroom membership.
- 4. Describe the perceptions of regular education students concerning inclusive regular classroom membership.

CHAPTER II

REVIEW OF LITERATURE

This chapter includes a review of literature relevant to this study. It presents an historical overview of the development of special education; the emergence of the Regular Education Initiative (REI); the movement towards inclusive education; attitudes toward inclusion; studies cited by proponents and opponents of inclusion; and, the possible impact of the perceptions of students on inclusion.

Historical Overview

Special education systems have been attempts to deal with human differences. Most early special educators were physicians (Kauffman & Hallahan, 1981). Modern special education for individuals with disabilities has often been traced to a French physician, Jean-Marc-Gaspard Itard; his work with Victor, the "wild boy of Aveyron", marked a well-known attempt to teach a special needs child (Lane, 1976). During the early 1800's, institutional treatment of individuals who were deaf, blind, and/or mentally deficient provided effective education in small, homelike settings. Clergymen, such as Reverend Gallaudet who headed the first residential school for the deaf; physicians such as Dr. Samuel Howe, who established institutions for the retarded;

and European emigrants, such as Edouard O. Seguin who was an educator of the retarded and disturbed; laid a guiding foundation for special education. According to Brockoven (1972), in the latter part of the nineteenth century the early exemplary residential care of individuals with disabilities degenerated into incarceration in large, dismal human warehouses.

The history of special education in the United States public school system has been complex. It involved the convergence of a number of disciplines, among them: education, sociology, anthropology, psychology, medicine, law, and politics.

Early in the history of the United States educational system, students who did not do well in the school setting simply dropped out. Tyler (1987) reported that before 1910, more than half of children attending school left before completing sixth grade. Special service delivery in these years dealt mainly with children who had observable disabilities (Sinclair & Ghory, 1987). Child labor laws, compulsory education laws, and later the technological revolution changed attitudes towards the importance of educating the populace. Children who had once been assimilated into an agrarian society became a more serious problem for parents and communities (Swanson & Reinert, 1984).

At the turn of the century, professionals in sociology and anthropology began accumulating evidence suggesting a relationship between sociocultural factors and special needs In 1907, the New York City Public Education Association employed visiting teachers who had a combined knowledge of social work and classroom teaching (Krugman, The visiting teacher movement stimulated interest in special education programming. Special classes and resource programs for exceptional children began appearing in public schools. The Council for Exceptional Children was founded in 1922. In 1924, John Lewis discussed special education in what was most likely the first special education textbook published in the United States. He reported that the rationale for special education was found in the fact of variability among children to be educated.

The scientific study of children began in the early twentieth century. The French government asked Alfred Binet and Theodore Simon (1916) to find a way to discriminate between children who could achieve in school and those who would likely fail. Failures were to be placed in special schools for slow learners. In 1905, the Simon-Binet Scale was published to assess higher mental processes. In the United States, a new academic approach used remediation of academic and information-processing deficits to decrease the discrepancy between student capacity and learning

requirements in brain-injured children. Leaders in this approach included Newell Kephart (1971), The Slow Learner in the Classroom and William Cruickshank (Cruickshank, Bentzen, Ratzeburg, & Tannhauser, 1961), The Montgomery County Study.

As the twentieth century progressed, theories of psychology contributed to the growth of special education. Psychodynamic educational practice provided the basis for major intervention programs for the emotionally disturbed. In the 1950's and 1960's, the use of a crisis teacher in school settings was advocated in order to teach and manage children in a regular class. This resource person was trained educationally and psychologically to function as a resource person for special students (Morse, 1968). Frank Hewett (1968) designed an engineered classroom, while Nicholas Hobbs and William Rhodes used the ecological approach in the development and implementation of Project Re-ED (Hobbs, 1965). Theoretical approaches used in classroom application included the concept of the life space interview from Fritz Redl (1965), client-centered theory of Carl Rogers (1970), transactional analysis of Eric Berne (1961), developmental theory of Rudolf Dreikurs (Dreikurs, Grunwald, & Pepper, 1971), reality therapy of William Glasser (1969), and rational-emotive therapy of Albert Ellis (1962).

It became apparent, in the mid twentieth century, that a group of children were failing subjects in school for no apparent reason. Dr. Samuel Kirk (1972) used the term learning disability to describe the problems of these children. The disciplines of neurology and psychology impacted the development of a specific abilities model to instruct students. This model diverted time and effort from instruction in problematic academic skills to target underlying deficits in perceptual-motor and psycholinguistic performance. The specific abilities model was later replaced by the cognitive developmental model. Strategies ensured initial comprehension and followed with drill and practice.

The medical profession continued to impact individuals with disabilities. An influential proponent for classification of psychiatric conditions was Emil Kraepelin who played a dominant role in the establishment of the organic viewpoint (Swanson & Reinert, 1984). This medical model played a significant role in developing categorical systems within special education. During the 1940's a group of theorists showed interest in moving away from specific classification. Programs developed that did not label or differentiate among the various disabilities. This theme has been repeated as at least a minor trend toward assessing and planning for children in terms of variables, instead of relying to any great extent on crude categories as a basis

for specific instructional planning (Reynolds & Lakin, 1987). The use of variables emphasized continuous differences among pupils. Each child was seen as having a unique set of strengths and weaknesses. Students who needed assistance were provided with noncategorical in-class support services. Reynolds recently reiterated this when he stated, "Perhaps there is less need of difference among the various 'special' and 'regular' instructional programs than there is for sharing strengths and delivering such strengths to children who have the greatest needs" (Reynolds, 1987, p. 138).

The Fourteenth Amendment to the Constitution provides equal protection to all citizens. Brown v. Board of Education (1954) gave precedent to guaranteeing right to education for all citizens on equal terms. Under the equal rights protection doctrine, providing separate school programs by race was declared unequal and unconstitutional. The precedence of Brown v. Board of Education became important for children with disabilities; denying benefits to students with disabilities constituted a violation of constitutional rights (Gartner & Lipsky, 1987). In the cases of Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania (1971, 1972) and Mills v. D.C. Board of Education (1972, 1980), it was determined that education is essential for the functioning of all children in society.

The Federal government took an active role in providing special education programs and aid for veterans with disabilities after World Wars I and II. Later, federal legislation strengthened right-to-education cases. Congress first addressed the education of children with disabilities in 1966. It amended The Elementary and Secondary Education Act (1965) to establish a program of federal grants. used these grants to initiate and improve programs for children with disabilities. In 1970, Congress repealed The Elementary and Secondary Education Act, but grant programs with similar objectives continued. Section 504 of the Rehabilitation Act (1973) was amended to cover a broader array of services. This federal civil rights law specifically protected the rights of children and adults with disabilities, including mandating access to all public buildings. The Education for All Handicapped Children Act (1975) required demonstration of a policy that ensured a free, appropriate public education for all children with disabilities between the ages of three and eighteen. Extensive procedural requirements were imposed upon states to ensure compliance with all aspects of the federal law. Services were extended to enable states to include children from birth to age twenty-one (NICHY, 1991). The Individuals with Disabilities Education Act (1990) ensured continued federal support of services for students with disabilities.

Concurrently, the U.S. Department of Education began conducting program reviews in states to ensure compliance with federal special education law. Least restrictive environment was often cited as an area of noncompliance. Students with severe disabilities were served through contracts developed between school districts and outside agencies. These services were delivered in isolated rather than in integrated environments.

Regular Education Initiative (REI)

During the late 1970's and early 1980's, service delivery patterns slowly began to change. Students with severe disabilities were integrated within regular school campuses. Services for students with mild conditions, however, remained the same; they were educated in pull-out programs and self-contained classes (Wilson, 1989). Federal legislation created a financial incentive for increasing the number of students receiving special education services. Child counts from local and state education agencies were used to allocate money. The dependence of funding on child counts established a system that created conditions antithetical to the establishment of proactive and successful programs (Epps & Tindal, 1987).

The issue of free, appropriate public education in the least restrictive environment remains a complex problem. It addresses financial concerns, human rights, parental

concerns, and educational effectiveness. The past decade in public education has witnessed the least restrictive environment language in statutory and regulatory language begin to take on a major significance from policy-level decisions to classroom practice (Sailor, 1991).

The original intention of resource programs was to provide short-term service that would allow the child to function more effectively within the regular educational environment. Madeleine Will (1986), a U.S. Assistant Secretary for Education in the Office of Special Education and Rehabilitative Services, helped promote the issue of service delivery to students with learning problems to national attention. Will challenged that many students with mild disabilities being served within the special education system could better be served through intervention in regular education. The Regular Education Initiative promoted by Will called for the integration of special needs students and regular education students in the same educational setting.

Movement Towards Inclusive Education

The momentum of the reform movement to include students with disabilities in regular education classrooms has been fueled by a series of publications that promoted and expanded the concept. Debate over integration questioned

the current diagnostic and instructional models, practices, and tools of special education (Conway & Gow, 1988).

A restructuring of the separate general and special education systems into a unitary system of public education has been proposed. If barriers separating students with disabilities and students without disabilities are to be fully eliminated, instruction and other services must be provided in natural settings where all students are included (Meyen & Skrtic, 1995). Proponents of inclusion themselves have differed over the issue of which students are to participate in inclusive education. Full inclusion referred to the inclusion of all students, including those with the most severe disabilities.

Attitudes Toward Inclusion

A number of professionals in special education endorsed the concept of inclusion as they expressed concern with the relationship between special and general education. Some supporters interpreted it as a concept of what should change in regular education. These special educators called for a new role for themselves in a consulting capacity.

The initiative met with resistance among other professionals who have supported the continuation of a continuum of services. The purpose of the continuum of educational placements set forth in federal regulations was to ensure an appropriate education for all students with

disabilities. Stafford (1978) reported that sponsors of the regulations in Congress recognized that the mainstream may not be capable of providing an appropriate education to all students, and that mainstream schooling may even be harmful to some special-needs students. It has also met with resistance among some teachers of regular education (Gottlieb & Leyser, 1981). The initiative calls for most pupils with disabilities to spend most of their time in the regular education classroom. There would be few, if any, self-contained classes for students with disabilities. Special education would be completely subsumed within regular education. Federal law is sufficiently vague so that the court system may determine service patterns based on individual and class action litigation.

Studies Cited by Opponents & Proponents of Inclusion

Inclusion has caused national discussion. Exchange of views has led to increased debate and research concerning services currently being provided to students with mild disabilities.

Opponents of inclusion have based their arguments on a variety of issues. From a historical standpoint, the development of special classes was due to the inability of general education to meet the needs of mildly disabled students (Madden & Slavin, 1983). The movement towards inclusion has been based on philosophical commitment, yet

that philosophical commitment appeared to be firmer than empirical evidence warrants (Carlberg & Kavale, 1980).

Kauffman (1985) argued that it is unfair and misleading to equate special education placements with the problems cited in Brown V. Board of Education. Kauffman contended that this court ruling disallowed skin color as a criterion for access or opportunity, while the needs of students with disabilities required accommodations far more complex than any contemplated by the court.

In calling for all children with disabilities to be placed in regular classrooms, regardless of the severity and nature of their difficulty, full inclusion replaces one injustice with another (Shanker, 1995). Children with severe emotional and behavioral problems need to be surrounded with an environment in which everyday events are turned to therapeutic use. This Milieu Therapy uses any activity to teach, change, or reinforce behavior through therapeutic intervention. The moment is seized while it is happening and the child's feelings are still fresh (Fuchs & Fuchs, 1995).

Some data suggested that rural students are more at risk for academic and behavioral problems than urban and suburban students (Huebner & Wise, 1992). Research has shown that enrolling students with disabilities in regular classes resulted in a high rate of failure and drop out among this population (Zigmond & Thornton, 1985).

Proponents of inclusion point to the fact that the full inclusion approach to the provision of special education services for low-incidence and severe disability populations appears to be gaining strength across the country (Sailor, 1991). They stated that integration of students with disabilities has been an attempt to reverse the isolation of students physically and socially and to remove limitations of their exposure to the established regular education curriculum (White & White, 1993).

Efficacy studies have shown positive outcomes on social and, to a lesser degree, academic integration of the population with more severe disabilities (Sailor, 1991). Evidence from the past fifteen years has suggested that segregation of special students in separate classrooms was actually deleterious to their academic performance and social adjustment, and that special students generally performed better on the average in regular classrooms (Baker, et al., 1995).

The court decision in <u>Oberti v. Clementon</u> (1993), upheld the right of children with disabilities to be educated in regular classrooms. In addition, it placed the burden of proof on school districts to demonstrate that a segregated placement is the best education approach for individual students. In an interview with John O'Neil (1995), Mara Sapon-Shevin has suggested that there is no way

that a child in a segregated classroom can learn to be part of the broader community.

Perceptions of Students with Disabilities Toward Inclusive Classrooms

The purpose of this study is to investigate the perceptions of students with disabilities and those without disabilities toward inclusive classrooms. Research has indicated few consistent benefits for students with mild disabilities in special classes in terms of academic skills, self-esteem, or behavior (Carlberg & Kavale, 1980). Evidence suggests that placement in general education classes is also fraught with problems (Madden & Slavin, 1983). Meeting the academic and social needs of students with disabilities presents a legal and ethical challenge.

Educational practitioners and researchers have become aware of the importance of student and teacher perceptions of performance as determinants of behavior (Levine and Wang, 1983). The study of the perception process itself and the impact of perceptions on educational performance has led to interdisciplinary dialogue between educational and social psychological researchers. A shift has occurred from the use of objective observations to the use of students' perceptions in measuring classroom climate. This trend relies more on perceptions for understanding classroom processes.

Assessment of classroom interaction through the students' perceptions is of high ecological validity and it appeals to the common sense, since they are the targets of the teacher's behavior and their (subjective) experience is what really counts. Moreover, students' perceptions are based on long, accumulated experience under natural conditions, less likely to be distorted as perceptions of outside observers might be (Babad, 1990, p. 1).

The perception of why an event has occurred relates to affect, and emotions are motivators of behavior (Weiner, 1983). A student's beliefs about the reasons for a particular performance are critical to the perception of how successful that performance is determined to be. Performance believed to be due to internal and controllable causes produces stronger feelings than performance attributed to external and uncontrollable causes. concept of locus of control focuses on an individual's perception of the location of the force responsible for the development of an experience. Students with internal locus of control perceive self as the causal factor in determining events in the environment. Students with external locus of control perceive forces outside themselves such as curriculum, peers, and teachers as determiners of events. Internal locus was positively related to degree of classroom participation, academic performance, scores on academic achievement tests, ability to delay gratification, problem solving, and persistence in solving difficult intellectual tasks. Research showed a relationship between changes in student perception of locus of control and improvement in

skill acquisition and school performance (Wang, 1983).

Student competence and involvement were more central for students with LD and autonomy and support-of-autonomy variables were more central for SED students. Internal motivation variables were important for achievement and adjustment of special needs students (Deci, Hodges, Pierson, and Tomassone, 1992). A close relationship was found between certain attitudinal measures and school achievement. It was shown that students' interests and attitudes contributed more to variation in school achievement than did student background factors, teacher characteristics, and school variables.

Success and failure are not concrete entities. They are psychological states determined by perceptions of reaching or not reaching a goal. Older elementary students and high school students relied more upon personal standards and social information when judging success. Students are daily surrounded by information about the performance of others in the class. Responses to social comparison information from peers and teachers resulted in perception of performance. Research into the impact of social comparison information upon mainstreamed students has suggested that students with disabilities sometimes suffer social rejection from peers and score lower on self-concept scales than those who remained in special education classrooms. Mainstreaming students does not insure

improvement of peer interaction or self-concept and may lead to destruction of motivation rather than to its enhancement (Levine, 1983).

Self-concept and peer acceptance in students with learning disabilities showed peer acceptance ratings similar for students classified learning disabled and for low achieving students (Vaughn, Hogan, Haager, and Kouzekanani, 1992). In our culture, being successful in schoolwork has been believed to require hard work plus ability. An overemphasis upon competition may have made it impossible for low-ability students to ever see themselves as successful in school environments (Frieze, Francis, and Hanusa, 1983).

Variations in teacher expectations and behavior may make it difficult for students to define roles; low-achieving students find it hard to understand when and how to approach teachers for help with schoolwork (Good, 1983). Pupil responses to teacher questions measure type and quality of teacher interaction (Hammill & Bartel, 1990). Students attribute different meanings to particular interactions with teachers. Calling on a high achiever has been perceived by students as an emotional support factor. Calling on a low achiever has been perceived by students as reflecting pressure (Babad, 1990).

Certain teaching adaptations that seem desirable and were commonly used by educators were less desirable to

students. Teaching style adaptations included using different textbooks, using different tests, and modifying homework assignments. Students preferred adaptations in teacher interaction, including teachers working more closely with students. High achievers were more likely to prefer teaching adaptations than were low achievers. Students who most needed adaptations were more likely to prefer teachers who did not make adaptations (Vaughn, Schumm, Niarhos, and Gordon, 1993).

Students with little initial interest in learning may be helped by extrinsic rewards but these rewards may be detrimental for students with high initial interest due to a change in motivational orientation (Pittman, Boggiano, and Ruble, 1983). Effective learning requires self-involvement that moves students beyond the level of receivers of curriculum content to partners in the learning process. Basic skills remediation, functional skills that apply to life situations, and curriculum that focuses on teaching students how to learn are critical components of a successful program (Hardiman, Drew, & Egan, 1996).

Students do not view inclusion in the same way as adults and should be consulted about academic programming. If success and failure to learn were at least partly attributed to learners, then the students' perceptions of teaching practices needed to be discerned (Blumenfeld, Hamilton, Bossert, Wessels, & Meece, 1983).

A growing number of psychological researchers have become interested in the role a student's internal dialogue plays in his behavior (Kerr, 1987). A basic premise of Adlerian psychology has been that human action always has a definite purpose. A model based on Adler's theories alleges that misbehavior occurs from one of four methods to attain self-worth: attention seeking, power seeking, revenge seeking, and assumed disability (Dreikurs et al., 1971). Albert Ellis, based on the earlier theory of personality developed by Adler and the model set forth by Dreikurs, stressed that "we control our ideas, attitudes, feelings, and actions, and we arrange our lives according to our own dictates" (Thompson & Rudolph, 1988, p. 104).

Summary

Attempts to deal with human differences have been influenced by a number of professional disciplines. A review of literature has shown the multifactored evolution of special education knowledge and practice for children with disabilities. Within the context of inclusive classrooms, learning is impacted by curriculum, peer interaction, teacher interaction, teaching style, learning style, and self-concept. Reactions to learning situations are thought to depend upon the belief structure of each individual. Therefore, examining the belief structures of students toward inclusive classrooms may provide an

important facet in the dialogue on the benefits versus detractions of inclusion for students currently served in special education programming.

CHAPTER III

METHOD

The research method, including procedures employed in collecting and analyzing data for this study, is detailed in this chapter. Q methodology was used to document the subjective opinions and reactions students have relative to regular education (inclusive) classrooms. The purpose of this study was to investigate perceptions toward inclusive classrooms as held by students currently placed in them. After an explanation of the methodology used, a description of the students who were invited to participate is given, the process used to develop the Q-sort is explicated, research procedures are described, and data analysis explained.

Q Methodology

Q methodology, first developed in the 1930's by William Stephenson (1953), has been described as an instrumental and philosophical approach to the study of subjectivity. Student subjectivity is considered to be synonymous with personal viewpoint, beliefs, experience, and background. Performing a Q-sort is an evaluation for which right answers, as such, do not exist. Stimuli are placed in an order that is significant from the standpoint of the person completing the sort. In this study, understanding of

student beliefs and group judgments was derived through the use of statements about inclusive classrooms. The ordering of statements by each individual reflected differences in the amount of importance each statement had for that person. Thus, a picture of the internal viewpoint toward inclusive classrooms of each individual was shown. The data that resulted from the set of statements arranged by each student were analyzed to yield useful statistics for the interpretation of meaning.

In Q methodology, the research variable becomes the people performing the Q-sorts, not the various Q-sort statements. Factor analysis conducted with Q methodology is, therefore, considered to be appropriate to determine what people perceive related to the subject being studied. Students associated with a certain factor are assumed to have a common perspective, or to form clusters of persons, according to the similarity in their rank ordering of the statements (Stephenson, 1953).

Studies have shown the test/retest reliability of data gathered through Q methodology to be 0.80 and higher (McKeown & Thomas, 1988). It is thus assumed that given the same items, the students within this study would produce additional Q-sorts that were highly correlated to their original sort. Content validity considers the theoretical applicability of the test items for their relevance to the subject being studied. Validity is not considered

particularly relevant in a statistical sense in Q-sort methodology. Q-sort is subjective by definition and there is no outside criterion for a person's own point of view Brown, 1980).

Generalizations in Q-methodology are not thought of in terms of sample and universe. Samples in Q studies are not usually drawn randomly, nor are they generalized to large populations of individuals. "All that is required are enough subjects to establish the existence of a factor for purposes of comparing one factor with another" (Brown, 1980, p. 192). For this reason, Q-method typically employs small numbers of respondents (McKeown & Thomas, 1988). Recognizing that the factor analytic model in Q methodology represents the sorts of people, increasing the number of persons on any factor is thought to have little impact on the results. Thus, the results are expected to be valid for other persons of the same potential type (Brown, 1980). Persons of any particular outlook would be expected to load highly on the same factor. For example, in the present study, the results apply only to those students participating in this study. However, one might conjecture that other rural students, of similar age, with similar educational placements, would have similar beliefs about inclusive classrooms.

Q is well adapted to studying aspects of intensive educational programs such as attitudinal changes of students

in school. It has an important contribution to make in behavioral research. "Q is an important and unique approach to the study of psychological, sociological, and educational phenomena" (Kerlinger, 1973, p. 598). This study used Q methodology to measure each student's point of view regarding inclusive regular education classrooms.

Subjects

Students currently enrolled in a rural school district located in the south, central United States were invited to participate in this study. This community lies in close proximity to a university town. The population is diversified. A number of residents commute to professional jobs, while others practice an agrarian lifestyle. A majority of the student population is bused to school each day.

This rural education district encompasses facilities that serve five hundred and twenty students in the elementary, middle, and high schools. Forty of these students, ages twelve through nineteen, took part in the study. Membership in cultural groups of participants included Native Americans (n=4), African Americans (n=1), Mexican Americans (n=1), and Caucasians (n=34). Table 1 specifies the age level, male/female designation, and educational category for each of the forty participants.

Table 1

Students in O-sort by Educational Category & Age Level

| Age Level | | | | | | | | | | | |
|-------------|-------|---|-----|-------|---|-------|---|-----|-------|--|--|
| Educational | 12-13 | | 14- | 14-15 | | 16-17 | | -19 | _ | | |
| Category | М | F | М | F | M | F | М | F | Total | | |
| SED | 4 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 9 | | |
| LD | 2 . | 1 | 3 | 0 | 2 | 0 | 2 | 0 | 10 | | |
| MR | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 5 | | |
| R | 3 | 2 | 3 | 2 | 3 | 1 | 1 | 1 | 16 | | |
| Total | 10 | 4 | 9 | 2 | 7 | 2 | 4 | 2 | 40 | | |

SED = Seriously Emotionally Disturbed

LD = Specific Learning Disability

MR = Mental Retardation

R = Regular Education

All potential participants in the SED and MR educational categories were asked to take part in the study. Due to higher student membership in the LD category, students were matched by age and then randomly chosen. Parents of seventeen of the students in the special education categories were contacted in person or by phone. The remaining seven were sent a letter of invitation for participation requesting written parent permission (see Appendix A). Students from comparative age levels in regular education classes were also chosen at random. Eleven of the parents of regular education students were contacted in person or by phone. Thirteen letters of

invitation to participate were sent home. The remaining five regular education students who took part in the study were those whose parents returned a signed permission form. Students were informed in written format of the purpose of the study, and student consent was obtained (see Appendix B). Student names and identifying characteristics were not used so anonymity was assured.

All of the students with disabilities have been served within special education programs for at least two years. None of the students has ever been served solely in a special education setting; all have been included for at least a portion of the day in inclusive education classrooms. Inclusive classrooms were determined to be those in which students with disabilities were integrated into regular education classes. Within this school district, support services have been provided for these students in inclusive classes by special education staff in collaboration with regular education teachers. These support services included daily staffings, assistance with assignments, individual test settings, and a full time aide in vocational classes.

Table 2 presents the amount of time students with disabilities spend in inclusive regular education classrooms. The table delineates number of students from each of the four educational service deliver categories and the mean number of hours per day, with a standard deviation,

that are spent in inclusive regular education classrooms. The least amount of time in regular education classes was experienced by students in the MR category. Note that students from the regular education category spend all of their educational placement time in the inclusive classroom. This accomplished two things; it provided the study with a full inclusion standard, and it demonstrated that the regular education students had no alternative or remedial time outside of the classroom.

Table 2

Student Category, Number Participating, & Average Hours per

Day in Regular Classes

| Category | Frequency | Hours | SD |
|---------------------------------|-----------|-------|------|
| Seriously Emotionally Disturbed | 9 | 5.0 | 1.80 |
| Specific Learning Disability | 10 | 5.4 | 1.17 |
| Mental Retardation | 5 | 2.4 | 0.55 |
| Regular Education | 16 | 7.0 | 0.00 |

Instrumentation

The list of statements for the Q-sort instrument employed in this study was developed from the domain of inclusive educational practice and theory. First, a population of items called a concourse in Q methodology (Brown, 1980) was drawn from several literary sources.

Concepts about the issue of inclusion were gathered from the review of literature along with terms from learning theory and the counseling theories of Adler (1927) and Ellis (1962). Next, students from two small school districts were interviewed concerning their reactions to integrated Conventional items, the statements from classrooms. literature and theory, and naturalistic items, the statements gathered from the interviews with students, were combined to form what is termed a hybrid or mixed sample (McKeown & Thomas, 1988). Q technique is defined by a particular logic of inquiry. To reduce the statements (n=200) to a manageable yet representative number, statements were chosen according to built in criteria. dimensions or criteria built into the design reflected issues occurring in the public debate of practice and theory (McKeown & Thomas, 1988). A content analysis of the entire set of statements revealed six potential categories occurring in the public debate of inclusion. Areas were nominated when they occurred in at least two documented conventional sources (from literature) and one naturalistic source (from student interviews). These categories were entitled curriculum, peer interaction, teacher interaction, teaching style, learning style, and self-concept. The category of curriculum dealt with basic grade-level academic/achievement content, functional skill components, and learning strategies material. Peer interaction related

to student attitudes towards peers and student perception of what to expect from peer relationships. Teacher interaction considered teacher expectations and behavior. This included the manner in which teachers related to a specific student and to students as a group. The category of teaching style considered various approaches to imparting information.

Included were the use of common teaching interventions such as pacing and individualized attention. Learning style focused on concepts of organizational skill, on-task behavior, and internal locus of control. Self-concept probed understanding and acceptance of oneself. Basic concerns included esteem for self, feelings of worthiness, and ability to make responsible decisions.

Seventy-two items that related most directly to the six theoretical categories were chosen (see Appendix C). This was based on representation of each concept and nonambiguous language. The items were bi-polar sets; one statement represented the concept in a positive manner and the other represented the concept in the opposite way. Each set was judged by a panel of experts from a local university level of educators to determine validity and item use. All three professors are considered experts in the area of special education who have an extensive experiential base with Q methodology. It was decided that positive orientation of items would be the best option for incorporation into the statements. Ranking items from most like inclusive classes

to most unlike inclusive classes was best accomplished from a positive framework. The hazard of confusing students with double negative ideas was thus eliminated.

Thirty-six items (see Appendix D), the positive descriptive statement from each set, were chosen to comprise the Q-sort. The standard range of one to eleven for a thirty-six item sort was used (see Appendix E). Each statement was placed or ranked in a column valued from -5 to The middle column which is valued at 0 indicates that items placed there were of no positive or negative theoretical value to the individual student completing the sort. High placement items, those put at either end of the Q-sort distribution, indicated a strong positive or negative reaction of the student to that statement with regard to inclusive classrooms. Items on the right or positive side of the distribution were rated as most like an inclusive classroom according to the student. Items on the left or negative side of the distribution were most unlike the student's opinions of an inclusive classroom.

A small pilot study was conducted within the confines of a class project. Two students from each educational category (SED, LD, MR, R) and in the twelve to nineteen age range were asked to complete the Q-sort. As a result of the pilot study, the thirty-six statements were revised (see Apendix F) to ensure equal representation of categories, a clear understanding of items by students, and an appropriate

level of readability. These statements were placed on cards to be ranked by each of the forty research participants.

Procedures

The Q-sort was administered on an individual basis.

Students participated within a private classroom setting,
that is separate from regular education classes, and during
a class period that was mutually convenient to the student
and the researcher.

Students were read a definition of inclusive regular education classrooms as follows: "an inclusive regular education classroom in one in which all students in a grade receive instruction for a subject in the same classroom setting." Then, any questions regarding this definition were answered by the researcher. Clarification was ensured by asking each student to summarize the definition before the sort began. Students often paraphrased their understanding of inclusion as "the classes everybody goes to, like science or home ec." (Field notes, 2/22/96, p. 4).

Appendix F) according to the following condition of instruction: "sort the items according to those you believe are most like an inclusive regular education classroom to those that you believe are most unlike an inclusive regular education classroom." Students began by forming a three pile general sort. Statements most like an inclusive

classroom were placed in a pile on the right. Statements most unlike an inclusive classroom were placed in a pile on the left. Statements that fell in between the two extreme ends were placed in a pile in the center. When this process was complete, students moved the statements from the three piles onto the sort board. Students with reading problems were able to have the concourse items read orally as often as needed to complete the sort. The reliability of the technique and the quality of the data were not considered to be undermined by reading the Q-sort items to the students.

An important step in Q methodology that is often overlooked after data are analyzed is the interview (Brown, 1980). Students whose Q-sorts had extreme loadings, either high or low, were interviewed to determine if the interpretation of the Q-sort accurately reflected individual points of view. Nineteen students were interviewed on an individual basis. The use of a tape recorder inhibited student response, so it was discarded. Instead, the researcher kept accurate field notes, with quotations for statements that directly related to the factor array interpretation. The particular questions asked varied according to which factor array the student represented (see Appendix G). The original questions were followed with questions that probed more deeply for student explanation. Additional information concerning specific frame of reference was gathered through this process.

Data Analysis

Data analysis involved the sequential application of three sets of statistical procedures that included correlation, factor analysis, and computation of factor scores. This was followed by qualitative interpretation of the factors.

"Correlation coefficients are employed to determine the extent to which statement patterns in two Q-sorts are similar" (Brown, 1980, p.267). It is believed that students who rank order the items in approximately the same manner have similar attitudes towards the topic in question. The correlation matrix was used to extract factors in which students grouped themselves as like-minded.

The factoring routine employed was centroid factor analysis from the computer program pcq3 (Stricklin, 1993). This method has been preferred by Stephenson because the number of ways of rotating through factor space is infinite. The permissiveness of the centroid method allows all factor solutions to be examined, and the researcher is free to be guided by theory. In contrast, the principal-components method has a best solution; it is the solution that maximizes the variance of each succeeding factor. The significance of any Q-sort used to define each factor was determined to be 0.45. This statistical criteria is used as a common default in pcq3 because of its conservative nature

(Brown, 1980). The varimax method was used to rotate the factors to achieve orthogonal solutions. It enabled procurement of a simple vantage point from which to describe the data. Q-sorts were calculated to form a single array of scores for each factor. Factor scores were converted to z-scores and used to determine the arrangement of statements on each factor array. Student Q-sorts were examined for similarity to the six models.

Q methodology (McKeown & Thomas, 1988) enabled respondents to communicate a point of view from an internal frame of reference. Following data analysis, the traits composing each of the Q-data factor arrays described the meaning of self reference or importance to the subjects loading on that factor. Interpretations of factors extends beyond statistical analysis to theoretical criteria. This includes using interview data, consensus and discriminating items, and researcher interpretations (Brown, 1980).

CHAPTER IV

RESULTS

Results of the analysis procedures employed in this study are presented in this chapter. Forty students, ages twelve through nineteen, completed a Q-sort to determine the operant factor structure or types of opinions at issue for students concerning inclusive education classrooms. After a description of the data analysis, the six factors that emerged are described.

Data analysis in Q methodology involves the sequential application of three sets of statistical procedures: correlation, factor analysis, and the computation of factor scores. Each of these procedures are presented, and the results include an interpretation of the factor scores.

Description of the Results

Correlation

Using pcq3 (Stricklin, 1993), correlation coefficients were employed to determine the extent to which rank order patterns in Q-sorts were similar. Each sort was compared to all other sorts. Pearson correlation coefficients provided this measure of association. Higher positive correlations indicated similar Q-sorts. Higher negative correlations indicated an inverse relationship between Q-sorts. The Q-

sorts in this study were correlated producing a 40 X 40 matrix (see Appendix H).

Factor Analysis

Factor analysis lends statistical clarity to the behavioral order shown in the correlation matrix. Factors indicated persons who rank-ordered the statements in the sort in essentially the same fashion (Brown, 1980). In this sense, the subjects have grouped themselves through the process of Q-sorting. The centroid factoring routine in pcg3 was used to obtain factors.

Nine factors were extracted that had eigenvalues greater than 1.00 (see Appendix I). For each eigenvalue, the percentage of total variance accounted for by each factor was also computed. Varimax rotation was used to examine preferred solutions, and the nine factor solution was rejected in favor of a more parsimonious six factor solution. Examining the five, six, and seven factor solutions, using inspection criteria, yielded the six factor solution. Inspection criteria used were: accounting for the most number of sorts, rejecting factors with no significant loading, accounting for divergent outlying perspectives, and relating to theory (Brown, 1980). Other solutions were possible and considered, but this six factor solution best met the inspection criteria. One of the factors had students that loaded significantly on both the

positive and negative ends. This bi-polar factor meant that seven actual factors responded to the research question-- what are the perceptions of students with disabilities and of students without disabilities toward inclusive regular education classrooms?

The six factor solution is shown in Table 3. Each factor is identified by a letter of the alphabet. Student numbers indicate the identity of each student loading on that sort. For example, Factor A was significant, over 0.45, for four students. Student number 6 was listed as a confounded sort. This indicates that this student loaded significantly on more than one factor. Five students did not load significantly on any of the six factors.

Table 3
Six Factor Solution of Student Perceptions Toward Inclusion

| Total Students | Sort | Student Numbers |
|-------------------|-------------------|----------------------------|
| [4] | A: | 9 10 26 40 |
| [6] | B: | 2 4 5 20 22 23 |
| [3] | C: | 3 11 24 |
| [9] | D: | 13 25 27 30 32 34 35 37 39 |
| [9] | E: | 1 7 12 15 28 29 31 33 36 |
| [3] | F: | 17 18 21 |
| [1] | Confounded sorts: | 6 |
| [5] | Not significant: | 8 14 16 19 38 |

A = The Competent Student

B = The Separatist Student

C = The Confident Student

D = The Nonconformist Student

E = The Paradoxical Student

F = The Curricular Student

The six factor solution summary is presented in Table

4. The eigenvalues and percent of total variance accounted
for by each factor are shown at the bottom of the table.
Altogether, this solution accounted for 51% of the total
variance. It will be noted that the eigenvalues for each
factor are not in descending order. As stated in the
section on data analysis, centroid factor analysis
(Thurstone, 1947) does not have a solution that maximizes
the variance of each succeeding factor. The column entitled
h2 shows communality, or the sum of squares of factor
loadings by rows. Communality indicates the percentage that
one student response associated with the responses of the
other students in the study. A student with a low h2 score
has responded in a unique way that has little in common with
other students.

On the table, each factor is identified by letter of the alphabet at the top of the column. Students are identified in the first column by their educational placement. Starred numbers are those that exceed the 0.45 cut off level for significance. For example, student R1 is a regular education student whose Q-sort loaded negatively on Factor 5.

Table 4

Varimax Rotation of the Six Factor Solution

| Sort | Factor | A | В | С | D | E | F | h2 | |
|------|--------|-----|------|-----|------|------|------|----|--|
| 1 | R1 | 19 | -36 | 31 | -15 | -47* | -20 | 55 | |
| 2 | R2 | -1 | -70* | 29 | -18 | -5 | -8 | 62 | |
| 3 | R3 | -3 | -3 | 61* | -9 | -17 | 1 | 41 | |
| 4 | R4 | 4 | -60* | 14 | 4 | -19 | 39 | 57 | |
| 5 | R5 | 16 | -64* | -4 | -28 | 0 | -11 | 53 | |
| 6 | R6 | 48* | -29 | 20 | -20 | -47* | 15 | 64 | |
| 7 | R7 | 11 | 13 | 32 | -14 | -55* | -10 | 46 | |
| 8 | . R8 | 38 | -35 | 24 | -13 | -40 | 28 | 58 | |
| 9 | R9 | 52* | -31 | 4 | -29 | -15 | 12 | 49 | |
| 10 | R10 | 63* | -2 | 5 | -7 | -3 | -12 | 42 | |
| 11 | R11 | 13 | -9 | 53* | 2 | -27 | -16 | 40 | |
| 12 | R12 | 12 | -15 | 39 | -33 | -59* | -10 | 66 | |
| 13 | R13 | 2 | -23 | -7 | -68* | -5 | -2 | 52 | |
| 14 | R14 | 12 | -28 | 42 | 7 | -5 | 41 | 44 | |
| 15 | R15 | 2 | -22 | -16 | -6 | -46* | -25 | 35 | |
| 16 | R16 | 25 | -4 | 38 | -6 | 0 | -9 | 22 | |
| 17 | MR17 | 5 | 0 | 2 | -5 | 3 | -47* | 23 | |
| 18 | MR18 | 42 | -25 | 12 | 25 | -28 | -52* | 66 | |
| 19 | MR19 | 40 | -20 | -1 | -32 | -43 | -20 | 53 | |
| 20 | MR20 | 18 | -65* | -5 | 8 | -39 | -12 | 63 | |
| 21 | MR21 | 24 | -5 | 7 | -17 | -13 | -46* | 32 | |
| 22 | LD22 | 16 | -55* | 33 | -21 | -2 | -8 | 49 | |

| 23 | LD23 | -32 | -55* | -3 | 13 | -8 | 43 | 61 | |
|----|------------------|------|------|------|------|------|------|-------------|--|
| 24 | LD24 | 32 | 17 | -48* | -9 | -6 | -19 | 41 | |
| 25 | LD25 | 0 | -41 | 29 | -52* | 9 | 8 | 54 | |
| 26 | LD26 | 53* | 11 | 17 | -10 | -8 | -33 | 45 | |
| 27 | LD27 | 31 | -35 | 24 | -46* | -28 | -31 | 66 | |
| 28 | LD28 | 11 | -22 | 31 | -17 | -66* | 32 | 72 | |
| 29 | LD29 | 11 | -22 | 31 | -17 | -66* | 32 | 72 | |
| 30 | LD30 | -11 | -22 | 22 | -46* | 9 | -32 | 43 | |
| 31 | LD31 | -9 | 10 | -12 | 1 | -65* | 14 | 47 | |
| 32 | SED32 | 23 | 8 | 17 | -52* | -28 | -16 | 46 | |
| 33 | SED33 | 12 | -12 | 7 | 6 | -49* | -22 | 33 | |
| 34 | SED34 | -4 | 4 | -43 | -53* | -15 | -4 | 49 | |
| 35 | SED35 | 23 | -26 | -27 | -53* | -37 | -4 | 61 | |
| 36 | SED36 | 3 | -36 | -11 | -24 | -45* | -34 | 52 | |
| 37 | SED37 | 26 | -4 | 3 | -64* | -12 | -7 | 50 | |
| 38 | SED38 | 2 | 18 | -4 | -39 | -31 | 4 | 28 | |
| 39 | SED39 | 18 | -7 | 9 | -63* | -4 | 1 | 44 | |
| 40 | SED40 | 57* | -43 | -16 | -30 | -12 | -7 | 64 | |
| | eigens % var. | 2.85 | | | | | 2.35 | 20.03 51 | |

R=Regular Education
MR=Mental Retardation
LD=Specific Learning Disability
SED=Seriously Emotionally Disturbed

Factor Scores

A model Q-sort or theoretical factor array, one for each factor, was generated. Each model followed the same pattern as the original Q-sort distribution and score sheet (see Appendix E). Student Q-sorts were calculated to form a single array of factor scores for each factor. Factor scores were converted to z-scores (see Appendix J). converted scores were used to determine the arrangement of statements on each factor array. For example, the concourse item in the +5 position on Factor A is the concourse item with the highest positive z-score. The item in the -5 position on Factor A is the concourse item listed with the highest negative z-score. Students who arranged their Qsorts in ways that were significantly similar (0.45) to the model (see starred numbers on Table 4), loaded on that factor. Within the student cells of Factor A, the students whose Q-sorts were similar, were students from regular education (R) 9 and 10 with scores of +52 and +63; a student from the Learning Disabilities category (LD) 26 with a score of +53; and, a student from the Seriously Emotionally Disturbed category (SED) 40 with a score of +57. Students with extreme loadings on this factor characterize a theoretical profile of the way this type of student perceives inclusive regular education classrooms.

A second table has been provided for each factor. This table provides a comparison of the factor with the other

five factors. The Q-sort statement or statements that distinguished this factor from the others are shown. Items must be three piles apart to be considered distinguishing. On Factor A, concourse item 15 (I am usually able to get help from the teacher when I need to.) rated +5; the next closest Factors were D and E with +2--exactly 3 piles away.

Profile tables for each of the six factors (A-B-C-D-E-F) are shown in odd-numbered tables 5-15. Distinguishing item tables for each factor are shown in even-numbered tables 6-16.

Factor Interpretation

Table 5

Factor A - The Competent Student

| Inclusion | | | | | | | | | |
|---|--------------|---------------------|---------------------------|---------------------------|--------------------------|---------------------|----------------|----------|----|
| -5 . -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
| 12 30 1 | 26 3 9 | 34 24 2 19 | 7 35 31 22 21 | 10 17 6 25 23 | 33 27 4 5 | 13 29 16 8 | 18 20 32 | 36 28 | 15 |
| Sorts with si R9 R10 LD26 SED40 | ignif | icant | load | ings: | +52 +63 +53 +57 | , | | | |

The Competent Student

This factor clustered around statements that dealt with teacher interaction, learning style, and self-concept. These students indicated a comfort level in inclusive regular education classes. Most like statements included:

- I am usually able to get help from the teacher when I need to. (z-score = 1.583)
- 28 A good reward is to know I have done my work correctly. (z-score = 1.571)
- 36 I am the kind of person who does my best.
 (z-score = 1.487)

Four students had Q-sorts that loaded on this factor, that is their sorts were significant (over 0.45). They included two regular education students who are consistently on the honor roll, one LD student who has had a successful year, and one SED student who attends the resource room for two classes each day and has participated in the design of his educational program.

The competency issue for this type of student is indicated by the positive internal dialogue shown in the statements that are most like an inclusive classroom. The perception exists that the requisite ability to learn, function, and respond in this setting is present. They felt that it was usually easy to get help by raising your hand and interacting with the teacher. Follow-up interviews with students R10, LD26, and SED40 did show a discrepancy in the approach of regular education students and those served in special education. Clues has to how you know you have done

your best revealed an internal locus of control for the regular education student, "I like the way I feel when my work is done" (Field notes, 3/13/96, p. 12). An external locus of control was present for the students in special education. Answers included, "I know because I get good grades, and the teacher tells me so." Another student stated, "I follow the rules" (Field notes, 3/13/96, p. 13).

The item that distinguished Factor A is shown in Table 6. This indicates that the position of this Q-sort statement in Factor A is quite different from the position of this statement on any of the other theoretical factor arrays.

Table 6

Distinguishing Item for Factor A

Factor A - The Competent Student

| | Factors | A | В | С | D | E | F |
|------------------------------------|---------|----|---|----|----|----|----|
| 15. I am usually at from the teach | | +5 | 0 | -3 | +2 | +2 | -1 |

Factor B - The Separatist Student

Table 7

| Inclus | ion | | | | | | | | | | |
|--------------------------|-------------------------|----------|---------------|----------------------|--------------------------|---------------------------------|----------------------------|--------------------|----------------|----------|----|
| | -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
| • | 12 | 30 17 | 2 22 20 | 26 29 13 19 | 7 33 3 24 27 | 14 15 23 32 10 5 | 21 8 34 4 35 | 1 25 6 18 | 28 16 31 | 36 11 | 9 |
| Sorts v R R R R R MR LD2 | 2 4 5 20 22 | signi | ficant | t load | dings | ' (! | 70 60 64 65 55 | | | | |

The Separatist Student

Students within this factor envisaged a separate system of class rules for different students. They admitted to being distracted by happenings in the classroom, but did not perceive persecution by other students. Negative loadings dealt with statements concerning teacher interaction and learning style. Most unlike statements included:

- Other students sometimes make fun of or tease me. (z-score = -1.943)
- When I am working on an assignment at my desk, I do not pay much attention to what is happening in the classroom. (z-score = -1.826)
- The class rules are the same for all students in the class. (z-score = -1.398)

Students with Q-sorts loading on this factor included three regular education students, one MR student with relatively good reading skills, and two LD students. One of the LD students has been fully mainstreamed and one will graduate from high school this year. Four of these students are actively involved in extra-curricular activities and are considered leaders within the school community. The facts relevant to the perception of separate systems were revealed in student interviews. Students R2, MR20, and LD22, had similar viewpoints. They stated that some students were "yelled at" more than others, and some received more teacher It was believed that several students were able assistance. to have more free time and to talk more in class. special education student said that distractions occurred when other students "make me laugh" or "want to tell me something." Frustration was indicated by the statement, "sometimes I am the only slow one on the assignment. Everybody else gets done quicker than I do. I do not feel good about it. One time I had to stay up most of the night to get an assignment done. I did not feel too good about (Field notes, 3/12/96, p. 7). that"

Table 8 again shows the concept of separate systems due to interaction with teachers. This statement is a distinguishing item for Factor B.

Table 8

Distinguishing Item for Factor B

| Factor B - The Separatist Student | | | | | | |
|--|---|--------|----|----|----|---|
| Factors | A | В | С | D | E | F |
| 17. The class rules are the same for all students in the class | 0 | -4 | +3 | +5 | +3 | 0 |
| en e | | | | | | |

Table 9

Factor C - The Confident Student

| Inclusio | n: Fa | actor | C is | bipo | lar | | | | | |
|-------------------------------|----------|---------------|---------------------|---------------------------|--------------------------------|--------------------------|----------------------|---------------|------|----|
| -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
| 19 | 12 20 | 15 23 8 | 26 2 24 21 | 4 16 25 13 31 | 5 1 36 22 33 28 | 6 18 27 7 30 | 14 32 34 35 | 9 29 17 | 10 3 | 11 |
| Sorts wi R3 R11 LD24 | th si | gnific | cant : | loadiı | ngs: | +61 +53 -48 | | | | |

This factor was bipolar. It had substantial positive and negative loadings and can be viewed as two unique factor representations.

The Confident Student

Students whose Q-sorts had positive loadings on Factor C felt a measure of success and self-assurance in dealing with inclusive classrooms. Statements on positive loadings dealt with the areas of curriculum and peer interactions.

Most like statements included:

- I usually know how to join in when a group of students is having fun together. (z-score = 1.630)
- 3 I am able to understand the material as it is
 given. (z-score = 1.504)
- Other students feel I am a member of the class. (z-score = 1.430)

Both of the students on the positive side came from the regular education group. When interviewed, student R11 stated that one of the best things about school is "coming here and seeing my friends" (Field notes, 3/14/96, p. 15). Each of these students maintains a high scholastic average and one is served in the gifted/talented program.

The student whose Q-sort was on the negative side indicated concerns in the area of teaching style. Most unlike statements included:

- 19 The material is sometimes presented too quickly for me to be able to understand it. (z-score = -1.953)
- Other students sometimes make fun of or tease me. (z-score = -1.910)
- 20 My teacher understands the way I am best able to learn about new things. (z-score = -1.514)

This student is currently served in the Specific

Learning Disabilities area of special education. He felt

confident in his ability to understand the material and to

keep up with the other students in the classroom. Confusion

was indicated with dissatisfaction concerning another

statement in the area of teaching style. Student LD24 said

"when I do not understand the material I feel kind of

embarrassed. I ask questions after school if the teacher is

willing to help. Teachers sometimes do not know how to help

me" (Field notes, 3/15/96, p. 17).

There were three distinguishing item for Factor C as shown in Table 10. The issue of confidence is again clarified. The students were sure of their ability to comprehend class material at the rate it was presented. They also felt comfortable around the other students in class.

Table 10

Distinguishing Items for Factor C

| Factor C - The Confident Student | | | | | | |
|--|-------|----|-----|----|----|----|
| Factors | A | B | - C | D | E | F |
| 3. I am able to understand the material as it is given | -3 | -1 | +4 | -2 | 0 | -4 |
| 10. Other students feel I am a member of the class | 0 | 0 | +4 | +1 | -1 | +1 |
| 30. When I am working on an assignment at my desk, I do not pay much attention to what is happening in the classroom | -4 | -4 | +1 | -2 | -3 | -2 |

Table 11

Factor D - The Nonconformist Student

| Inc | lusic | n | | | | | | | | | | |
|-----|----------------|---------|----------------|-----------------------|---------------------------|---------------------------------|---------------------------|--------------------|---------------|---------|----|--|
| | -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 | |
| | 31 | 2 12 | 26 34 22 | 33 29 30 . 3 | 7 27 36 24 21 | 20 28 25 4 35 16 | 19 11 1 14 10 | 5 23 6 15 | 9 13 18 | 32 8 | 17 | |
| Sor | | | ignif | cant | load | ings: | | | | | | |
| | R13 | | | | | | -68 | | | | | |
| | LD25 | | | | | | -52 -46 | | | | | |
| | LD30 | | | | | | -46 | | | | | |
| | SED32 | | | | | | -52 | | | | | |
| | SED34 | | | | | | -53 | | | | | |
| | SED35 | | | | | | -53 | | | | | |
| | SED37 SED39 | | | | | | -64 -63 | | | | | |

The Nonconformist Student

The Q-sorts of the students on Factor D had negative loadings. Statements came from the areas of self-concept and curriculum. Students did not feel confident in their ability to deal with school. They also did not see the work in inclusive classrooms as interesting. Most unlike statements included:

I am able to cope with school as easily as other students. (z-score = -1.652)

- 2 Most of the schoolwork is interesting to me. (z-score = -1.648)
- Other students sometimes make fun of or tease me. (z-score = -1.584)

Five of the students who loaded on this factor are categorized SED, three are categorized LD, and one is a regular education student. Student interviews were conducted with students R13, LD27, SED37, and SED39. nonconforming nature of these students can be seen in the internal dialogue that excused the lack of coping skills. They also exhibited a disregard for the importance of school work to their present and future lives. An external locus of control was disclosed as far as judging that others cope more easily with school. The clues these students used to judge that others were faring better included, "Other students get better grades." "I know I do not do as well by how many friends I have, and I get yelled at more" (Field notes, 3/11/96, p. 5). When asked what made the work not interesting, answers ranged from, "it is sometimes too hard" to "it is sometimes too easy". Two students felt the things they did in school would not be useful when they grew up, "I am never going to use math anyway so it is a waste of time." "This work is nothing to me. I am going to be a big star and hire people to do this for me." In addition, one students stated that the work was not interesting "when I'm mad" (Field notes, 3/11/96, p. 5-6).

The distinguishing item for Factor D is listed in Table 12. The students within this factor do recognize that coping with school is more difficult for them than it is for other students. They did not indicate recognition of personal responsibility for this fact. The nonconformist attitude looked to outside sources for explanation.

Distinguishing Item for Factor D

Table 12

| Factor D - The Nonconformist Student | | | | | | |
|---|--------|----|----|--------|----|---|
| Factors | A | В | С | D | E | F |
| 31. I am able to cope with school as easily as other students | -1 | +3 | -1 | -5 | +1 | 0 |

Table 13

Factor E - The Paradoxical Student

| Inclusion | | | | | | | | | | | |
|-----------|--------------|---------|----------------|-------------------|---------------------------|--------------------------------|----------------------------|--------------------|---------------|----------|----|
| | -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
| | 23 | 12 2 | 27 20 30 | 7 26 1 8 | 25 10 5 24 11 | 3 22 19 33 36 4 | 31 29 28 21 32 | 15 16 6 1 | 9 35 17 | 34 18 | 14 |
| Sort | | th si | gnif | cant | load | ings: | | | | | |
| | R1 | | | | | | -47 | | | | |
| | R7 R12 | | | | | | -55 -59 | | | | |
| | R15 | | | | | | -46 | | | | |
| | LD28 | | | | | | -66 | | | | |
| | LD29 LD31 | | | | | | -66 | | | | |
| ç | SED33 | | | | | | -65 -49 | | | | |
| | SED36 | | | | | | -45 | | | | |

The Paradoxical Student

The Q-sorts of students in this factor again loaded negatively. Q-sort categories important to these students included teaching style and curriculum. Their perceptions indicated that the teacher did not help them correctly begin assignments. These students also did not find schoolwork interesting. Paradoxically, the students felt that the teacher liked having them in class. Most unlike statements included:

- The teacher checks to see if I am doing the work correctly when I begin an assignment. (z-score = -2.100)
- Other students sometimes make fun of or tease me. (z-score = -1.336)
- 2 Most of the schoolwork is interesting to me. (z-score = -1.327)

Students in Factor E included two SED students, three LD students, and four regular education students. regular education students have consistently been high achievers. The special education students from both groups have had grades that varied considerably from one semester to the next. Interviews with students R7, LD29, LD31, and SED36, indicated that they had differing views concerning statement number 23 (The teacher checks to see if I am doing the work correctly when I begin an assignment). The high achieving student from regular education iterated that the work did not need to be checked by the teacher as work began on an assignment. This was not a problem, it was the way things were done. The students from the two special education categories were frustrated that the teacher did not check the work as students began an assignment. happens a lot, I mess up and it makes me mad." They often were required to do the assignment over and said, "I feel both sad and mad. If I go ask at the beginning she helps, but I still usually do not understand it" (Field notes, 3/15/96, p. 19). All of the students felt most of the reading and written work was boring. The regular education

student said, "I do not find anything interesting about the schoolwork. I have already done a lot of work like it."

Students from the special education categories indicated that schoolwork needed to be more "like television" (Field notes, 3/15/96, p. 20).

The distinguishing item for Factor E is listed in Table 14. When asked how the teacher showed you she is glad you are in the class students answered, "she asks me how I am" and "she told me so." Another student said, "you can just tell, like she is friendly" (Field notes, 3/15/96, p. 18).

Distinguishing Item for Factor E

Table 14

| Factor E - The Paradoxical Student | | | | | | |
|---|---|---|----|----|----|----|
| Factors | A | В | С | D | E | F |
| 14. My teacher likes having me in the class | 0 | 0 | +2 | +1 | +5 | +2 |

Factor F - The Curricular Student

Table 15

| Inc | lusio | on | | | | | | | | | |
|-----|-------------------------------|----|----------------|--------------------|---------------------------|---------------------------------|---------------------------|----------------------|---------------|---------|----|
| | -5 | -4 | -3 | -2 | -1 | 0 | +1 | +2 | +3 | +4 | +5 |
| | 7 | 12 | 25 19 35 | 8 1 30 26 | 22 4 15 11 16 | 31 27 24 28 17 9 | 5 21 20 32 10 | 14 33 34 13 | 6 29 36 | 2 23 | 18 |
| Sor | ts wi MR17 MR18 MR21 | 3 | lgnif: | icant | load | ings: 17 18 21 | -47 -52 -46 | | | | |

The Curricular Student

The students in factor F were the only participants who stated that they felt the schoolwork was interesting. The Q-sorts of these students loaded negatively on the factor array. Areas addressed were curriculum and peer interaction. Most unlike statements included:

- 7 Members of my class usually listen to my ideas. (z-score = -1.863)
- Other students sometimes make fun of or tease me. (z-score = -1.730)
 - I am able to understand the material as it is given. (z-score = -1.655)

All three students loading on this factor are categorized MR. Each of the students was interviewed. The students disclosed that they sometimes couldn't keep up with

assignments. "I try my best at comprehending. When I get bad grades or problems wrong I feel down about it." "My teacher lets me do part of the work, or I take it to my other class to finish" (Field notes, 3/12/96, p. 9). These students thought that members of the inclusive class judged their ideas as "funny" and that regular class members wanted to do their own ideas. One student stated that this was too bad because "I could have had the right answer" (Field notes, 3/12/96, p. 10).

There were three distinguishing items for this factor. It is interesting to note that statement number 9 (I have friends I spend time interacting with each day), placed 0 on factor F. The concept of friends in the regular education classroom was neither positive or negative for these students. During student interviews it was discovered that they felt friendships were from the special education classroom. "My best friend is in my little class." "I eat lunch with my other friends" (Field notes, 3/12/96, p. 9).

Table 16

Distinguishing Items for Factor F

| Factor F - The Curricular Student | | | | | | |
|---|----|--------|----|----|----|----|
| Factors | A | В | С | D | E | F |
| 2. Most of the schoolwork is interesting to me | -2 | -3 | -2 | -4 | -4 | +4 |
| 7. Members of my class usually listen to my ideas | -1 | -1 | +1 | -1 | -2 | -5 |
| 9. I have friends in my class that I spend time interacting with each day | -3 | +5 | +3 | +3 | +3 | 0 |

Table 17 shows the manner in which each of the six factors correlated with the others. The diagonal shows a perfect correlation of 1.00 since each factor exactly correlates with itself.

Table 17

Factor Correlations for the Six Factors

| Factor | A | В | С | D | E | F | |
|--------|-----|-----|-----|-----|-----|---|--|
| A | | | | | | | |
| В | .30 | | | | | | |
| C | .02 | .27 | | | | | |
| D | .48 | .34 | .10 | | | | |
| E | .30 | .41 | .42 | .39 | | | |
| F | .43 | .15 | .12 | .20 | .26 | | |

All statements used in the Q-sort, with array position on each factor, are shown in Table 18. As has been indicated in the discussions of distinguishing factors, differences in scores between statements for each factor are assumed to reflect differences in the amount of theoretical importance attributed to the item by students on that An item scored +5 is believed to be of more factor. importance to the students than an item scored +1. reverse is also true. An item scored -5 is thought to indicate greater negative importance than an item scored -1. This is in direct response to the condition of instruction, "sort the items according to those that you believe are most like an inclusive classroom to those that you believe are most unlike an inclusive classroom." For example, to read the tabled information, the first statement, item number 1, was considered to be unlike an inclusive classroom by the students on Factor A as indicated by the -4 rating. same item held less importance for students on the other five factors as shown by the smaller + or - ratings. Note that two statements, numbers 12 and 26, are consensus items for all six factors. There was little difference in the amount of theoretical importance attributed to these items by students.

Table 18

Item Scores for Each Statement by Factor Array

| Factors | A | В | С | D | E | F |
|--|----|----|----|----|----|----|
| 1. All students in class do the same assignments each day. | -4 | +2 | 0 | +1 | -2 | -2 |
| Most of the schoolwork is interesting to me. | -2 | -3 | -2 | -4 | -4 | +4 |
| 3. I am able to understand the material as it is given. | -3 | -1 | +4 | -2 | 0 | -4 |
| 4. The textbook material makes sense to students in the class. | +1 | +1 | -1 | 0 | 0 | -1 |
| 5. In my class I am taught how to learn new material. | +1 | 0 | 0 | +2 | -1 | +1 |
| 6. I know that the things I am learning in class will help me when I am an adult. | .0 | +2 | +1 | +2 | +2 | +3 |
| 7. Members of my class usually listen to my ideas. | -1 | -1 | +1 | -1 | -2 | -5 |
| 8. Working in groups with other students makes it easy to complete projects. | +2 | +1 | -3 | +4 | -2 | -2 |
| 9. I have friends in my class that I spend time interacting with each day. | -3 | +5 | +3 | +3 | +3 | 0 |
| 10. Other students feel I am a member of the class. | 0 | 0 | +4 | +1 | -1 | +1 |
| 11. I usually know how to join in when a group of students is having fun together. | +1 | +4 | +5 | +1 | -1 | -1 |
| 12. Other students sometimes make fun of or tease me. | -5 | -5 | -4 | -4 | -4 | -4 |
| 13. My teacher speaks to me in a friendly way. | +2 | -2 | -1 | +3 | +2 | +2 |

14. My teacher likes having me in 0 0 +2 +1 +5 +2 class. 15. I am usually able to get help +5 0 -3 +2 +2 -1from the teacher when I need to. +2 +3 -1 0 +2 -1 16. I understand what the teacher expects from the students in the class. 17. The class rules are the same for 0 -4 +3 +5 +3all students in the class. 18. My teacher knows I can do good +3 +2 +1 +3work. -2 -2 -5 +119. The teacher sometimes presents 0 -3 the material too quickly for me to be able to understand it. 20. My teacher understands the way I +3 -3 -4 0 -3 +1am best able to learn about new things. 21. It is all right to be creative -1 +1 -2 -1 +1 +1 when I do my assignments as long as the work is accurate. 22. I am called on in class when the -1 -3 0 -3 0 -1teacher wants to find out if I know the answer. 23. The teacher checks to see if I am 0 0 -3 +2 -5 +4 doing the work correctly when I begin an assignment. 24. My teacher helps me know how to -2 -1 -2 -1 -1 0 do different class activities. 0 +2 -1 0 -1 -3 25. It is easy to organize the materials I need to do my work. 26. When I get a big assignment, I -3 -2 -2 -3 -2 -2 break it down into small parts before I start to work.

27. I usually know how much time I +1 -1 +1 -1 -3 0

need to set aside to complete an assignment.

+4 +3 0 28. A good reward is to know I have done my work correctly. 29. I am most interested in thinking +2 -2 +3 -2 carefully as I do my work. -4 +1 -2 -3 30. When I am working on an assignment at my desk, I do not pay much attention to what is happening in the classroom. -1 +3 -1 -5 31. I am able to cope with school as easily as other students. 0 +2 32. When I work hard I am able to +3 +4 +1 +1 make a good grade. 33. I feel happy most of the time I +1 -1 0 am in class. 34. I usually make decisions that -2 +1+2 -3 +4 turn out to be good ones. 35. I have many good qualities to -1 +1 +2 offer. 36. I am the kind of person who does +4 +4 0 -1 0 + 3my best.

Summary

Results of the analysis procedures employed in this study found operant factor structures, or types of opinions at issue for students concerning inclusive education classrooms. Each of the six theoretical factor arrays illustrated one type of student.

The competent student knows how to interact within the school environment to produce positive results. This student feels good about himself (I am the kind of person who does my best). When assistance is required, interaction

with teachers is initiated. Some discrepancy was described by the internal locus of control indicated by competent regular education students and the external locus of control indicated by competent special education students.

The separatist student perceives that there are divergent systems within the education classroom for different students. Class rules are not the same for all students in the class. This system can be considered to be to an individual's advantage or disadvantage. In addition, what is happening within the classroom acts as a distraction to on-task focus.

The confident student does not allow what is happening within the classroom to act as a distraction to the learning process. This student is able to understand the material as it is presented and feels comfortable around other students in the class. A confident student whose Q-sort loaded negatively on the factor felt that the material is not presented too quickly for understanding. The teacher, however, does not always understand how this student is best able to learn.

The nonconformist student recognizes that other students cope with school more easily. The ability to cope is perceived as dependant on external factors. Schoolwork is not interesting; it is judged as too hard or too easy. No connection is seen between present tasks and future work.

Contradictions in perceptions of inclusive regular education classrooms were described by the paradoxical student. Teachers will not help when I begin an assignment, but they are glad I am in class. Schoolwork is boring, but it is not because of the material; if it were presented like a television show it would be more interesting.

The curricular student does find schoolwork interesting. However, it is sometimes difficult to understand the material and keep up with assignments. This student does not feel that other members of the class listen to ideas the student has, even though the ideas might be good ones.

The findings indicate that the beliefs of each student type, in relation to inclusive education classrooms, differ on a variety of issues. The majority of students in the study (82%) indicated negative perceptions of membership in an inclusive classroom setting

CHAPTER V

SUMMARY, DISCUSSION, AND CONCLUSIONS

Summary of the Investigation

The contemporary debate in American education concerning the inclusion of students with disabilities in naturalized settings continues with point/counterpoint precision. The categorical system, mandated most recently by the Individuals with Disabilities Education Act, requires that students be evaluated to determine eligibility for specially designed instruction within a specific disability grouping. IDEA (1990) also requires that students with disabilities be educated in the least restrictive This least restrictive environment is environment. determined on an individual basis by committee members fulfilling requirements for the Individualized Education Program. In contrast, an inclusive education movement seeks to provide services and instruction for students with disabilities in the regular education classroom.

A review of literature reflected the complexity of the issue. There is no consensus of opinion on the optimal environment for the academic and emotional growth of students with disabilities. Historically, many disciplines have impacted educational programming. Historically, adult advocates have argued for and against special classes versus regular classroom (inclusive) settings. Historically,

students with disabilities have not been central to the decision making process.

The legal and ethical challenge continues for our society to provide a free, appropriate public education for all students. Student interest and attitudes contribute to variation in school performance and skill acquisition.

Therefore, the investigative focus of this study was upon the perceptions of students toward inclusion. Examining the perceptions of students with and without disabilities toward inclusive regular education classrooms may provide an indication of potential success or failure in regular classroom settings.

Forty students from a rural school district in the south, central United States individually completed a Q-sort. Students were instructed to sort thirty-six statements from a hybrid concourse. These statements had been determined relevant to the topic of inclusion. The condition of instruction was to "sort the items according to those that you believe are most like an inclusive classroom to those that you believe are most unlike an inclusive classroom." Data gathered from the Q-sorts underwent correlation, factor analysis, and the computation of factor scores. Students with Q-sorts loading on the extreme ends of each factor were interviewed to check that the sort was an accurate reflection of individual points of view. Interviews were analyzed using descriptive statistics and

qualitative interpretation. Factors were detailed, and student opinions on the issue of inclusion were examined.

Summary and Discussion of Findings

The findings of this study indicated that students hold widely varying perceptions of what is important in inclusive regular education classrooms. Types of opinions at issue for students varied on items associated with curriculum, peer interaction, interaction with teachers, teaching style, learning style, and self-concept. Six theoretical factor arrays were generated and each illustrated a student profile.

The competent student of Factor A demarcated on the category of teacher interaction (I am usually able to get help from the teacher when I need to). On Factor B, the separatist student did not believe that class rules are the same for all students. Several systems exist within the education setting. The confident student of Factor C indicated three consequential items in the areas of curriculum, learning style, and peer interaction. student type felt that the material was not difficult to understand as it was given. Learning style did not allow for distractions within the learning environment to interrupt focus, and this student felt accepted by others as a member of the class. The Factor D student, the nonconformist, differentiated from others in the category of self-concept. This student felt that others were able to cope with school more easily. An external locus of control placed causation for this fact on others within the school environment. Factor E was represented by the paradoxical student. This student felt welcome in the classroom and felt sure that the teacher liked having the student there. The student did not, however, like being there. The curricular student stated that most of the schoolwork was interesting. This student's good ideas are not listened to by other members of the class. Friendships formed with other special education students and not with members of the regular education (inclusive) classroom.

The six student profiles from these factors have shown a view of what is happening in school today from the students' point of view. School has not been depicted as a positive place for the majority of these students. Little relationship was seen by the students between school and life in the real world. If an important goal of our school system is to prepare students for life, a part of which is the world of work, either the relevance has not been there or many of the students have not seen it.

Although the traits composing the matrix were centered around the concept of importance to each individual student, students within specific disability categories did load on several common items. The original purpose of the study was

to examine the perceptions of students with and without disabilities toward inclusive regular education classrooms.

This study:

- 1. Described the perceptions of students categorized seriously emotionally disturbed concerning inclusive regular classroom membership.
- 2. Described the perceptions of students categorized specific learning disabled concerning inclusive regular classroom membership.
- 3. Described the perceptions of students categorized mentally retarded concerning inclusive regular classroom membership.
- 4. Described the perceptions of regular education students concerning inclusive regular classroom membership.

Of the students categorized seriously emotionally disturbed, eight of the nine stated that most of the schoolwork was not interesting. Five of them also described themselves as not coping with school as well as other students. One of the SED students loaded on a factor that showed a positive orientation toward inclusive classrooms. Within the context of the interview, however, this student provided information that showed an external locus of control for judging performance.

Students categorized specific learning disabled were dispersed throughout five of the six factors. "Learning disabilities is a broad, generic term that involves many different, specific types of problems" (Hardiman et al., 1996, p. 301). The spread of responses is thus perhaps not surprising. One student indicated that help from the teacher was available, that he was the kind of person who

did his best, and a good reward is to know I have done my work correctly. Two students admitted to being easily distracted and felt the class rules differed for different students. One student stated that the teacher did not understand the best way to help the student learn new material. Six LD students disclosed that schoolwork was not interesting and three felt they were not able to cope with school as well as other students. Three also indicated frustration that the teacher would not check at the beginning to see if an assignment was being done correctly.

All students stating that most of the schoolwork is interesting are being served under the special education category of mentally retarded. The same students did not feel that members of the class listened to their ideas. They stated they were not able to understand the material as it was given. One of the MR students admitted to being easily distracted and felt the class rules were not the same for all students.

The perceptions of regular education students were varied. They scattered throughout five of the six factor profiles. Four of the students indicated there were some positive aspects of school. These included receiving teacher assistance, doing their best, enjoying intrinsic rewards, getting along with classmates, and understanding the material. Other regular education students did not have positive feelings toward inclusive classrooms. They noted

frustration with distractions, differing class rules for different students, and not being interested in the schoolwork.

Overall, the perceptions of students toward regular education (inclusive) classrooms indicated dissatisfaction with the current system. When negative student perceptions are accompanied by serious emotional disturbance, specific learning disabilities, or mental retardation, the potential for any success appears jeopardized.

Discussion of the Implications of this Study

The importance of a factor cannot be determined by statistical criteria alone, but must take into account the social and political setting to which the factor is organically connected (Brown, 1980, p. 42). The theoretical implications of this research, within the setting of public education, imply that there appears to be no one item or group of items to fix in order to improve inclusive regular classroom membership. The poor social status and self-concept that students with mild disabilities have within general school programs cannot be attributed to any one factor (Gottlieb & Leyser, 1981). Rather, these problems are a result of the complex interaction of academic task requirements, behavioral expectations, and teacher and student attitudes (Conway & Gow, 1988).

Traditionally, school organization has not accommodated diversity. No instructional system or program has been devised that can anticipate all the learning possibilities that occur in the classroom. Although the identification of children within various categories is not very informative, the formulation of an Individualized Education Plan is meant to focus on strengths and weaknesses of the individual student. Many of the approaches that have been most successful with students who have learning and behavioral problems are found to be prescriptive in nature (Hammill & Bartel, 1990). Inclusive classroom structure does not necessarily lend itself to prescriptive analysis or teaching. When inclusive classroom teachers have individualized instruction, additional problems have become apparent. Research that has focused on adaptations that facilitate academic success of students with disabilities in the regular education (inclusive) classroom has not addressed the social implications of these adaptations. Adaptations that point out academic difficulties may be undesirable in terms of student acceptance by classmates. Students who most need adaptations are more likely to prefer a teacher who does not make them (Vaughn, et al., 1993).

Student dissatisfaction with inclusive regular education classrooms was shown in this study. "The child who is inattentive, noncompliant with teachers' commands, not task oriented, overdependent, and low in verbal and social

interpersonal skills is most likely to be an academic failure" (Kauffman, 1985, p. 149). Students who perceive the inclusive classroom environment as not interesting, distracting, and having different rules for different students feel justified in not putting forth much effort, "I don't try when I'm mad, why should I?" (Field notes, 3/11/96, p. 6).

In order to alleviate current problems within the educational system, focus may need to be on the improvement of school for regular education students. The validity of inclusion for special needs students is important. However, if the majority of students have negative perceptions of regular education classrooms, placing additional students in these classes has the chance to compound existing problems for all students. The learning and social difficulties of special education students have no easy remedy.

Inclusion for children with disabilities and providing support through team teaching are not new concepts.

Individualizing education for students through the use of classroom aides is also not a new concept, although the assistance at one time came through parent volunteers.

These forms of educational practice were represented within the educational system a number of years ago and are being recycled.

Perhaps it is time for a paradigm shift in regular and special education. A shift that would allow professionals

within the field to abandon one way of seeing for a different way. Skrtic (1991) states that education must look beyond educational practice to the theories in which they are grounded. He proposes that professionals join forces to collaborate in multidisciplinary teams to problem solve and innovate specific project areas. Changing educational goals would enable students to be able to work with others and to take responsibility for their own continued learning. This type of regular education (inclusive) environment could perhaps better accommodate all students. A recent innovation has been the trend to emphasize school to work programs. Relevance and student choice are built into the implementation of this process. This may provide a common meeting point for students currently served in regular education programs and students currently served in special education programs.

Recommendations for Further Research

The following are recommendations for further research:

1. Systematic comparisons need to be made between perceptions of the inclusive regular education classroom as it is and perceptions of the classroom as students would like it to be. Student participants would be asked to complete the Q-sort twice, each time with a different condition of instruction. This would provide an in-depth examination of perceptions of

- inclusive classrooms and perhaps illuminate the intrasubjectivity of each student.
- 2. This study was limited to one school district that qualifies as both small and rural. Replication of the study in districts with more diverse populations and in urban settings are needed to provide new insights.
- 3. It would be interesting to gather teacher perceptions of inclusive regular education classrooms through the use of the same Q-sort. This would provide a dialogue for change between students and faculty.
- 4. Special education teachers in other schools could be trained to replicate this study. Information might be gained about current student perceptions of what is and what is not working within that school. Discussion centered around what changes need to be made to improve educational practices could ensue.

Limitations of this Study

While theoretical background states generalizations in Q-methodology are not thought of in sample and universe, it still seems important to note that this study was conducted in one school district and with a limited number of students. Research involving Q-sorts that are administered individually is a time consuming practice. It was necessary to coordinate schedules so that students did not miss important material in other classes. This meant that the

number of students involved was limited by practical constraints. In addition, the MR group had small representation.

Due to the fact that the Q-sorts were administered individually and anonymity was assured, it is assumed that students in all categories felt free to respond honestly. Some students completing the Q-sort did have more previous interaction with the researcher and seemed more comfortable during the completion of the sort and during the interview process.

Erratic patterns of intellectual and academic performance may indicate a pupil is having emotional problems. The emotional negativity of the SED students is sometimes reflected is widely varying scores from one test session to the next. Care should be taken when interpreting results from any one procedure for this group.

The students within the study have generally known each other for years. This may well affect the fact that there was a consensus item that other students did not tease and make fun of me. The school philosophy and veteran staff provide a sense of community and commitment to those living within the district.

Interview questions and the Q-sort statements were designed by the researcher. Hybrid concourse items were developed from student interviews and from literature. Theoretical considerations were built into the design; and a

panel of experts judged them to be relevant to the issue of inclusive classrooms. However, no quantitative data has been gathered to verify relevance.

Summation

The results of this study indicated that the perceptions of students with disabilities toward inclusive regular education classes are more negative than positive. An additional, unexpected finding was that the perceptions of many students without disabilities toward regular education classrooms was negative. Inclusion has conceptual value in its equal but individual education premise, but potential failure within this setting for students with disabilities would seem a real possibility. Further research is required to gain a better understanding of what constitutes a setting that most students will perceive as beneficial.

REFERENCES

Babad, E. (1990). Calling on students: How a teacher's behavior can acquire disparate meanings in students' minds. <u>Journal of Classroom Interaction</u>, 25, 1-4.

Baker, C., Rude, H., Sasso, G., & Weishahn, M. (1994).

Enhancing rural students' attitudes toward peers with

disabilities: A comparison of interventions. Rural Special

Education Quarterly, 132, 34-40.

Baker, E. T., Wang, M. C., & Walberg, H. J. (1995).

The effects of inclusion on learning. <u>Educational</u>

<u>Leadership</u>, 33-35.

Berne, E. (1961). <u>Transactional analysis in psychotherapy</u>. New York, NY: Grove Press.

Binet, A. & Simon, T. (1916). The development of intelligence in children. Vineland, NJ: Training School Publication #11.

Blumenfeld, V., Hamilton, V. L., Bossert, S. T.,
Wessels, K., & Meece, J. (1983). Teacher talk and student
thought: Socialization into the student role. In J. M.
Levine & M. C. Wang (Eds.), Teacher and student perceptions:
Implications for learning, (pp. 143-192). Hillsdale, NJ:
Lawrence Erlbaum Associates, Publishers.

Brockoven, J. S. (1972). Moral treatment in community mental health. New York, NY: Springer Publishing Company.

Brown, S. R. (1980). <u>Political subjectivity</u>. New Haven, CT: Yale University Press.

Brown v. Board of Education, 347 U.S. 483 (1954).

Carlberg, C., & Kavale, K. (1980). The efficacy of special versus regular class placement for exceptional children: A meta-analysis. The Journal of Special Education, 14, 295-306.

Conway, R. N.F., & Gow, L. (1988). Mainstreaming special class students with mild handicaps through group instruction. Remedial and Special Education, 9(5), 34-40.

Cruickshank, W. M., Bentzen, F. A., Ratzeburg, I. H., & Tannhauser, M. T. (1961). A teaching method for braininjured and hyperactive children. Syracuse, NY: Syracuse
University Press.

Deci, E. L., Hodges, R., Pierson, L., & Tomassone, J. (1992). Autonomy and competence as motivational factors in students with learning disabilities and emotional handicaps.

Journal of Learning Disabilities, 25, 457-471.

Dreikurs, R., Grunwald, B. B., & Pepper, F. C. (1971).

Maintaining sanity in the classroom. New York, NY: Harper
& Row.

Education for All Handicapped Children Act, 20 United States Code, Sections 1400-1461 (1975).

Elementary and Secondary Education Act, 20 United States Code, Sections 236-244 (1965).

Ellis, A. (1962). Reason and emotion in psychotherapy.

New York, NY: Lyle Stuart Publishers.

Epps, S., & Tindal, G. (1987). The effectiveness of differential programming in serving students with mild handicaps: Placement options and instructional programming. In M. C. Wang, M. C. Reynolds, & H. J. Walberg (Eds.), Handbook of special education: Research and practice.

Learner characteristics and adaptive education, 1 (pp. 213-248). New York, NY: Pergamon Press.

Field Notes, 1996 (2/22, 3/11-3/15).

Frieze, I. H., Francis, W. D., & Hanusa, B. H. (1983).

Defining success in classroom settings. In J. M. Levine &M.

C. Wang (Eds.), <u>Teacher and student perceptions:</u>

<u>Implications for learning</u>, (pp. 3-28). Hillsdale, NJ:

Lawrence Erlbaum Associates, Publishers.

Fuchs, D., & Fuchs, L. S. (1995). Sometimes separate is better. Educational Leadership, 22-26.

Gartner, A., & Lipsky, D. K. (1987). Beyond special education: Toward a quality system for all students.

Harvard Educational Review, 57(4), 367-395.

Ginsburg, H., & Opper, S. (1969). <u>Piaget's theory of intellectual development</u>. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Glasser, W. (1969). <u>Schools without failure</u>. New York, NY: Harper & Row.

Good, T. L. (1983). Student and teacher perceptions:

A review of five position papers. In J. M. Levine & M. C.

Wang (Eds.), <u>Teacher and students perceptions: Implications</u>

for learning, (pp. 125-139). Hillsdale, NJ: Lawrence

Erlbaum Associates, Publishers.

Gottlieb, J. & Leyser, Y. (1981). Facilitating the social mainstreaming of retarded children. <u>EEO/Peer</u>

<u>Relations</u>, 1(4), 57-69.

Hammill, D. D., & Bartel, N. R. (1990). <u>Teaching</u> students with learning and behavior problems (5th ed.). Boston, MA: Allyn and Bacon.

Hardiman, M. L., Drew, C. J., & Egan, M. W. (1996).

Human exceptionality: Society, school, and family. Boston,

MA: Allyn and Bacon.

Hewett, R. M., & Forness, S. R. (1977). <u>Education of exceptional learners</u> (2nd ed.). Boston, MA: Allyn & Bacon.

Hewett, T. M. (1968). The emotionally disturbed child in the classroom. Boston, MA: Allyn & Bacon.

Hobbs, N. (1965). How the Re-ED plan developed. In N.J. Long, W.C. Morse, & R.G. Newman (Eds.), Conflict in the classroom, (pp. 286-294). Belmont, CA: Wadsworth Publishing Company, Inc.

Huebner, E. S., & Wise, P. S. (1992). Training preservice school psychologists to facilitate the implementation of the regular education initiative in rural schools. Rural Special Education Quarterly, 11(3), 20-28.

Individuals with Disabilities Education Act, 20 United States Code, Sections 1401-1468 (1990).

Johnston, D., Proctor, W., & Corey (1995). Not a way out: A way in. Educational Leadership, 46-49.

Kauffman, J.M. (1985). <u>Characteristics of children's</u>
<u>behavior disorders</u> (3rd ed.). Columbus, OH: Charles E.

Merrill Publishing Company.

Kauffman, J. M., Gerber, M. M., & Semmel, M. I. (1988).

Arguable assumptions underlying the regular education

initiative. <u>Journal of Learning Disabilities</u>, 21, 6-11.

Kauffman, J. M., & Hallahan, D. P. (1981). <u>Handbook of special education</u>. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Kephart, N. C. (1971). The slow learner in the classroom. Columbus, OH: Charles E. Merrill Publishing Company.

Kerlinger, F. N. (1973). <u>Foundations of behavioral</u>
<u>research</u> (2nd ed.). New York, NY: Holt, Rinehart, &
Winston, Inc.

Kerr, R. (1987). <u>Positively learning to manage</u>
negative emotions. Portland, MA: J. Weston Walch,
Publisher.

Kirk, S. A. (1972). Educating exceptional children (2nd ed.). Boston, MA: Houghton Mifflin.

Krugman, M. (Ed.). (1958). Orthopsychiatry and the school. New York, NY: American Orthopsychiatric Association.

Lane, H. L. (1976). The wild boy of Aveyron.

Cambridge, MA: Harvard University Press.

Levine, J. M. (1983). Social comparison and education.

In J. M. Levine and M. C. Wang (Eds.), <u>Teacher and student</u>

<u>perceptions: Implications for learning</u>, (pp. 29-55).

Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Levine, J. M. & Wang, M. C. (1983). <u>Teacher and</u>

<u>student perceptions: Implications for learning</u>. Hillsdale,

NJ: Lawrence Erlbaum Associates, Publishers.

Madden, N. A., & Slavin, R. E. (1983). Mainstreaming students with mild handicaps: Academic and social outcomes.

Review of Educational Research, 53, (4), 519-569.

McKeown, B., & Thomas, D. (1988). <u>O methodology</u>.

Newbury Park, CA: Sage Publications, Inc.

Meyen, E.L., & Skrtic, T.M. (1995). <u>Special education</u> & <u>student disability</u> (4th ed.). Denver, CO: Love Publishing Company.

Mills v. D.C. Board of Education, 348 F. Supp. 866 (D.D.C. 1972); contempt proceedings, EHLR 551:643 (D.D.C. 1980).

Morse, W. C. (1968). The crisis teacher. In N. J.

Long, W. C. Morse, and R. G. Newman (Eds.), Conflict in the

classroom, (pp. 251-254). Belmont, CA: Wadsworth

Publishing Company, Inc.

NICHY, National Information Center for Children and Youth with Disabilities News Digest (1991). The education of children and youth with special needs: What do the laws say? 1(1), 1-15.

Oberti V. Clememton, 995 F.2d 1204 (3rd Cir. 1993).

Oklahoma State Department of Education (1992).

Policies and procedures manual for special education in

Oklahoma. Norman, OK: University of Oklahoma Printing

Services.

O'Neil, J. (1995). Can inclusion work? A conversation with Jim Kauffman and Mara Sapon-Shevin. Educational Leadership, 7-11.

Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania, 334 R. Supp. 1257, 343 F. Supp 279 (E.D. PA 1971, 1972).

Pittman, T. S., Boggiano, A. K., & Ruble, D. N. (1983).

Intrinsic and extrinsic motivational orientations: Limiting conditions on the undermining and enhancing effects of reward on intrinsic motivation. In J. M. Levine and M. C. Wang (Eds.), Teacher and student perceptions: Implications for learning, (pp. 319-340). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Redl, F. (1965). The concept of the life space interview. In N. L. Long, W. C. Morse, & R. G. Newman (Eds.), Conflict in the classroom, (pp. 363-374). Belmont, CA: Wadsworth Publishing Company, Inc.

Rehabilitation Act, 29 United States Code, Sections 706-794 (1973).

Reynolds, M. C. (1987). Students with special needs.

In M. C. Reynolds, & J. W. Birch (Eds.), Adaptive

mainstreaming: A primer for teachers and principals (pp. 129-142). New York, NY: Longman.

Reynolds, M. C., & Lakin, K. C. (1987). Noncategorical special education: Models for research and practice. In M. C. Wang, M. C. Reynolds, & H. J. Walberg (Eds.), <u>Handbook of special education: Research and practice. Mildly handicapped conditions</u>, 2 (pp. 331-356). Oxford: Pergamon Press.

Rogers, C. (1970). <u>Carl Rogers on encounter groups</u>.

New York, NY: Harper & Row.

Sailor, W. (1991). Special education in the restructured school. Remedial and Special Education, 12, 8-22.

Shanker, A. (1995). Full inclusion is neither free nor appropriate. Educational Leadership, 18-21.

Sinclair, R. L., & Ghory, W. J. (1987). Reaching
marginal students: A primary concern for school renewal.
Chicago, IL: McCutchan Publishing Corporation.

Skrtic, T. M., (1991). The special education paradox: Equity as the way to excellence. <u>Harvard Educational</u>

Review, 61, 148-195.

Stadter, P. A. (1980). <u>Arrian of Nicomedia</u>. Chapel Hill, NC: The University of North Carolina Press.

Stafford, R. (1978). Education for thehandicapped: A senator's perspective. <u>Vermont Law Review</u>, 3, 71-76.

Stainback, S., & Stainback, W., (1984). A rationale for the merger of special and regular education.

Exceptional Children, 51, 102-111.

Stephenson, W. (1953). <u>The study of behavior: O-</u>
<u>technique and its methodology</u>. Chicago, IL: University of
Chicago Press.

Stricklin, M. (1993). <u>Factor analysis programs for O-techniques</u>, <u>pcq (version three)</u>. Lincoln, NE: University of Nebraska Press.

Swanson, H. L., & Reinert, H. R., (1984). <u>Teaching</u>

<u>strategies for children in conflict</u> (2nd ed.). St. Louis,

MO: Times Mirror/Mosby College Publishing.

Thompson, C. L., & Rudolph, L. B. (1988). <u>Counseling</u>
children (2nd ed.), (pp. 103-123). Pacific Grove, CA:
Brooks/Cole Publishing Company.

Thurstone, L. L. (1947). <u>Multiple-factor analysis</u>. Chicago, IL: University of Chicago Press.

Turnbull III, H. R. (1993). Free appropriate public education The law and children with disabilities (4th ed.).

Denver, CO: Love Publishing Company.

Tyler, R. W. (1987). Forward. In R. L. Sinclair & W.

J. Ghory. Reaching marginal students: A primary concern of school renewal. Chicago, IL: McCrutchen Publishing

Corporation.

U. S. Department of Education (1992). <u>Fourteenth</u>

<u>annual report to Congress on the implementation of the</u>

<u>education of the handicapped act</u>. Washington DC: U. S.

Government Printing Office.

Vaughn, S., Hogan, A., Haager, D., & Kouzekanani, K. (1992). Self-concept and peer acceptance in students with learning disabilities: A four- to five-year prospective study. <u>Journal of Educational Psychology</u>, 14, 43-50.

Vaughn, S., Schumm, J. S., Niarhos, F. J., & Gordon, J. (1993). Students' perceptions of two hypothetical teachers' instructional adaptations for low achievers. The Elementary School Journal, 91, 87-102.

Wang, M. C. (1983). Development and consequences of students' sense of personal control. In J. M. Levine & M. C. Wang (Eds.), <u>Teacher and student perceptions:</u>

Implications for learning, (pp. 213-247). Hillsdale, NJ:

Lawrence Erlbaum Associates, Publishers.

Weiner, B. (1983). Speculations regarding the role of affect in achievement-change programs guided by attributional principles. In J. M. Levine & M. C. Wang (Eds.), Teacher and student perceptions: Implications for learning, (pp. 57-73). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

White, A. E., & White, L. L. (1993). A collaborative model for students with mild disabilities in middle schools. In E. L. Meyen, G. A. Vergason, & R. J. Whelan (Eds.), Challenges facing special education, (pp.91-104). Denver, CO: Love Publishing Company.

Will, M. C. (1986). Educating children with learning problems: A shared responsibility. Exceptional Children, 52, 411-415.

Wilson, W. C. (1989). Administrative Strategies for Integration. In R. Gaylord-Ross (Ed.), <u>Integration</u>

<u>strategies for students with handicaps</u> (pp. 299-319). York,

PA: The Maple Press Company.

Zigmond, N., & Thornton, H. (1985). Follow-up of postsecondary age learning disabled graduates and drop-outs.

Learning Disabilities Research, 1(1), 50-55.

APPENDIXES

APPENDIX A

PARENTAL CONSENT FORM

Dear Parent/Guardian:

I am a special education teacher in the Ripley Public School District. I am also a student at Oklahoma State University. As part of my class requirements at OSU, I am conducting a study about how students feel toward regular education classrooms. I hope that this research will help teachers plan the best possible educational programming for all students.

I would appreciate your assistance in my project; I would like to ask your student about current perceptions towards regular education classes. If you choose to allow your child to participate, I will ask him/her to sort through words describing regular education classes and rank them according to those that are most like the classroom versus those that are least like the classroom. The word sort will take approximately twenty minutes. All responses will be kept anonymous. No identifying information will be kept and none will be in your student's file. Each student will be informed that he/she may choose to stop at any time during the word sort and there will be no negative consequences.

Please return this form to your child's teacher as soon as possible. If you have any questions or concerns about the project I can be reached at school (918-372-4245) or at home (405-743-3407). Thank you for your time and consideration.

Sincerely,

| Beverly Benge Special Education Teacher/Counselor |
|--|
| Student name |
| Check one: |
| Yes, my student may participate |
| No, my student may not participate |
| Parent/Guardian Signature |
| Date |

APPENDIX B STUDENT CONSENT FORM

Dear Student,

This is to ask if you will take part in a study I am doing for a class I take at Oklahoma State University. Specifically, I want to know how you feel about regular education classes.

You will be asked to sort through words and put those that are most like your regular classrooms in one stack and those that are most unlike your regular classrooms in a separate stack. After that, you will place each word on a sort board; this will show your ideas about the classes you attend.

You will not put your name with your answers. Your part in the study will be anonymous. Also, you may quit at any time without any trouble.

I will answer any questions you have about this study. If you are willing to take part, sign on the line below.

| Student | signature | · · | | |
|---------|-----------|---------|-------------|--|
| Date | | | | |

APPENDIX C BIPOLAR Q-SORT STATEMENTS

Category Structure for O-sort

Curriculum:

- All of the students in class should do the same assignments each day.
 All of the students in class should not do the same assignments each day.
- Most of the schoolwork is interesting to me.
 Most of the schoolwork is not interesting to me.
- 3. I am able to understand the material as it is given. I am not able to understand the material as it is given.
- 4. I like to use the same textbook as other students in the class.

 I do not like to use the same textbook as other students in the class.
- 5. In my class I am taught how to learn the material.
 In my class I am not taught how to learn the material.
- 6. I know that the things that I am learning in class will help me when I am an adult.
 I do not believe that the things that I am learning in class will help me when I am an adult.

Peer Interaction:

- Members of my class usually listen to my ideas.
 Members of my class do not usually listen to my ideas.
- Working in groups with other students makes it easy to complete projects.
 Working in groups with other students makes it hard to complete projects.
- 3. I have friends in my class that I spend time interacting with each day.
 I do not have friends in my class that I spend time interacting with each day.
- 4. Other students feel I am a member of the class.
 Other students do not feel I am a member of the class.
- 5. I usually know how to join in when a group of students is having fun together.

 I usually do not know how to join in when a group of students is having fun together.
- 6. Other students sometimes make fun of or tease me. Other students do not make fun of or tease me.

Teacher Interaction:

- My teacher speaks to me in a friendly way.
 My teacher does not speak to me in a friendly way.
- My teacher likes having me in the class.
 My teacher does not like having me in the class.
- 3. I am usually able to get help from the teacher when I need to.
 I am usually not able to get help from the teacher when I need to.
- 4. I understand what the teacher expects from the students in the class.
 I do not understand what the teacher expects from the students in the class.
- 5. The class rules are the same for all students in the class.
 The class rules are not the same for all students in the class.
- 6. My teacher knows I can do good work.

 My teacher does not know I can do good work.

Teaching Style:

- The material is sometimes presented too quickly for me to be able to understand it.
 The material is never presented too quickly for me to be able to understand it.
- My teacher understands the way I am best able to learn about new things.
 My teacher does not understand the way I am best able to learn about new things.
- 3. It is all right to be creative when I do my assignments as long as the work is accurate. It is not all right to be creative when I do my assignments as long as the work is accurate.
- 4. I am called on in class when the teacher wants to find out if I know the answer. I am never called on in class when the teacher wants to find out if I know the answer.
- 5. The teacher checks to see if I am doing the work correctly when I begin an assignment.

 The teacher never checks to see if I am doing the work correctly when I begin an assignment.

6. My teacher helps me know when to do different class activities.

My teacher does not help me know when to do different class activities.

Learning Style:

- It is easy to organize the materials I need to do my work.
 It is difficult to organize the materials I need to do my work.
- When I get a big assignment, I break it down into small parts before I start to work. When I get a big assignment, I do not break it down into small parts before I start to work.
- 3. I usually know how much time I need to set aside to complete an assignment.

 I usually do not know how much time I need to set aside to complete an assignment.
- 4. A good reward is to know I have done my work correctly. To know I have done my work correctly is not a good reward.
- 5. I am most interested in thinking carefully as I do my work.
 I am not interested in thinking carefully as I do my work.
- 6. When I am working on an assignment at my desk, I do not pay much attention to what is happening in the classroom.
 When I am working on an assignment at my desk, I often do not stay on task when something is happening in the classroom.

Self-concept:

- I am able to cope with school as easily as other students.
 I am not able to cope with school as easily as other students.
- When I work hard I am able to make a good grade. When I work hard I am still not able to make a good grade.
- 3. I feel happy most of the time I am in class. I do not feel happy most of the time I am in class.

- 4. I usually make decisions that turn out to be good ones. I usually make decisions that turn out to be bad ones.
- 5. I have many good qualities to offer.
 I do not have many good qualities to offer.
- 6. I am the kind of person who does my best. I am not the kind of person who does my best.

APPENDIX D POSITIVE DESCRIPTOR STATEMENTS

Category Structure for O-sort

Curriculum:

- 1. All of the students in class should do the same assignments each day.
- 2. Most of the schoolwork is interesting to me.
- 3. I am able to understand the material as it is given .
- 4. I like to use the same textbook as other students in the class.
- 5. In my class I am taught how to learn the material.
- 6. I know that the things that I am learning in class will help me when I am an adult.

Peer Interaction:

- 1. Members of my class usually listen to my ideas.
- 2. Working in groups with other students makes it easy to complete projects.
- 3. I have friends in my class that I spend time interacting with each day.
- 4. Other students feel I am a member of the class.
- 5. I usually know how to join in when a group of students is having fun together.
- 6. Other students sometimes make fun of or tease me.

Teacher Interaction:

- 1. My teacher speaks to me in a friendly way.
- 2. My teacher likes having me in the class.
- 3. I am usually able to get help from the teacher when I need to.
- 4. I understand what the teacher expects from the students in the class.
- 5. The class rules are the same for all students in the class.
- 6. My teacher knows I can do good work.

Teaching Style:

1. The material is sometimes presented too quickly for me to be able to understand it.

- My teacher understands the way I am best able to learn about new things.
- 3. It is all right to be creative when I do my assignments as long as the work is accurate.
- I am called on in class when the teacher wants to find out if I know the answer.
- 5. The teacher checks to see if I am doing the work correctly when I begin an assignment.
- 6. My teacher helps me know when to do different class activities.

Learning Style:

- It is easy to organize the materials I need to do my work.
- When I get a big assignment, I break it down into small parts before I start to work.
- 3. I usually know how much time I need to set aside to complete an assignment.
- 4. A good reward is to know I have done my work correctly.
- 5. I am most interested in thinking carefully as I do my work.
- 6. When I am working on an assignment at my desk, I do not pay much attention to what is happening in the classroom.

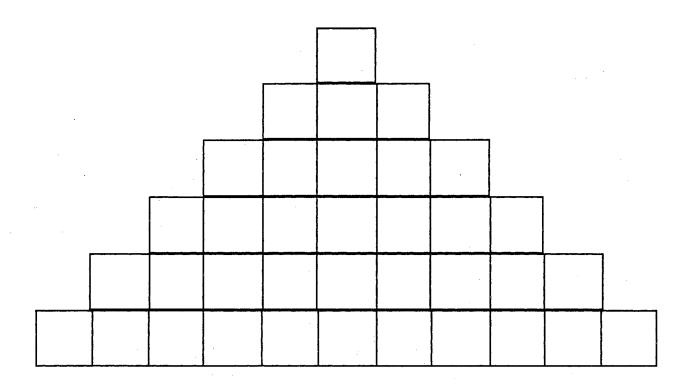
Self-concept:

- 1. I am able to cope with school as easily as other students.
- 2. When I work hard I am able to make a good grade.
- 3. I feel happy most of the time I am in class.
- 4. I usually make decisions that turn out to be good ones.
- 5. I have many good qualities to offer.
- 6. I am the kind of person who does my best.

APPENDIX E

Q-SORT DISTRIBUTION AND SCORE SHEET

Q-Sort Distribution and Score Sheet



APPENDIX F
Q-SORT STATMENTS

Category Structure for O-sort

Curriculum:

- 1. All students in class do the same assignments each day.
- 2. Most of the schoolwork is interesting to me.
- 3. I am able to understand the material as it is given.
- 4. The textbook material makes sense to students in the class.
- 5. In my class I am taught how to learn new material.
- 6. I know that the things that I am learning in class will help me when I am an adult.

Peer Interaction:

- 1. Members of my class usually listen to my ideas.
- Working in groups with other students makes it easy to complete projects.
- 3. I have friends in my class that I spend time interacting with each day.
 - 4. Other students feel I am a member of the class.
 - 5. I usually know how to join in when a group of students is having fun together.
 - Other students sometimes make fun of or tease me.

Teacher Interaction:

- 1. My teacher speaks to me in a friendly way.
- 2. My teacher likes having me in the class.
- 3. I am usually able to get help from the teacher when I need to.
- 4. I understand what the teacher expects from the students in the class.
- 5. The class rules are the same for all students in the class.
- 6. My teacher knows I can do good work.

Teaching Style:

1. The teacher sometimes presents the material too quickly for me to be able to understand it.

- 2. My teacher understands the way I am best able to learn about new things.
- 3. It is all right to be creative when I do my assignments as long as the work is accurate.
- I am called on in class when the teacher wants to find out if I know the answer.
- 5. The teacher checks to see if I am doing the work correctly when I begin an assignment.
- 6. My teacher helps me know how to do different class activities.

Learning Style:

- 1. It is easy to organize the materials I need to do my work.
- 2. When I get a big assignment, I break it down into small parts before I start to work.
- 3. I usually know how much time I need to set aside to complete an assignment.
- 4. A good reward is to know I have done my work correctly.
- 5. I am most interested in thinking carefully as I do my work.
- 6. When I am working on an assignment at my desk, I do not pay much attention to what is happening in the classroom.

Self-concept:

- 1. I am able to cope with school as easily as other students.
- 2. When I work hard I am able to make a good grade.
- 3. I feel happy most of the time I am in class.
- 4. I usually make decisions that turn out to be good ones.
- 5. I have many good qualities to offer.
- 6. I am the kind of person who does my best.

APPENDIX G
INTERVIEW FORMAT

Interview Format:

Students at the extreme ends of each factor will be interviewed to determine if the sort accurately reflects individual points of view and to gather more detailed information. The specific questions asked cannot be determined until the Q-sorts undergo factor analysis. Questions will relate directly to concourse items; examples of possible questions are listed below.

- What do you find especially interesting about the schoolwork you do in your inclusive classroom? (Probe)
- 2. How do you know you have done your best? (Probe)
- 3. What clues tell you that the class rules are not the same for all students in the class? (Probe)
- 4. What types of things distract or interrupt you when you are working on an assignment? (Probe)
- 5. In what way are you important to other students in your class? (Probe)
- 6. How does your teacher show you she is glad you are in the class? (Probe)
- 7. What have you found works best when you need to get help from the teacher? (Probe)
- 8. How do you feel when you don't understand the material as it is given? What do you do about it? (Probe)
- 9. What might your teacher do to help you learn material more easily? (Probe)
- 10. What clues tell you that other students cope with school more easily than you do? (Probe)

APPENDIX H CORRELATION MATRIX

Table 19

<u>Correlation Matrix</u>

| sor | t 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------|--------------|--------------|--------------|--------------|-------|-------|--------------|--------|-------|-------|
| 1 | | | | | | | | | | |
| 1 2 | 4143 | | | | | | | | | |
| 3 | 3429 | 3095 | | | | | | | | |
| 4 | 2524 | 4190 | 1143 | | | | | | | |
| 5 | 3619 | | -1190 | 3333 | | | | | | |
| 6 | 5048 | 3143 | 3810 | 3619 | 2857 | | | | | |
| 7 | 3476 | 0095 | 2714 | 0476 | -0714 | 2429 | | | | |
| 8 | 4762 | 4190 | 2762 | 4143 | 2048 | 5476 | 2810 | | | |
| 9 | 2286 | 3238 | 0714 | 2143 | 4429 | 5952 | | 4762 | | |
| 10 | 3190 | | -0238 | | 1810 | 3667 | 0190 | | 2333 | |
| 11 | 4190 | 3905 | 3571 | | 0952 | 3524 | 3238 | 3476 | 1714 | -0190 |
| 12 | 5429 | 3000 | 4238 | 2381 | 3286 | 5095 | 4952 | 4571 | 3857 | 2095 |
| 13 | 2524 | 3048 | 0571 | 1429 | 2952 | 2190 | 0333 | 1095 | 2857 | 2048 |
| 14 | 0714 | 3000 | 2286 | 4190 | 1000 | 2667 | 0714 | 3714 | 0905 | 0714 |
| 15 | 2857 | 0762 | 0333 | 1429 | 2381 | 2143 | 2333 | 1286 | 1000 | 0000 |
| 16 | 4143 | 2429 | 2048 | 0762 | 1000 | 2333 | 3524 | 3143 | 0857 | 1762 |
| 17 | 1143 | 0810 | 0857 | -1952 | 0429 | -0190 | -0238 | -2667- | -1286 | 1095 |
| 18 | 3762 | 2095 | 0333 | 0381 | 2381 | 3524 | 2048 | 2476 | 3762 | 3952 |
| 19 | 5381 | 0905 | 0619 | 1095 | 2619 | 4333 | 4810 | 4667 | 4952 | 3095 |
| 20 | 3286 | 4571 | 0857 | 3952 | 4286 | 4714 | 1429 | 3810 | 4810 | -0476 |
| 21 | 1571 | 1524 | 0619 | -1286 | 0810 | 1095 | 1143 | | | 2333 |
| 22 | 2667 | 5571 | 1762 | 4095 | 4381 | 2857 | 2905 | 3714 | | 0524 |
| 23 | 1571 | 4048 | 1000 | 4952 | 3905 | | -1619 | | | -1857 |
| | -1238 | | -2571 | | -0905 | -0143 | -0476 | | 1381 | 0524 |
| 25 | 2286 | 4000 | 2857 | 4810 | 3143 | 3286 | | 2952 | 2619 | -0333 |
| 26 | 2524 | -0571 | | -1143 | 1619 | 3476 | | 0619 | 2571 | 4857 |
| 27 | 4476 | 4381 | 1762 | 2619 | 4048 | 3095 | 2286 | | 3095 | 3381 |
| 28 | 4000 | 2190 | 3286 | 4952 | 1810 | 4476 | | 5143 | 2714 | 0286 |
| 29 | 4000 | 2190 | 3286 | 4952 | | 4476 | | 5143 | 2714 | 0286 |
| 30 | 2762 | 2190 | 1952 | | 3095 | 0333 | | -0286 | 1429 | 1190 |
| 31 | 1048 | 0095 | 0619 | 0381 | -1190 | 3048 | | 2048 | 0429 | -0619 |
| 32 | 1571 | 2048 | | -1286 | 1714 | 3810 | 3952 | 1667 | 3619 | 0810 |
| 33 | 4857 | 1048 | 1714 | 2190 | 1571 | 3095 | 4762 | | 1905 | 2857 |
| | -0476 | | | -1476 | | | | 0381 | | |
| 35 | 4667 | 2857 | 0476 | 1524 | 3524 | 4429 | 2000 | | 3095 | 3190 |
| 36 | 5333 | 4143 | 0476 | 1095 | 1952 | 2857 | 2381 | 3333 | 1286 | 0952 |
| 37 | 3000 | 1667 | 1000 | -0190 | 2952 | 3190 | 1143 | | 4286 | 2429 |
| 38 | 0095 | -0952 | -0333 | -1000 | -0381 | 2000 | 2524 | | 1476 | 1095 |
| 39 40 | 1476 2857 | 2762 2619 | 0619 0762 | -1190 3000 | 3333 | 2333 | 1381 0762 | | 3810 | 1905 |
| 40 | 205/ | 2019 | 0/02 | 3000 | 4952 | 5143 | 0/02 | 2952 | 6476 | 3333 |

| Corr | | ion mat | 13 | cont.) 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|--------------------------------------|--------------|---------------|---------------|----------------|--------------|----------------|---------------|---------------|--------------|---------------|
| 1 2 3 4 5 6 7 8 | | | | | | | | | | |
| 10 11 | | | | | | | | | | |
| 12 13 | 3952 0524 | 1857 | | | | | | | | |
| 14 15 | 3476 0810 | 2000 3190 | -0762 2762 | -0762 | | | | | | |
| 16 | 3429 | 2524 | 1381 | 1238 | 0381 | | | | | |
| 17 18 | 1714 3381 | -0286 4000 | 2048 -0905 | -2476 0143 | 2429 3381 | 0810 0762 | 3143 | | | |
| 19 | 0810 | 4571 | 1857 | 1238 | 4000 | 2000 | 0048 | 3762 | | _ |
| 20 21 | 2333 1667 | 2190 1714 | 1190 | 2952 -0571 | 4238 0476 | -0190 -1095 | 0286 3619 | 3571 3381 | 3429 4238 | 2619 |
| 22 | 2000 | 2524 | 0667 1952 | 3190 | 0333 | 2429 | 0476 | 2000 | 2762 | 5667 |
| 23 - | 0095 | 0857 | 0095 | 1429 | 0048 | -1762 | -2857 | -1762 | | 2667 |
| | 1286 0571 | -2333 | 0333 5095 | -3381 1762 | 1476 1429 | 0619 1238 | 2190 1333 | 0857 -1000 | 1190 2810 | -0143 1667 |
| 26 | 3000 | 2714 2095 | 1238 | -1048 | 1238 | 2762 | 2048 | 3429 | 2476 | 1007 |
| 27 | 2476 | 5333 | 3524 | 2143 | 3095 | 2381 | 2714 | 4476 | 5381 | 3810 |
| 28 | 3143 | 5095 | 1619 | 4476 | 2238 | 0524 | | 1000 | | 3905 |
| 29 30 | 3143 0238 | 5095 3095 | 1619 3810 | 4476 -1143 | 2238 2190 | 0524 1524 | -0381 0667 | 1000 0476 | 3429 2952 | 3905 0143 |
| 31 | 1333 | 2762 | 0429 | 1000 | 3190 | -0857 | | 1429 | 0857 | |
| 32 | 2571 | 4286 | 3619 | 0952 | 0714 | 1857 | | 0619 | | |
| | 1333 | | | -1905 | | | | | 3190 | |
| | 0095 0810 | 0190 2810 | | -1333 -0333 | 1952 | | | -1714 | 1810 4667 | |
| | 2619 | 2619 | | 0048 | | | 1429 | | 4238 | |
| 37 | 1476 | 4143 | | | -0048 | -1143 | -0238 | 1476 | 4095 | -0524 |
| | 0095 | 3381 | | -1429 | | | -0429 | | | |
| 39 40 | 0857 0667 | 4095 2286 | 3524 4190 | 0667 1286 | -0524 | 2476 0524 | -1190 1762 | -0381 | 2762 5333 | 0190 5049 |
| 40 | 000/ | 2200 | 4190 | 1200 | 3932 | 0524 | 1/02 | 3238 | 2333 | 504 6 |

```
Correlation matrix (cont.)
                                                          29
                                                   28
                                                               30
sort 21
            22
                  23
                               25
                                      26
                                             27
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21
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    2619
          1333
23 -1857
24
    0524 -2286 -1952
    0905
                 2238 -2571
25
          4762
                        1190 -0238
26
    3238
          1048 -4048
    5476
           5286 -0714 -0286
                              3571
                                     2571
27
    1286
          2857
                 3143 -2524
                              2857
                                     0619
                                           3667
28
29
    1286
          2857
                 3143 -2524
                              2857
                                     0619
                                           3667 10000 ----
30
    1619
          2571 -0810 -2238
                              4762
                                     2000
                                           3857 -0286-0286 ----
31
    0190 -0429 -0524
                        1429 -2000 -0381 -0524
                                                  3571 3571-1619
                                                  3095 3095 1238
    4476
          0857 -1476
                        1905
                                     2048
                                           4476
32
                              2190
33
    1714
                1095
                        0524 -0048
                                     3381
                                                  3905 3905 1714
          0857
                                           1714
34
    1571 -0048 -0381
                        3238
                              0905 -0143
                                           1571
                                                  0571 0571 0238
35
    1476
          2048
                 1333
                        3000
                              2143
                                     1000
                                           5095
                                                  2476 2476 1667
                              0810 -0095
                                                  2143 2143 2238
36
    3095
          2143
                 0333
                        1286
                                           5286
    2857
                              4238
                                                  2524 2524 3952
37
          1333 -0048
                        0667
                                     4048
                                           4429
38
    0000
          1238 -1571
                        0905 -0095
                                     0810
                                           2952
                                                  2286 2286-0619
    1048
           3286 -1190
                              2143
                                                  1333 1333 3476
39
                        0286
                                     1857
                                           4667
40
    2714
          3238 -0048
                                                  2619 2619 1810
                        3762
                              3190
                                     3143
                                           4714
```

```
Correlation matrix (cont.)
sort 31
                   33
                                 35
                                        36
                                               37
                                                      38
                                                            39
                                                                  40
            32
 1
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    1667
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    2619
           2857 -0667
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           4667
                  2714
                         4762
36
    3143
           2476
                  2762
                         3714
                               5667
37 -1048
                                4905
           4095
                  2048
                         3571
                                      1667
38
   4524
           2476 -0571
                         3524
                                      1571
                                             2000
                               2714
39 -0238
           3714 -0048
                         4476
                                             5667
                               4857
                                      2571
                                                    4000 ----
40 -0381
           4143
                  2048
                         1667
                               4619
                                      3095
                                             3762 -0524 1857 ----
```

APPENDIX I

NINE FACTOR SOLUTION OF STUDENT PERCEPTIONS TOWARD INCLUSION

Table 20 Nine Factor Solution of Student Perceptions Toward Inclusion

| Total | Sort | Student Numbers |
|---------|-------------------|----------------------|
| [3] | A: | 25 30 37 |
| [4] | B: | 2 5 20 22 |
| វិ5 រំ | C: | 6 12 28 29 31 |
| រែនា៍ | D: | 3 11 16 |
| ្រី4 រ៉ | E: | 9 10 26 40 |
| រែនា៍ | F: | 17 21 23 |
| [4] | G: | 24 34 35 36 |
| 121 | H: | 38 39 |
| [2] | I: | 18 33 |
| [2] | Confounded sorts: | 1 13 |
| [8] | Not significant: | 4 7 8 14 15 19 27 32 |

⁴⁰ sorts

³⁶ items

¹¹ piles
9 centroids extracted

APPENDIX J Z SCORES

Table 21

Z-Scores

| Fact | or | A | В | С | - D | E | F | |
|------|----------|--------|--------|--------|----------------|--------|--------|--|
| | 4 | 1 400 | 0 742 | 0 000 | 0 516 | 0 077 | 0 000 | |
| item | 1. | -1.488 | | | 0.516 | | | |
| | 2. | | | | -1.648 | | 1.540 | |
| | 3. | | -0.403 | 1.504 | | -0.287 | | |
| | 4. | 0.533 | | | 0.152 | | -0.554 | |
| | 5. | 0.688 | | -0.068 | 0.783 | -0.621 | 0.346 | |
| | 6. | -0.051 | 0.888 | 0.392 | 0.856 | 1.043 | 1.081 | |
| | 7. 8. | 1.036 | -0.689 | | | | | |
| | | | | -1.236 | 1.632 1.100 | | | |
| | 9. | | 2.343 | | | 1.252 | 0.127 | |
| | 10. | | | 1.430 | | | 0.616 | |
| | 11. | | 1.436 | 1.630 | | -0.300 | | |
| | 12. | | | | -1.584 | | | |
| | 13. | | -0.806 | | 1.232 | | 1.075 | |
| | 14. | | | | 0.581 | | 0.735 | |
| | 15. | | | -1.304 | | | -0.464 | |
| | 16. | | | -0.490 | | | -0.366 | |
| | 17. | | -1.398 | | 1.830 | 1.349 | 0.095 | |
| | 18. | | 0.966 | | 1.324 | 1.563 | 1.825 | |
| | 19. | | -0.766 | | 0.367 | | -1.177 | |
| | 20. | | | -1.514 | | -1.194 | 0.452 | |
| | 21. | | | -0.777 | | 0.754 | 0.346 | |
| | 22. | | | 0.020 | | -0.215 | | |
| | 23. | | | | | | 1.799 | |
| | 24. | | | -0.881 | | -0.423 | 0.000 | |
| | 25. | | | -0.479 | | -0.666 | | |
| | 26. | | | -0.939 | | -1.003 | | |
| | 27. | | | | -0.595 | | | |
| | 28. | | | 0.296 | | | 0.075 | |
| | 29. | | | | | 0.276 | 1.133 | |
| | 30. | | -1.826 | | -0.974 | | | |
| | 31. | | | | | | | |
| | 32. | | | | 1.375 | | 0.523 | |
| | 33. | | | 0.068 | | | 0.761 | |
| | 34. | | 0.597 | 1.123 | | 1.473 | 0.969 | |
| | 35. | | 0.733 | | 0.210 | | -1.038 | |
| | 36. | 1.487 | 1.367 | -0.012 | -0.315 | 0.064 | 1.522 | |

VITA

Beverly A. Carstens Benge Candidate for the Degree of Doctor of Philosophy

Thesis: PERCEPTIONS OF STUDENTS WITH DISABILITIES TOWARD

INCLUSIVE REGULAR EDUCATION CLASSROOMS

Major Field: Applied Behavioral Studies

Biographical:

Education: Graduated from Helena High School, Helena, Montana in May 1965; received Bachelor of Arts degree in Elementary Education from Rocky Mountain College, Billings, Montana, in December 1968.

Completed the requirements for the Master of Science degree with a major in Student Personnel and Guidance at Oklahoma State University in July, 1974; completed the requirements for the Doctor of Philosophy degree with a major in Special Education at Oklahoma State University in May, 1996.

Experience: Elementary classroom teacher in Montana, Nevada, and Oklahoma from 1969-1975. Preschool teacher and counselor from 1980-1983. Teacher of the Emotionally Disturbed and Counselor, Ripley Public Schools August, 1989, to present. Graduate Assistant, Department of Applied Behavioral Studies, Oklahoma State University, August, 1995, to present.

Professional Memberships: National Education Association, Council for Exceptional Children, Phi Kappa Phi.

OKLAHOMA STATE UNIVERSITY INSTITUTIONAL REVIEW BOARD HUMAN SUBJECTS REVIEW

Date: 10-11-95 **IRB#:** ED-96-037

Proposal Title: PERCEPTIONS OF STUDENTS WITH DISABILITIES TOWARD

INCLUSIVE REGULAR EDUCATION CLASSROOMS

Principal Investigator(s): J.B. Wilkinson, Beverly Carstens Benge

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING.

APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.

ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval are as follows:

Signature:

hair of Institutional Review Rea

Date: October 23, 1995