THE INCLUSION OF AUTISTIC STUDENTS IN THE GENERAL CURRICULUM

by

Eric Sparkenbaugh

B.A., Bucknell University, 1990

M.S.Ed., Duquesne University, 1993

Submitted to the Graduate Faculty of

the School of Education in partial fulfillment

of the requirements for the degree of Doctor of Education

University of Pittsburgh

2006

UNIVERSITY OF PITTSBURGH

SCHOOL OF EDUCATION

This dissertation was presented

by

Eric Sparkenbaugh

It was defended on

August 31, 2006

and approved by

Maureen McClure, Faculty, Administrative and Policy Studies

Richard Seckinger, Faculty Emeritus, Administrative and Policy Studies

Nancy Minshew, Professor of Psychiatry and Neurology, School of Medicine

Daniel Berquist, Retired Director of Pupil Services, Montour School District

Dissertation Director: Charles Gorman, Faculty Emeritus, Administrative and Policy Studies

THE INCLUSION OF AUTISTIC STUDENTS IN THE GENERAL CURRICULUM

Eric Sparkenbaugh, Ed.D.

University of Pittsburgh

Elementary, middle, and retired teachers, from the Montour School District, volunteered to

participate in a research study of teachers' attitudes and beliefs pertaining to academic standards

and inclusion of autistic students in the general curriculum. Fourteen participants completed two

surveys and a personal interview with an independent observer present. Survey responses were

analyzed and further clarified during the interviews. Teacher profiles were developed, which

shared personal experiences and beliefs regarding the standards and inclusion.   Although

experiences and attitudes varied greatly between individuals, all of the participants recognized

the need to participate in individualized education planning and the need for additional training

regarding autism and inclusion.   Participants also acknowledged the emphasis on teaching the

Pennsylvania academic standards and the increased pressure to have all students become

proficient in the areas of reading, writing, and mathematics.

TABLE OF CONTENTS

Chapter I - Review of Literature

Introduction

Over the past decade, the number of children diagnosed with Autism Spectrum Disorder (ASD) has increased significantly (Yeargin-Allsopp, Rice, Karapurkar, Doernberg, Boyle & Murphy, 2003). Projections regarding the growth of ASD in Pennsylvania also reveal a steady increase in the incident rate. Public schools in Pennsylvania ultimately need to expand their capacity to address this growing population. In order to provide an appropriate education, the student's needs drive the program; therefore, a rudimentary understanding of autism is required. Various settings, programs, and techniques may be examined to determine a proper placement and an individualized education plan. This chapter will review literature and law regarding the nature of autism, the inclusion of special needs students in the general curriculum, and the concept of building individual and school capacity for program improvement.

Autism

Autism is a neurobiological disorder of development within the brain, which causes discrepancies or differences in the way information is processed, and directly affects an individual's ability to comprehend and communicate. Primarily, difficulties lie in the individual's ability to: use language to interact and communicate with others, understand and relate in typical ways to people, events, and objects in the environment, respond to sensory stimuli, and learn and think like typically developing children. The effects of autism on learning and functioning can range from mild to severe and can cause confusion, frustration, and anxiety, expressed in a variety of ways. Such reactions include social withdraw, repetitive behaviors, and

possibly, in extreme situations, aggressive and/or self-injurious behaviors (Janzen, 1996). The learning and thinking styles exhibited by people with autism are as unique as the individual, yet they often are predictable. Furthermore, it is essential to gain an understanding of how students process information, how they think, and how they are likely to respond in certain situations. This will assist in identifying the antecedents to many learning and behavior problems.

The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, (DSM-IV) defines the broad range of Pervasive Developmental Disorders (PDD) and specifically, the essential features of Autistic Disorder. The impaired development in social interaction and communication of individuals with Autistic Disorder is marked and sustained. They demonstrate restricted, repetitive, and stereotypical patterns of behavior, interests, and activities. Manifestations of the disorder vary greatly depending upon the age and developmental level of the individual. Consequently, the impairment must manifest by delays or abnormal functioning in at least one of the following areas prior to age three: social interaction, language, or symbolic or imaginative play. Epidemiological studies suggest rates of Autistic Disorder of 2-5 cases per 10,000 individuals (DSM-IV, 1994).

Autism Spectrum Disorder encompasses a broad range of brain disorders that include Asperger's Syndrome, Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS), Rett Syndrome, which only affects females, and autism. In January 2004, a new tool called Autism A.L.A.R.M. (**A**utism is prevalent, **L**isten to parents, **A**ct early, **R**efer, **M**onitor) emerged collaboratively from the Department of Health and Human Services, the Center for Disease Control, the American Academy of Pediatrics, the Medical Home Initiatives, and First Signs, Inc., to assist primary care physicians with the early diagnosis of autism. According to this new diagnostic tool, autism now affects one in every 166 children born today.

Educating students with autism presents many challenges to the multidisciplinary professionals and staff charged with providing an appropriate education. Today, many of these students are being educated in their neighborhood schools, where students with ASD warrant varying degrees of assistance and intervention to address communication, behavior, social, and academic needs. Autism has been recognized as a category of disability by the federal government since the passage of the Individuals with Disabilities Education Act (IDEA) in 1990; therefore, students with autism are eligible for special education and related services if necessary.

IDEA required each state's Department of Education and the U.S. Department of Education to record specific childhood disabilities, including autism, for each school year. The Pennsylvania Public Schools Autism Prevalence Report, School Years 1992-2003, analyzed the IDEA data by quantifying and characterizing the trends of autism prevalence (Hollenbeck, 2004). The results indicated a systemic increase in autism prevalence across the United States; in Pennsylvania, 7,178 children met the eligibility criteria for the autism disability category in 2003. Additionally, there was an 876% cumulative growth rate of autism from 1992-2003, a 21% average annual growth rate. The majority of this increase was attributed to the identification of young children (Hollenbeck, 2004).

School administrators can make efforts to develop and enhance their competence as leaders of effective educational programs for these special students. Individualized intensive programs should address specific deficits and utilize each student's particular strengths as well as all available resources. Rea (2000) suggested administrators seek various sources of information regarding autism and make concerted efforts to personally know these unique children. Modeling collaboration and teamwork and offering meaningful training and support to staff can

foster positive attitudes and develop skills to strengthen such a program. Additionally, providing legitimate opportunities for inclusion with typical peers can extend the learning domain.

Effective teachers and paraprofessionals responsible for the daily education of special needs students generally exhibit an appreciation for diversity, patience, and problem solving capabilities (Rea, 2000). The task also requires refined organizational skills and specific knowledge regarding autism and effective practices. High expectations and adequate yearly progress for students should be maintained, while remaining conscious of the considerable stress and demands of raising a child with this disability.

Appropriate educational interventions acknowledge the students' perceptions of the world and adapt the environment to facilitate learning. The typical school setting is not necessarily well suited or structured for autistic students; however, it can be modified to meet their individual needs. Visual cues and picture schedules help address deficits in language comprehension and communication. Also, well structured and organized lessons, with clear expectations, lead to fewer behavior problems and greater independence. This concept, also known as structured teaching, applies physical organization, scheduling, and deliberate teaching methods to promote success (Volmer, 1995).

Developed in the early 1970's by Schopler, the Treatment and Education of Autistic and Related Communication Handicapped Children (TEACCH) approach prioritizes the person and structure. By centering on the individual, understanding autism, and making necessary accommodations, intervention strategies build on existing strengths and interests. Organizing the physical environment, developing schedules, providing clear expectations, and using visual materials proved effective in helping people with autism acquire and utilize necessary skills

(Mesibov, 2004). Structured teaching implies nothing about where autistic students should be educated; this should be a collaborative decision determined by the skills and needs of the individual student.

Equally important are the critical elements of structure within a classroom. All facets of the student's environment and educational program should be tailored to meet the particular needs of each student. Often, students with autism face organizational challenges and difficulties with general rules or simple directions because of their limited comprehension and/or language skills (Landrus & Mesibov, 1986). Younger students, special needs students, and impulsive students require increased structure, firm boundaries, and specific cues to promote appropriate behavior and academic growth.

A self-contained classroom for younger autistic students may necessitate areas for play, snack, rest, formal instruction, independent work, and the development of self-help and social skills. Classrooms for middle and high school students generally require areas for group and individual instruction, domestic skills, grooming, and leisure (Landrus & Mesibov, 1986). Spacious rooms, with separate areas for each activity, are ideal yet uncommon. The use of visual cues to clarify expectations and label the environment, in both printed and iconic form, enables the students to accurately discriminate between and among activities. The natural attributes of each distinct classroom should also be utilized to minimize distractions.

Schedules and routines are crucial components of a structured educational program and provide the student with a deeper understanding of expectations and predictability (Volmer, 1995). Many classrooms avail two types of schedules simultaneously; a general class schedule and individual student schedules (Landrus & Mesibov, 1986). The general class schedule signifies what the teacher has planned as whole group activities, while the individual student

schedules indicate the specific instructional activities or other related services for that child. Another essential component of sound scheduling is the employment of the Premack principle, or first/then sequencing. A powerful method for maintaining motivation, students are able to engage in a preferred activity, which is contingent upon their completion of a less desired task. Successful teaching strategies incorporate clear, concise directives and prompts, thus allowing students to maintain attention when receiving directions or attending to a task. Subsequently, knowing where to obtain necessary materials and requesting assistance when needed remain a priority for the student.

Special attention is warranted when selecting and prioritizing behaviors to address and modify. Symptomatic behaviors associated with autism, although not critical for the development of essential skills or the student's general functioning, can be targeted after the most crucial tasks are addressed. For students with autism, the focus should rest on the antecedents to behavior and skill deficits rather than the consequences of a behavior (Volmer, 1995). Continuous, praise, firm redirection, positive reinforcement, and mild punishment are preferred strategies when dealing with the behavioral issues of autistic students as well as their typical peers.

More often, autistic students have difficulty generalizing social skills than do other students; therefore, social skill training should focus on the generalization of skills. Positively and consistently reinforcing targeted skills, across several settings, allows for effective behavior modification and can help students develop and hone desired qualities. Using non-handicapped students to model and assist with social skills training benefits both the tutor and learner, only

enhancing the generalization of acquired skills (Wooten & Mesibov, 1986). Marked changes in

the peer tutors' sensitivity to and acceptance of autistic students and their needs are added

advantages (Cox & Schopler, 1991).

Inclusion

The terms inclusion, or inclusive education, are not specifically defined in federal laws or

state mandates, yet the provision for a student to be educated in the least restrictive environment

proffered the legal stimuli for inclusive education (Villa & Thousand, 1995). The mandate

impelling inclusion in the United States is Public Law 94-142, known as the Individuals with

Disabilities Education Act. This law states:

> to the maximum extent appropriate, handicapped children, including those children in
> public and private institutions or other care facilities, are educated with children who are
> not handicapped, and that special classes, separate schooling, or other removal of
> handicapped children from the regular educational environment occurs only when the
> nature or severity of the handicap is such that education in regular classes with the use of
> supplementary aids and services cannot be achieved satisfactorily (P.L. 94-142, Section
> 1412 [5] [B]).

Attempts to include all students in general education programs have endured throughout

history. In the United States, handicapped and learning disabled students were not deemed

worthy of formal education until the 1800's. Segregated or institutionalized education was the

norm during the nineteenth and most of the twentieth century. Even when compulsory school

attendance laws were passed in the early 1900's, many disabled children were excluded from

public schools (Villa & Thousand, 1995). Special classes and day schools surfaced in the early

part of the twentieth century, yet institutional programs and separate educational facilities

lingered as the preferred method of educating disabled students.

During the 1950's and 1960's, it appeared the country developed a greater respect for human dignity, regardless of individual differences. A powerful movement toward civil rights, away from the more segregated education options, fell into place (Villa & Thousand, 1995). Most notably, the 1954 *Brown vs. Board of Education* decision, whereas Chief Justice Warren ruled "separate is not equal". While this ruling almost immediately confronted the exclusive practices facing minorities, it later led to more inclusive opportunities for disabled students.

In November of 2004, Congress completed work on the reauthorization of IDEA entitled the Individuals with Disabilities Education Improvement Act (IDEIA), also known as IDEA 2004. The new IDEIA frequently refers to the Elementary and Secondary Education Act of 1965, now known as No Child Left Behind (NCLB). These references address new qualifications for special education teachers, new assessment requirements for students with disabilities, and provisions that allow IDEIA funds to be used for activities required by NCLB.

Public schools across America face the daunting responsibility of providing a free and appropriate education for all students. Riehl (2000) examined the role of school administrators in responding to the myriad of needs within a diverse student population. Three particular administrative tasks were explored: cultivating new meanings and acceptance of diversity, nurturing inclusive school climates and instructional programs, and facilitating positive and productive relationships between schools and communities (Riehl, 2000).

Relevant discourse and discussion among stakeholders and the co-creation of new meanings and understandings regarding diversity, and inclusion, can facilitate the reconstruction of beliefs and expectations. Administrators can reinforce effective practices and procedures that embrace diversity and support differentiated instructional techniques, which address all types of learners and ability levels (Riehl, 2000). All in all, educational leaders can help identify and

prioritize shared goals, acquire and distribute necessary resources, and support the implementation of strategies to improve student learning and outcomes.

There have been a variety of terms used to characterize the education of students with disabilities with their typical peers. Integration described the placement of special needs students into regular schools. The term mainstreaming illustrated the placement of these students in regular education classes. Inclusion, however, described much more than accepting special needs students into the mainstream. True inclusive education programs targeted the restructuring of the school to accept and meet the diverse needs of each and every student, ultimately teaching all students together (Westling & Fox, 2000).

Recently, educational placement options for all children with disabilities have greatly expanded in response to changing theories of programming. Philosophies have ranged from completely segregated schools and classrooms, selected participation, mainstreaming for specific content areas or desired activities, peer tutoring, reverse mainstreaming, to partial or full inclusion with appropriate support and accommodations (Wagner, 1999). Many special needs students, including autistic children, are now being educated in regular classrooms with their peers. Exposure to typical peers in realistic and multiple settings can be mutually beneficial. Social development is enhanced by positive role models, and successful interactions and attention can bolster self-esteem. Conventionally developing students can also learn about their disabled classmates and hopefully develop greater understanding, acceptance, and tolerance.

Supported education, a term used to describe programs which provide necessary support and insurances of academic goals, refers to those individuals with disabilities who are integrated or included in general programs. Some student's needs are best met in a self-contained special education classroom or facility, while others are best served partially or fully integrated into the

general curriculum with the necessary support and adaptations. In order to benefit from any

educational experience, autistic students rely on others to provide vital support and interventions.

Without reservation, the teacher and paraprofessionals should organize the environment, design

appropriate instruction, and help interpret the meanings of events. When all elements of an

educational program are congruent with the student's needs, motivation is high, learning is

optimum, and behavior is stable (Janzen, 1996).

Inclusion often involves complex systemic change, which confronts the school culture,

and personal and organizational values. This paradigm shift requires vision, skill, incentives,

and resources. Diversity needs to be valued, along with a sense that all students belong.

Because learning is as an evolutionary process that engages students on multiple levels, teacher

preparation can equip educators with abilities to personalize learning for all students (Thomas,

2004).

Equally important is the philosophical argument that children with disabilities are entitled

to an education within the mainstream of public education. This assertion is based primarily on

two arguments: 1) segregating these students denies them access to normal classes or

experiences, and 2) segregated services have not delivered an appropriate education for disabled

students (Division TEACCH, 2004). Decisions about merging autistic students into integrated

settings must adhere to the "least restrictive environment" principle. It should be noted this

concept requires appropriate learning occur; therefore, the setting selected should promote

meaningful learning and functioning.

Furthermore, inclusive opportunities for autistic students should be offered based on the

child's ability to function and participate in a particular activity or setting (Division TEACCH,

2004). Following adequate student assessment and staff training, inclusion activities typically

require continued support, cooperation, and communication. Oftentimes, placements for children with autism involve a combination of educational settings. Individualization cultivates unique solutions that meet the specific needs of the student; however, inclusion should not replace the full continuum of services. Partial inclusion and special classes and/or programs should be retained as an option for students who require such a level of intervention (Division TEACCH, 2004).

Regardless of the educational setting, any program for autistic students should be age and developmentally appropriate. Each student reveals particular strengths and weaknesses, which must be considered as academic and functional skills are balanced. Growing evidence has indicated that placing students with ASD in general education settings with their peers can significantly change behaviors (Smith, Polloway, Patton & Dowdy, 1998), as peers generally served as excellent role models and often supported their autistic classmates.

Capacity

In order to meet the demands of NCLB and to ensure all students meet new and more challenging expectations, meaningful educational reform should consider the availability of resources, professional development, and the many factors determining educational capacity. Spillane and Seashore Louis (2002) argued that the bottom line for school improvement is student learning, and improving students' opportunities to learn results in measurable and subtle achievement growth. If a current educational system does not possess the capacity to accomplish desired goals, then the system's capacity may be increased by improving the effectiveness and efficiency of workers, adding or reallocating resources, and/or by restructuring how work is organized and services are delivered (O'Day, Goertz & Floden, 1995).

Teacher capacity is multidimensional and evolving and should consider the teachers knowledge, skills, dispositions, and views of self (O'Day, Goertz & Floden, 1995). Competent instructors require knowledge of specific content areas, curriculum and relevant standards, and sound instructional techniques. Staff attitudes surrounding change, student expectations, and achievement should be acknowledged and discussed in a positive manner. Providing appropriate resources and training and a rationale for the necessary changes can help make resistant staff members more amenable to new programs or procedures. Also, teachers' views of themselves as learners and their role in the learning environment are critical (O'Day, Goertz, & Floden, 1995).

Proponents of systemic education reform have outlined several strategies for building teacher and organizational capacity to achieve standards-based reform (O'Day, Goertz, & Floden, 1995). The process and outcome of developing and articulating a reformed vision can boost organizational capacity and provide direction for the mission. Instructional guidance, through professional development activities, curriculum guides, and standards–based assessments, promotes capacity by evaluating progress and providing opportunities for continuing education. Granting professionals an active role in decision-making relevant to instruction may restructure the organization and in turn, advocates capacity. Implementing consistent systemic and individual evaluation procedures, across all disciplines and settings, and ensuring reasonable accountability measures facilitates the building of capacity.

Spillane and Seashore Louis (2002) adopted a model of instructional capacity which identifies key elements of instruction to further examine the relationship between school improvement initiatives and the actual teaching that occurs within the classroom. The first element of educational knowledge was comprised of specific content knowledge, pedagogical knowledge, and knowledge of learners in general. Gaining an understanding of students as

12

learners and their cognitive development allowed teachers to better comprehend how students process and experience new information. Moreover, social and cultural aspects of teaching and learning should be recognized.

Teachers' beliefs and expectations of student achievement influence the manner in which learning opportunities are presented (Spillane & Seashore Louis, 2002). Factors such as race, sex, and socio-economic status often cloud perceptions of student achievement and sometimes lower the expectations for students. Teachers, who assume the children in their classroom bring with them disadvantaging conditions, often shy away from higher level instructional activities and focus on basic skills. These low expectations for students may adversely affect self-concept and diminish effort.

As the largest group of involved professionals, teachers have been encouraged to take primary responsibility for the reformation of the teaching profession (Lambert, Collay, Dietz, Kent & Richert, 1997). Indeed, a teacher's capacity to influence a system requires the ability to understand the relationship of teachers and individual classrooms to the larger educational system. According to the research, a new perspective was upheld, viewing differently the work of teaching and learning, schools and schooling, and the organization of power and authority in schools. Consequently, teaching was considered highly relational and interactive, a learning community founded on constructivism.

Lambert (1998) expressed every person involved in the education of students has the right and potential to be a leader. Broad-based, skillful participation in reform movements redistributed power and authority and contributed to an infrastructure of support. Roles of the principal and teachers expanded, as reflective inquiring practitioners engaging in real dialogue

13

and self analysis. Structure, administrative support, and a shared vision provided opportunities for individuals to actively contribute to the implementation of meaningful endeavors.

It is apparent that legislation has removed educators' primary authority to assess needs and develop appropriate initiatives to respond to specific contexts (Lambert, Walker, Zimmerman, Cooper, Lambert, Gardner, Szabo, 2002). Mandates and directives for educational reform, accountability, and standards forced faculties to better understand the complexities of their unique situation and incorporate sound strategies fitting to their circumstances. Patterns of relationships formed the basis of human growth and development, as the lives of administrators, teachers, and students inextricably intertwined. Also, diversity enhanced the complexity of relationships and provided multiple perspectives, thereby extending human and societal possibilities (Lambert et. al., 2002).   Ultimately, a productive dissonance and increased consciousness led to a reciprocal social and intellectual growth, which helped balance the ecology of the system.

Schools that were improving exhibited collaboration and a collective commitment to desired outcomes. Harris and Lambert (2003) believed effective leaders captivated, inspired, and motivated the professional learning community charged with implementing productive change. Collegial relations afforded opportunities for people to work together in new ways and fostered trust and a sense of community. This social cohesion simultaneously improved the leadership capacity to maintain the conditions and skills necessary for optimum growth.

The history of educational reform indicates the traditional hierarchical model of school leadership has failed to produce meaningful reformation. The notion of educational leaders in positions of authority making critical decisions for improvement, then promoting adherence to sundry strategies by those charged with implementing changes, has proven inadequate.

Although there are cases where the traditional leadership approach has lead to meaningful improvement, these changes or new programs are frequently disbanded once the identified leader is removed (Copland, 2003).

Copland (2003) examined findings from a large-scale school reform effort throughout the San Francisco area entitled the Bay Area School Reform Collaborative (BASRC). BASRC's theory of school leadership instituted a change in school culture. Significant and meaningful innovations required collaboration and were accomplished cooperatively. Restructuring the roles and processes of leadership to comprise administrators, teachers, other professionals, paraprofessionals, and the community created distributed leadership, which led to increased capacity. Continual inquiry centered on student achievement, effective instructional techniques, and high standards strengthened capacity for improved student learning. Problem identification and problem solving strategies were developed collectively, focusing on increased learning for all students (Copland, 2003).

Massell (2000) explored four major capacity building strategies that Consortium for Policy Research in Education (CPRE) researchers observed in 22 districts in California, Colorado, Florida, Kentucky, Maryland, Michigan, Minnesota, and Texas over a two-year period. One of the most glaring trends enphasized the use of data to drive instructional decisions. The vast majority of districts valued the expansion of teacher knowledge and skills as a fundamental component of educational change. Although specific strategies differed, a commonly observed theme was the increased desire to provide less traditional forms of professional development. Aligning the curriculum with instruction emerged as a critical element of capacity, however, district approaches to achieve this goal varied substantially

(Massell, 2000). Lastly, some districts focused additional attention and resources on poorly performing schools and students in an effort to expand capacity.

As educators manage change to meet successful outcomes, basic observations can guide our thinking about educational change. Reform movements often occur in three broad phases: initiation, implementation, and institutionalization. Fullan (1989) acknowledged the critical aspects and integration of each phase while detailing implementation strategies and potential pitfalls. Characteristics of change projects underwent scrutiny as did specific characteristics of the change processes involved. Factors affecting the probability of a particular change project receiving the requisite attention and support were further observed and clarified.

Successful change involved continuous learning which was more intensive and systematic than traditional forms of in-service activities (Fullan, 1989). Leadership, at the building and district levels, played a critical role as to whether change was facilitated or stifled. Auspicious administrators obtained relevant knowledge and clearly communicated desired goals and expected outcomes, while sharing decision making and control over the process with the stakeholders. Continual monitoring and problem solving relied on effective communication and sensitivity to local, external, and community values and context.

Failing to adjust when the surrounding environment evolves can lead to extinction, yet making quick decisions can be equally as fatal (Fullan, 2001). Fullan acknowledged the complexity, unpredictability, and nonlinear nature of change. Deep sustained reform relied on the masses and involved slow learning in context over time. Leaders, on all levels, needed to demonstrate an understanding of the process and a widespread internal commitment. When change agents acted with a moral purpose and the intention of making a difference, they were better able to embrace new ideas and new patterns of relationships (Fullan, 2001).

Sustainability of comprehensive school reform was examined in changing district and state contexts (Datnow, 2005). Specifically, 13 elementary schools implemented comprehensive school reform models in one urban school district. Datnow examined the qualitative data gathered in a longitudinal case study, the reasons why reforms are sustained in some schools and not others, and how changing contexts regulate reform sustainability.

Three years after implementing changes, six of the 13 schools studied discontinued their reform efforts. Two schools were implementing new programs at a low level. The remaining five schools continued their reform models with moderate to high levels of intensity. The data gathered through interviews, focus groups, and case reports indicated that changing context affected reform sustainability differently among schools. Factors included each school's strategy for initiating and implementing change, specific local conditions, previous experiences with reform movements, and individual, school, and district capacity (Datnow, 2005).

The challenge of a public school providing a free and appropriate education for autistic students is continuous. Educational programs and plans are individualized and modified as progress is made or changes are needed. Consequentially, it is the combined responsibility of school districts, schools, and educators to provide opportunities to learn in the least restrictive environment. Educating autistic students in a public school requires much knowledge, skill, resources, and support. Although the education of a child is not the sole responsibility of a single teacher, the teacher is the primary point of instructional delivery. These professionals teach numerous students with various abilities, while coping with the increasing pressure of meeting required academic standards.

Chapter II – The Study

Introduction

       As NCLB, which requires that all students meet specific academic standards and achieve adequate yearly progress, and IDEIA, which requires educating all students in the least restrictive environment, continue to collide, the demands placed on teachers swell. The types of students found in public schools today are quite diverse and have a wide range of abilities, interests, and backgrounds. Students with disabilities are attending their neighborhood schools more frequently and are being included in general education classes as much as possible. One disability category expanding exponentially over the past decade is autism. More students with autism are being diagnosed and more of these students are attending public schools.

       This case study will examine teachers' beliefs and attitudes regarding the academic standards and the inclusion of autistic students in the general curriculum. Teachers who have expressed concerns in these areas will be encouraged to participate in this study, and a nominal reward will be given to each participant. No more that 16 elementary, middle school, and retired teachers from the Montour School District, who have had some experience dealing with autistic students, will complete two brief surveys, modeled after a similar survey developed by Cordisco in 1992. After completing the surveys, the surveys will be scored, then volunteers will attend a personal interview with the researcher and an observer present.

       One survey will examine beliefs and attitudes about academic standards and the other will focus on inclusion. Analyses of the surveys will lead to follow-up questions asked at the

personal interview. Specific classroom experiences or incidents involving the inclusion of autistic students, relevant training opportunities, and the meeting of academic standards may also be explored during the interview.

An independent observer will take detailed notes and debrief the researcher following each interview. The observer is male and received his Ph.D. in Educational Administration from the University of Pittsburgh. He was a School Psychologist and retired as the Director of Pupil Services from the Montour School District approximately 10 years ago.

A teacher profile will be developed for each participant using the information gathered from the surveys and interview. Teacher names will be eliminated to ensure confidentiality. Participants will have the opportunity to review their profile and make comments. They will also be offered a copy of the completed study.

Statement of the Problem

How are teachers at the elementary and middle school levels equipped to have all students meet the academic standards while including autistic students in general education programs? What, if any, are the notable differences in the types of experiences and levels of training provided teachers at the elementary and middle schools? What themes pertaining to teacher attitudes and school culture can be generalized from the survey responses and the shared critical episodes?

1. What are the concerns of teachers regarding the inclusion of autistic students in the general curriculum?

2. What are the concerns of teachers regarding all students meeting the academic standards?

3. How do prior experiences and training affect teachers' concerns?

4. How are teachers implementing the pertinent strategies and techniques developed through their professional training opportunities?

5. What are the similarities and differences between teachers' attitudes, beliefs, and experiences at the elementary and middle school levels?

6. What do these incidents reveal about school culture?

7. How do the teachers evaluate program effectiveness?

Operational Definitions

Academic Standards – specific knowledge and skills, identified by the Pennsylvania Department of Education, all students are to acquire at various grade level benchmarks.

Autism – a neurobiological pervasive developmental disorder marked by abnormal or impaired social interaction and a restricted repertoire of activity and interests.

Autism Spectrum Disorder (ASD) – an umbrella term, encompassing a broad range of brain disorders, that includes Asperger's Syndrome, Pervasive Developmental Disorder - Not Otherwise Specified (PDD-NOS), and autism.

Capacity – the ability of an organization, staff, or individual to accomplish desired goals or implement change.

Differentiated Instruction – varying instructional strategies and/or materials in order to meet the needs of students with different learning styles and abilities.

Inclusion – including disabled students in general education classes with their typical peers with the necessary supports and accommodations.

Least Restrictive Environment – to the maximum extent appropriate, handicapped children are to be educated with children who are not handicapped.

Public School – the neighborhood school or district which a student would attend if they did not have a disability.

Support Personnel – staff members, aside from the classroom teacher, who provide services and assistance to students with disabilities. These may include; a nurse, counselor, aide, speech clinician, occupational therapist, physical therapist, or other professional or paraprofessional.

Procedures

All data collection materials and procedures have been reviewed by the University of Pittsburgh Institutional Review Board, IRB number 0507151. This study satisfies all the necessary criteria for an exemption under section 45 CFR 46.101(b)(2) and is designated as "exempt" (Appendix A). The specific materials and protocol were also reviewed and approved by the Montour School District, via the Superintendent.

1. An initial request for teacher volunteers will be posted in the office and teacher's lounge of Ingram Elementary School and David E. Williams Middle School. The initial request will also be made available to the Montour School District's retired teachers' association. This notice will briefly describe the requirements, the

voluntary nature of the study, and contact information for those teachers who are willing to participate or would like additional information (Appendix B).

2. Teachers who have expressed an interest in participating in the study will be sent a letter as a potential participant (Appendix C). This letter will detail specific qualifications and procedures and approximate time requirements. A signed and dated statement acknowledging the individual's intent to participate in the study will be requested. A minimum of eight and a maximum of 16 volunteers, comprised of elementary, middle level, and retired teachers, will participate in this study.

3. Participants will be sent two brief surveys; one concerning their beliefs and attitudes regarding inclusion (Appendix D) and the other concerning their beliefs and attitudes regarding academic standards (Appendix E). Each survey statement will be scored on a five point scale as to whether the participant strongly agrees (1) or strongly disagrees (5) with the prompt. Completed surveys will be returned to the researcher.

4. Once all surveys are returned, a mean score for each participant's survey will be determined. Item analysis will reveal the group mean for each survey statement. Responses which deviate significantly from an individual's survey average, or the group average for a particular item, will be considered outlier responses and will be further explored during the personal interviews. These outlier responses will be at least two points from the mean score.

5. A personal interview will be scheduled with each participant at a mutually convenient time and location. This interview will be scheduled for approximately one-half hour. An independent observer will be present to take definitive notes and to debrief the interviewer following each session. Interview questions will further explore outlier

responses on the surveys. Questions will probe for relevant training and personal experiences involving the inclusion of autistic students in the general curriculum and having all students meet academic standards.

6. The interviewer and observer will review specific incidents, experiences, and the participants' levels of training, and will discuss pertinent or recurring themes that arise. This information, along with specific survey responses, will be used to develop individual teacher profiles. Each profile will be a snapshot of the participant's beliefs and attitudes regarding inclusion and the academic standards, his/her level of experience and training, and feelings about what contributes to the success and failure of inclusion. Factors relevant to the specific grade level or content area of the instructor will also be recorded.

7. Teachers will not be identified by name in the teacher profiles and all efforts will be made to ensure confidentiality. All participants will have the opportunity the review their profile and comment if they desire. Teacher comments will be documented. Participants will be encouraged to share any recent events or circumstances and will be given the opportunity to anonymously share any information relevant to this study.

Limitations

This researcher acknowledges the boundaries of the research design and the limits this research places on the conclusions. The researcher's dual role as the principal investigator and an administrator for the Montour School District cannot be ignored. Although it is clearly stated in the letter to potential participants that participation in the study is entirely voluntary, and that information obtained would be kept confidential and not used in an evaluative or supervisory

manner, participant responses may be influenced by the researcher's dual role. The fact that the independent observer is a retired employee of the Montour School District and a friend of the researcher should be confessed. The observer may have been a supervisor or co-worker of a participant and it could affect responses to interview questions or constrict the personal information shared at the interview.

Conducting research within the Montour School District may limit the generalizations that can be made. Montour is a typical, suburban, primarily white, middle to upper middle class school district with many financial and ancillary resources. Similar research conducted in a school system with different demographics and available resources may yield dissimilar findings.

The unintentional and inherent bias in the wording, or intent, of the survey questions should be recognized. There may be a tendency for participants to respond affirmatively to the survey questions in general. Determining which survey responses are considered outlier responses should be done in an objective and consistent manner.

Chapter III – Results

<u>Participants</u>

Fourteen teachers responded to the initial request for volunteers. Each of these 14 plausible subjects received a more detailed explanation of the study with a potential participant agreement. All 14 potential participants signed and returned the participation form. Ten of the volunteers were female, four were male. Six taught at the elementary school, six at the middle school, and two were retired elementary teachers. Three of the participants had experience at both the elementary and middle levels, and four teachers possessed special education certificates. The average number of years teaching experience was 15.5 years, ranging from two to 40 years.

<u>Survey Responses</u>

Completed surveys were tallied and responses were transcribed to a spreadsheet using Microsoft Excel (Chart #1). This raw data was then analyzed in order to determine individual survey averages (Chart #2), group averages for specific questions (Chart #3), and any outlier responses that deviated from the mean by two or more points on the five point agreement scale. Outlier responses represented the maximum differential of the respondents' attitudes and beliefs surrounding the standards and inclusion, rather than the central tendencies. These responses were further elaborated during the personal interviews.

Chart #1
Survey Responses

		Statement Number	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Teacher	# 1	Inclusion Survey	1	1	1	1	1	1	1	1	1	1
Teacher	# 1	Standards Survey	1	2	1	3	5	3	3	1	1	3
Teacher	# 2	Inclusion Survey	3	1	1	2	3	2	2	1	1	1
Teacher	# 2	Standards Survey	1	1	1	3	2	5	3	2	1	3
Teacher	# 3	Inclusion Survey	1	1	1	1	2	1	3	1	1	4
Teacher	# 3	Standards Survey	1	2	1	2	4	4	5	2	1	2
Teacher	# 4	Inclusion Survey	4	4	1	4	4	5	4	5	1	1
Teacher	# 4	Standards Survey	1	1	3	1	3	5	2	1	1	1
Teacher	# 5	Inclusion Survey	1	1	1	1	1	1	1	3	1	2
Teacher	# 5	Standards Survey	1	1	1	4	2	3	3	1	1	1
Teacher	# 6	Inclusion Survey	1	1	1	2	1	5	3	2	1	4
Teacher	# 6	Standards Survey	2	1	1	2	2	2	3	2	2	3
Teacher	# 7	Inclusion Survey	1	1	1	1	1	1	2	1	1	1
Teacher	# 7	Standards Survey	1	1	1	1	2	2	3	1	1	2
Teacher	# 8	Inclusion Survey	1	1	1	1	1	2	2	2	1	1
Teacher	# 8	Standards Survey	1	2	1	3	4	2	3	1	1	1
Teacher	# 9	Inclusion Survey	4	4	2	4	4	3	4	5	2	3
Teacher	# 9	Standards Survey	1	1	1	2	2	5	3	2	1	3
Teacher	# 10	Inclusion Survey	4	3	1	4	4	5	4	4	1	2
Teacher	# 10	Standards Survey	1	1	4	1	3	5	3	1	1	2
Teacher	# 11	Inclusion Survey	1	1	1	2	1	1	2	1	1	1
Teacher	# 11	Standards Survey	1	1	1	2	2	3	2	1	1	2
Teacher	# 12	Inclusion Survey	1	1	1	2	2	2	2	2	1	3
Teacher	# 12	Standards Survey	1	2	1	2	3	3	2	1	1	2
Teacher	# 13	Inclusion Survey	4	2	1	2	4	1	3	4	1	3
Teacher	# 13	Standards Survey	1	1	1	3	1	3	5	2	1	3
Teacher	# 14	Inclusion Survey	2	1	1	1	2	1	2	2	1	1
Teacher	# 14	Standards Survey	1	2	3	2	3	5	2	3	1	1

Chart #2
Individual Survey Averages and Outlier Responses

		Statement Number	1	2	3	4	5	6	7	8	9	10	Avg
Teacher	# 1	Inclusion Survey	1	1	1	1	1	1	1	1	1	1	**1.0**
Teacher	# 1	Standards Survey	1	2	1	3	**5**	3	3	1	1	3	**2.3**
Teacher	# 2	Inclusion Survey	3	1	1	2	3	2	2	1	1	1	**1.7**
Teacher	# 2	Standards Survey	1	1	1	3	2	**5**	3	2	1	3	**2.2**
Teacher	# 3	Inclusion Survey	1	1	1	1	2	1	3	1	1	**4**	**1.6**
Teacher	# 3	Standards Survey	1	2	1	2	4	4	**5**	2	1	2	**2.4**
Teacher	# 4	Inclusion Survey	4	4	**1**	4	4	5	4	5	**1**	**1**	**3.3**
Teacher	# 4	Standards Survey	1	1	3	1	3	**5**	2	1	1	1	**1.9**
Teacher	# 5	Inclusion Survey	1	1	1	1	1	1	1	3	1	2	**1.3**
Teacher	# 5	Standards Survey	1	1	1	**4**	2	3	3	1	1	1	**1.8**
Teacher	# 6	Inclusion Survey	1	1	1	2	1	**5**	3	2	1	4	**2.1**
Teacher	# 6	Standards Survey	2	1	1	2	2	2	3	2	2	3	**2.0**
Teacher	# 7	Inclusion Survey	1	1	1	1	1	1	2	1	1	1	**1.1**
Teacher	# 7	Standards Survey	1	1	1	1	2	2	3	1	1	2	**1.5**
Teacher	# 8	Inclusion Survey	1	1	1	1	1	2	2	2	1	1	**1.3**
Teacher	# 8	Standards Survey	1	2	1	3	**4**	2	3	1	1	1	**1.9**
Teacher	# 9	Inclusion Survey	4	4	2	4	4	3	4	5	2	3	**3.5**
Teacher	# 9	Standards Survey	1	1	1	2	2	**5**	3	2	1	3	**2.1**
Teacher	# 10	Inclusion Survey	4	3	**1**	4	4	5	4	4	**1**	2	**3.2**
Teacher	# 10	Standards Survey	1	1	4	1	3	**5**	3	1	1	2	**2.2**
Teacher	# 11	Inclusion Survey	1	1	1	2	1	1	2	1	1	1	**1.2**
Teacher	# 11	Standards Survey	1	1	1	2	2	3	2	1	1	2	**1.6**
Teacher	# 12	Inclusion Survey	1	1	1	2	2	2	2	2	1	3	**1.7**
Teacher	# 12	Standards Survey	1	2	1	2	3	3	2	1	1	2	**1.8**
Teacher	# 13	Inclusion Survey	4	2	1	2	4	1	3	4	1	3	**2.5**
Teacher	# 13	Standards Survey	1	1	1	3	1	3	**5**	2	1	3	**2.1**
Teacher	# 14	Inclusion Survey	2	1	1	1	2	1	2	2	1	1	**1.4**
Teacher	# 14	Standards Survey	1	2	3	2	3	**5**	2	3	1	1	**2.3**

For example, Teacher #1 responded she strongly agreed (1) with all statements on the inclusion survey; therefore, there were no outlier responses indicated. Also, Teacher #1 strongly disagreed (5) with prompt number five on the standards survey, the allowable accommodations for the PSSA are appropriate. This strong disagreement varied 2.7 from her 2.3 average on the standards survey, thus constituting an outlier response.

Chart #3
Group Averages for Each Survey Question and Outlier Responses

		Statement Number	1	2	3	4	5	6	7	8	9	10
Teacher	# 1	Inclusion Survey	1	1	1	1	1	1	1	1	1	1
Teacher	# 2	Inclusion Survey	3	1	1	2	3	2	2	1	1	1
Teacher	# 3	Inclusion Survey	1	1	1	1	2	1	3	1	1	**4**
Teacher	# 4	Inclusion Survey	4	**4**	1	**4**	4	**5**	4	**5**	1	1
Teacher	# 5	Inclusion Survey	1	1	1	1	1	1	1	3	1	2
Teacher	# 6	Inclusion Survey	1	1	1	2	1	**5**	3	2	1	**4**
Teacher	# 7	Inclusion Survey	1	1	1	1	1	1	2	1	1	1
Teacher	# 8	Inclusion Survey	1	1	1	1	1	2	2	2	1	1
Teacher	# 9	Inclusion Survey	4	**4**	2	**4**	4	3	4	**5**	2	3
Teacher	# 10	Inclusion Survey	4	3	1	**4**	4	**5**	4	4	1	2
Teacher	# 11	Inclusion Survey	1	1	1	2	1	1	2	1	1	1
Teacher	# 12	Inclusion Survey	1	1	1	2	2	2	2	2	1	3
Teacher	# 13	Inclusion Survey	4	2	1	2	4	1	3	4	1	3
Teacher	# 14	Inclusion Survey	2	1	1	1	2	1	2	2	1	1
Average			**2.1**	**1.6**	**1.1**	**2.0**	**2.2**	**2.2**	**2.5**	**2.4**	**1.1**	**2.0**
Teacher	# 1	Standards Survey	1	2	1	3	**5**	3	3	1	1	3
Teacher	# 2	Standards Survey	1	1	1	3	2	5	3	2	1	3
Teacher	# 3	Standards Survey	1	2	1	2	4	4	**5**	2	1	2
Teacher	# 4	Standards Survey	1	1	3	1	3	5	2	1	1	1
Teacher	# 5	Standards Survey	1	1	1	4	2	3	3	1	1	1
Teacher	# 6	Standards Survey	2	1	1	2	2	2	3	2	2	3
Teacher	# 7	Standards Survey	1	1	1	1	2	2	3	1	1	2
Teacher	# 8	Standards Survey	1	2	1	3	4	2	3	1	1	1
Teacher	# 9	Standards Survey	1	1	1	2	2	5	3	2	1	3
Teacher	# 10	Standards Survey	1	1	**4**	1	3	5	3	1	1	2
Teacher	# 11	Standards Survey	1	1	1	2	2	3	2	1	1	2
Teacher	# 12	Standards Survey	1	2	1	2	3	3	2	1	1	2
Teacher	# 13	Standards Survey	1	1	1	3	1	3	**5**	2	1	3
Teacher	# 14	Standards Survey	1	2	3	2	3	5	2	3	1	1
Average			**1.1**	**1.4**	**1.5**	**2.2**	**2.7**	**3.6**	**3.0**	**1.5**	**1.1**	**2.1**

For example, the average group score for statement number six on the inclusion survey

was 2.2. This prompt stated the amount and type of inclusion are determined by the strengths

and needs of the individual student. Three participants strongly disagreed (5) with this

statement, a difference of 2.8 from the mean. Statement number six on the standards survey

yielded an average response of 3.6, the highest average response for all statements, yet there were no outlier responses. This prompt stated all students are able to become proficient in the areas of reading, writing, and mathematics.

The mean individual participant score on the inclusion survey was 1.9, with average scores ranging from 1 to 3.5. The mean individual participant score for the standards survey was 2.0, ranging only from 1.5 to 2.4. Averages for specific questions on the inclusion survey ranged from 1.1 to 2.5, and from 1.1 to 3.6 on the standards survey.

Six statements on the inclusion survey elicited a range of responses from 1-4. Two statements on the inclusion survey had a range of responses from 1-5. These statements indicated the amount and type of inclusion are determined by the strengths and needs of the individual student, and autistic students should receive instruction in the least restrictive environment. Three statements on the standards survey elicited a range of responses from 1-4, while one statement had a range of responses from 2-5.

Personal Interviews

After analyzing survey data and identifying outlier responses, personal interviews were scheduled with each participant. These interviews were scheduled at either the elementary or middle school, after school hours, at a mutually convenient time. Interviews lasted approximately one-half hour and progressed through an informal outline (Appendix F). Following each interview, the researcher and observer discussed their notes and any pertinent concepts or themes. Information obtained from the interviews was incorporated with the survey data to develop individual teacher profiles.

Teacher #1 is female and currently teaches fifth and sixth grade emotional/autistic support at the middle school. She has a Bachelor of Science degree in Education from Carlow College and is completing a Masters degree in Educational Administration at Walden University. Her areas of certification are elementary education and special education. She has been teaching in the public school system for four years, one year as the elementary emotional/autistic support teacher.

Questions specific to her survey responses revealed her belief that students who need accommodations can succeed with necessary materials and curricular adaptations, as she strongly agreed with all of the statements regarding inclusion. Teacher #1 also expressed the accommodations for the Pennsylvania System of School Assessment (PSSA) are not appropriate. She stated the need for more significant accommodations and for testing on each student's instructional level.

Teacher #1 indicated having highly qualified teachers and support personnel, increased funding, and major adaptations to textbooks would assist all students in meeting the academic standards. She stated including autistic students in the general curriculum is "my whole life", as she follows the district scope and sequence and assists with adaptations. She acknowledged it is difficult and she is not always liked by her peers, but feels it necessary to advocate for the students.

Her concerns regarding the inclusion of autistic students involved the need for regular education teachers to receive more training to make appropriate accommodations. She felt improved communication, utilizing a team approach, and familiarity with each student may

contribute to successful inclusion. Untrained professionals and paraprofessionals, classrooms not conducive to inclusion, and poor acceptance by peers were reported as inhibitors of inclusion.

Teacher #1 attended several relevant training opportunities including; TEACCH training, Bureau of Educational Research seminars regarding learning styles, and progress monitoring through the Allegheny Intermediate Unit (AIU). She implemented relevant strategies gained through professional development activities by using manipulatives and hands on activities, specific adaptations and schedules, and her increased knowledge surrounding the characteristics of autism. Program effectiveness was determined by student progress toward Individualized Education Program (IEP) goals, parental feedback, and the inclusion of the each student as much as possible.

When asked if there were any significant incidents or experiences regarding inclusion, Teacher #1 shared how one student would run from the classroom when overwhelmed with an academic task. She explained how she and the student role played problematic situations and incorporated more social programming. She shared her belief that inclusion improves students' self esteem and confidence, and that the professionals must make available opportunities for inclusion to succeed. Because of her past experience, Teacher #1 was able to share her opinion regarding the difference between the elementary and middle school programs. She expressed "the academic and behavioral expectations are greater at the middle level and there are better peer models". The schedule at the middle school also allowed her to assist regular educators more frequently in making adaptations for the rigorous curriculum.

Teacher #1 reviewed her profile and made no specific comments; however, she did report a recent development:

It has been the district's decision that after a student completes the sixth grade there will no longer be a classroom titled autistic support. They will be serviced in the emotional support room only during one period. The seventh and eighth grade emotional support teacher will supply her services as push in and not pull out, nor does she supply instruction in any curriculum area. This teacher cannot be the teacher of record due to her not being highly qualified, according to the new state guidelines.

Options currently in place for those students who still require instruction in the autistic support room for math and language arts, upon entering seventh grade, will only be serviced for curriculum in the learning support or life skills classrooms if they qualify. We are taking the supports away that these students have depended on and have shown to be successful. I anticipate that our enrollment into approved private schools will increase in the future for the autistic children because we no longer have a program in place for them after sixth grade.

There is no place for an autistic student to report for sensory integration, which is necessary for most students with autism. It seems we work with these students from K-6 and then they are on their own. Looking at it from a parent's perspective, I would advocate keeping the program alive in the seventh and eighth grades and carrying it through the high school.

I believe the reasons stated were financial. How much cost will it be to the taxpayers when we start paying for alternative placements? The number of children with autism is growing from one in every 2,500 to currently one in 166. That number keeps growing, and as a school district, we need to ask ourselves, are we budgeting the best we can to prepare for those students with autism?

Teacher #2 is male and presently teaches fifth grade science and social studies at the middle school. He has a Bachelor of Science in Education from Edinboro University. His area of certification is elementary education. He has been teaching in the public school system for 40 years, all fifth grade and most with his current district. He has taught all subject areas in both self contained and departmentalized classrooms. His continuous teaching of fifth grade has allowed him to teach at both the elementary and middle school, as fifth grade was recently moved from the elementary.

Questions specific to his survey responses reiterated his belief that not all students possess the ability to become proficient in the areas of reading, writing, and mathematics. "Some students do not have the IQ to enable them to become proficient. Just look at society, we would all be clones and there would be no individuality if we all had the same abilities." He indicated he could not see how proficiency could be expected for all, and that students came in all different sizes, appearances, and abilities.

He shared his experience including autistic students in the general curriculum has occurred primarily over the past few years, and he taught four autistic students in his science and social studies courses the previous year. His concerns were primarily behavioral. Teacher #2 indicated the majority of students behaved appropriately most of the time, however there were instances of severe behaviors, such as yelling out, physical aggression, or being generally disruptive. He also stated the student's attention span and infatuation with particular objects should be considered, and an aide can contribute to successful inclusion when a student has difficulty grasping a specific concept or skill.

Teacher #2 reported his training regarding the inclusion of autistic students was limited to some general information regarding autism when the autistic support program was implemented approximately six years ago. Through professional development activities, he has utilized more individualized and structured teaching strategies, provided the instructional assistants specific directives, and adapted the curriculum in ways similar for learning support students when necessary. Program effectiveness for individual students was determined by meeting IEP goals and reexamining the presentation of lessons and more realistic goals when current goals are not reached. "Sometimes we do too much for special needs students and it interferes with their ability to be proficient and it is not a true evaluation of their ability." He stated that school

initiatives seem to be meeting most of the educational needs of the students but not all of the behavioral needs, and he wondered if impulsiveness or compulsiveness can really be changed.

When asked if there were any significant incidents or experiences regarding inclusion, Teacher #2 indicated he never saw a student physically attack another student and that a few students have really done well. He shared his beliefs that autistic students were generally not articulate but they could perform, and most other students accepted them. He thought inclusion needs to occur on and individual basis, considering what is best for all of the students, and sometimes a small setting is better. Teacher #2 concluded by stating he did not see much difference in the fifth grade being at the elementary or middle level, and that the fifth grade was isolated, like their own little building, at the middle school. He saw teachers accommodating students, supporting paraprofessionals, and students attempting to help their peers at both levels. Teacher #2 reviewed his profile and made no comments.

Teacher #3 is female and currently teaches eighth grade learning support at the middle school. She earned her Bachelor of Science in Psychology and Masters of Education from the University of Pittsburgh. Her areas of certification are N-12 mental and physical disabilities, middle level English, and middle level math. She has been teaching two years.

Questions specific to her survey responses revealed her limited personal experience dealing with autistic students. She had worked with only one child, who had been diagnosed with a learning disability as well. Teacher # 3 shared, although teachers continuously post and address standards, she honestly thinks students do not pay attention to them. She added, "Learning disabled and special needs students can make progress but it is unrealistic to be on the same page, it is the nature of some disabilities to learn differently and at a different pace. Some students need the basics and some individual needs are not addressed by the standards."

Her concerns regarding the inclusion of autistic students were the students' lack of social skills, different learning styles, and sensory issues. The fact not all teachers were trained to deal with autistic students was also a concern. She identified the support staff as a factor contributing to successful inclusion, and mentioned potential inhibitors as auditory and visual stimuli, other environmental elements, and offensive social behavior. Program effectiveness was ascertained through multiple assessment, instruction, and reassessment. Was there growth, stagnation, or regression?

Teacher #3 participated in courses at the University of Pittsburgh dealing with inclusion and various workshops through Autismlink. Additionally, she indicated it is helpful to get specific information from the parents, as every student is different. She also stated some teachers are set in their ways and view support teachers as glorified aides, yet they are willing to take suggestions regarding accommodations. Teacher #3 concluded by saying "the I in IEP stands for individualized and standards do not take this into account."

She reviewed her profile and commented. "I feel that it is unrealistic for students with special needs to be on the same page as their non-disabled peers in curriculum and content areas that are affected by their disability. There are teachers who are very open to the inclusion process and working with support teachers."

Teacher #4 is female and presently teaches fourth grade at the elementary school. She earned her Bachelor of Science in Education from Robert Morris University and her Masters in Education from Duquesne University. Her areas of certification are business education and elementary education. She has been teaching 10 years.

Questions specific to her survey responses disclosed her agreement that the number of autistic students in the general curriculum is increasing and additional planning and training are

required. She felt it was important to participate in the development of students' IEPs, but added students are often included without considering their strengths and needs, "they enter regular education regardless, they are dumped in there whether it is the best thing or not." Teacher #4 also stated autistic students should not receive instruction in the least restrictive environment and they often require tremendous structure, have medical issues, and sometimes show up without their aide. She shared her belief autistic students "generally hit a wall in third grade."

She expressed her concern having all students meet the academic standards is not a practical concept and there is a broader need to focus on certain concepts and life skills rather than overwhelming students. She has included over a half a dozen autistic students in her social studies classes over the years and found them to be very disruptive and unable to pay attention. "If they have an interest in a specific topic or have the ability, then inclusion can work well, otherwise it is unfair to the autistic child as well as the other students, and it puts all of the students at a disadvantage."

Teacher #4 indicated she received no formal training pertaining to inclusion or autism, except for a brief session about the general characteristics of autism. "I could have taken some courses in the summer, or on my own, but feel it should be provided by the district." She has implemented some strategies she has gained through professional development activities, such as cooperative learning and differentiated instruction. She felt district initiatives were poorly managed because students were just placed in educational settings to please the parents and the educational team did not always sit down to determine what is best for the student.

Also, she suggested some students should not receive grades but rather be evaluated using pass or fail. She questioned why autistic students are required to take the same assessment as regular education students and wondered why there is not a state test for autistic or learning

support students. Teacher #4 discussed instances when students escalated to "attack mode" and she became worried for her own safety and the safety of her other students. She felt an inclusive environment was not appropriate for violent or aggressive students and forcing them to be in a structured class, which is of little interest or benefit to them, can actually trigger an aggressive outburst. Teacher #4 concluded by stating we have to remember "they are darling in their own way and they are children". She reviewed her profile and offered minor corrections to the wording of her profile.

Teacher #5 is male and presently teaches computers at two of the elementary schools in the district. He earned his Bachelor of Science in Accounting from Robert Morris University. His area of certification is business education. He has been teaching three years and previously worked in the private business sector, as an accountant, eight years.

Questions specific to his survey responses divulged his belief that the state assessment is not objective and does not accurately measure the standards the students are expected to meet. Teacher #5 asserted some students experience test anxiety and do not test well. He acknowledged not all students possess the same skill level but all students should have the opportunity to learn, and teachers should treat each student equally while improving their skills, whether or not they actually meet the standards.

Teacher #5 has instructed approximately a dozen autistic students, since all special needs students are included for computers and all other special area subjects. His concerns regarding the inclusion of autistic students entailed the students' disruptive behaviors, difficulty following classroom rules, and problems deviating from specific routines or lessons. He identified factors contributing to successful inclusion as the support provided by the instructional assistants and the fact most students were interested in computers and motivated to be in his class. Aside from

some inappropriate social behaviors, Teacher #5 stated, "I have never had a real problem including students in the computer lab and have not experienced anything that would be considered detrimental to the other students."

He attended seminars in college dealing with all types of inclusion, some district in-services and briefings, and inquiry based training. He participated in and read all necessary IEPs, and appreciated relevant information shared by the aides and support teachers. "I welcome any type of training that will benefit the way I teach." Teacher #5 implemented many strategies gained through professional development including clearly stating the learning objective, cooperative grouping, peer helpers, and positive reinforcement. Program effectiveness was determined through observation and performance. "Can the student complete the project or demonstrate the skill and knowledge of the standard with support?"

Teacher #5 shared his successful experiences including special needs students in the after-school intramural program, which he supervises. He also explained an incident when he deviated from his typical structure of a lesson and a student quickly became frustrated and attempted to strike him. He indicated he is now more aware of the need to adhere to a schedule and standard format, discuss any possible changes, and alternate desired activities, preferred activities, and breaks. Teacher #5 concluded by stating he was shocked by the younger students' awareness of their peers' needs and their willingness to assist. "The other students develop an understanding that everyone is not the same and they become more accepting of differences. I think this benefits the class as a whole." He reviewed his profile without comment.

Teacher #6 is female and currently teaches elementary emotional support, which also services autistic students. She received her Bachelor of Science in Education and Masters of

Education from Duquesne University. Her areas of certification are early childhood education, elementary education, and special education. She has been teaching four years, all variations of emotional support.

Questions specific to her survey responses revealed her belief that although the number of autistic students is increasing, they are not always being included as much as they could be included. She commented the students strengths and needs should determine the amount and type of inclusion but "often the teacher's needs become the determining factors". She also indicated teachers' attitudes and expectations can vary greatly.

She stated she was comfortable with the academic standards and her students were able to grasp them if the content and materials were properly adapted and expectations remained high. Her concern regarding inclusion questioned whether the students actually did something meaningful and were they just kept busy. "I know they can do a lot but not everyone sees that." She found the majority of students to be accepting and friendly; however, she was disappointed the autistic students were sometimes overlooked when there were classroom parties or special events.

Factors contributing to successful inclusion examined the individual student's strengths and the teacher's attitude, acceptance, and willingness to try new things. She also stated it is easier to include a student when his/her skill level is at or near grade level. Teacher #6 found the TEACCH training to be very beneficial and participated in AIU workshops as well. She stressed her desire for the general educators and veteran teachers to receive more training in the areas of inclusion and making adaptations.

Teacher #6 implemented several strategies gained trough professional development activities including picture schedules, hands-on activities, movement during instruction,

highlighting text or directions, reducing the length of assignments, and utilizing a daily communication log. Individual program effectiveness was evaluated by monitoring progress toward IEP goals, verbal assessments and checks for understanding, and formal tests and quizzes. She found school-wide initiatives to be very effective. Overall, she has witnessed academic and behavioral progress, improved work habits, and increased motivation. "This year we experienced much success with a first grade student, and if you did not know he had ASD you would not be able to tell. The teacher deals with him like any other student as much as possible." Much of the success was credited to the personality of the instructor, support from the paraprofessional, and effective communication.

She reviewed her profile and commented. "The teacher profile is accurate. Key points are highlighted, such as the need for ongoing, effective training for regular education teachers, and the influence of perspective and attitude on the successful inclusion of students with autism. The teacher profile addresses another important element, which is holding special needs students to the academic standards and setting high expectations for all students. The profile is well written and addresses the most relevant issues encountered in the education and inclusion of students with autism."

Teacher #7 is female and retired a few years ago to raise her family. She earned a Bachelor of Science in Education from Edinboro University and a Masters in Education from California University. Her areas of certification include elementary education, special education, and reading specialist. She taught five years as a learning support, emotional support, autistic support, and second grade teacher.

She shared her numerous experiences including autistic students from both the support teacher and regular education teacher perspectives. Teacher #7 recognized the social and

academic concerns and the need for other students' acceptance. "It was more difficult as a special education teacher working with the regular education teachers for inclusion. Some teachers are not trained or maybe did not want training and they are looking out for the other 20 students in regular education. While I see their point of view, it was also very frustrating for me as a special educator and I cried many times." She also explained how the experience increased her knowledge and understanding while teaching second grade and including special needs students.

Her concerns regarding all students meeting the academic standards specified instruction needed to follow the standards and each teacher and student needed to become familiar with the standards. Specifically, she wanted the autistic students to feel welcome, while working cooperatively to be consistent with academic and behavioral expectations and discipline. She reinforced the fact that students should to be given the chance to be included based upon their strengths and needs. Teacher #7 stressed the importance of having a well trained aide and involving peers as helpers and models. She added making it a team process, involving all the stakeholders, and trying to understand why parents wanted a child to be included, were equally important. She identified factors inhibiting inclusion as the teachers' reluctance to cooperate, receive training, or try new things.

Teacher #7 attended several training session as an initial member of the autistic support team. She participated in TEACCH training at the D.T. Watson Institute, the Pennsylvania Autism Conference at Pennsylvania State University, and district in-services regarding autism. She found the TEACCH training and other seminars provided many useful classroom strategies, such as picture schedules, written checklists, work stations, and activity bins, which she transferred to her regular education classroom and found beneficial to all of her students. She

evaluated program effectiveness by the IEP goals, grades, assessment data, and input from team members. She also inquired whether or not the students were actually learning something in regular education and understanding the lesson without major disruptions.

No significant incidents were reported, yet Teacher #7 again stressed her frustration when certain teachers felt a student was better off not included; however, when inclusion was successful, the parents often expressed appreciation and made her feel as though her efforts were worthwhile. "You cannot give up on inclusion; do as much as you can to educate other teachers, aides, and other students. I have found that the teachers, who have had professional and personal experiences, or family members with special needs, are generally more receptive. Some teachers may not change their personal philosophy about inclusion, but those who support it should continue to do so and encourage their colleagues to do the same." Teacher #7 reviewed her profile and offered only minor clarifications.

Teacher #8 is female and currently teaches first grade. She earned a Bachelor of Science in Education from John Carroll University and a Masters of Education from Duquesne University. Her areas of certification are elementary education and reading specialist. She has been a full-time teacher for 10 years, three as an elementary reading specialist and the last seven as a first grade teacher.

Questions specific to her survey responses disclosed her limited first hand knowledge of the PSSA. She described her understanding, from what she has heard, that the accommodations for the PSSA are not consistent with the accommodations many students regularly receive at the elementary level. She expressed her concern with the current number of academic standards and the varying specificity.

She has taught three autistic boys, one in her classroom for two consecutive years, as per

parental request. The level of inclusion for these students varied. Her concern regarding

inclusion was placement of the student in the proper learning environment, "What is appropriate

for some may not be appropriate for others, it depends on the severity." She identified well

trained aides and the support from the special education teacher as factors contributing to

successful inclusion, yet she stressed her desire for more detailed behavior plans and

communication regarding specific strategies, "Sometimes they just hand us the IEP and expect us

to understand."

Teacher #8 attended district in-services provided by the special education department and

an autistic behavioral support seminar at the Community College of Allegheny County. She has

tiered and differentiated instruction, enriched all students when appropriate, and incorporated

movement, breaks, and sensory issues as needed. Her evaluation of individual program

effectiveness focused on an understanding of the IEP. She utilized "cheat sheets" to emphasize

targeted IEP goals, some academic and some behavioral. She also mentioned the benefit of

consistent implementation of school wide initiatives in order to reinforce important messages and

themes.

"I have had great experiences including students, I think of a non-verbal student with

significant behavioral concerns arriving in first grade and him leaving fourth grade doing the

morning announcements." She indicated her belief that the first grade students notice differences

in their autistic classmates, and they are very accepting. Teacher #8 acknowledged styles and

strategies vary significantly from class to class, but inclusion remains very important. "I know it

is important for kids to be in regular education, even if it is for five minutes to be part of the

group. They need a chance to interact with typical peers, be accepted, make friends, and help

identify themselves as regular kids." She concluded by sharing her hope that standards and inclusion be addressed regularly. Teacher #8 provided no comments after reviewing her profile.

Teacher #9 is female and currently teaches third grade at the elementary level. She received her Bachelor of Science degree in Education from Edinboro University. Her area of certification is elementary education. She has been a teacher for 24 years and has taught all grade levels and subject areas in first through sixth grade, seven years as a first grade teacher and 10 years as a third grade teacher.

Questions specific to her survey responses revealed her belief that it is difficult to differentiate instruction, as the PSSA steers the entire curriculum and educators must stick to the standards. She felt the extent to which support teachers and paraprofessionals facilitate inclusion varied. "Some things aides do are over the top and do not facilitate inclusion, they can push too hard until the student lashes out and it seems like they are punishing the student for being autistic." Moreover, she stated some students have been included successfully but extreme students have gotten physical and have been wrestled to the ground. Teacher #9 questioned, "How is it the least restrictive environment if they have an aide next to them all day?" She expressed some students may be restricted by an aide and it can be taken the wrong way when an aide is asked to "give the child some space".

Teacher #9 has taught three autistic students over the past four years. She indicated her concern with all students meeting the academic standards, as there are too many variables and ability levels. "We cannot expect students to be proficient at the third grade level if they have first grade ability." Her concerns regarding inclusion focused on the safety of her students and the possibility of aggressive behaviors. She identified having the right kind of aide, who works

cooperatively with the student and teacher, as a contributing factor to successful inclusion. Autistic students not knowing how to socialize or interact with others limited the benefits of inclusion through not fault of their own.

Her training regarding the inclusion of autistic students occurred at district in-services and at an AIU workshop. She implemented preventative strategies for physical aggression by identifying antecedents to behaviors, and made efforts to include students as much as possible. Teacher #9 evaluated program effectiveness by the students' adherence to classroom rules, participation, and motivation.

She shared her understanding that autistic students cannot help their peculiarities and she has had success and difficult situations while working with these students. A particular student had an all around positive school experience, he participated in class, worked through the content, socialized to best of his ability, and his parents were involved and happy. Then an incident occurred. "The class was visiting the book fair and the student did not want to leave, he became aggressive which was upsetting to everyone." Teacher #9 reviewed her profile and added, "The student's unwillingness to leave the book fair was upsetting, but the aide's handling of the situation was more so. She wrestled him to the ground and then dragged him from the area against his will."

Teacher #10 is female and presently teaches fourth grade at the elementary school. She earned her Bachelor of Arts degree in Psychology from Thiel College and a Masters equivalence from various institutions. Her area of certification is elementary education. She has been a teacher for 31 years, five years in fifth grade, 12 years in third grade, and 14 years in fourth grade, all at the same school.

Questions regarding her survey responses and comments were clarified during the interview and a scoring change was made. She revealed her beliefs that inclusion requires additional planning, and participation in the IEP process is important. She disagreed it is important to assess students regularly and utilize the results to guide instruction. Teacher #10 strongly disagreed all students can become proficient in the areas of reading, writing, and mathematics. "There is a lot of effort for some concepts that are not that important for this age level, and we ignore creativity."

Teacher #10 included more than six autistic students in regular education over the past few years. She emphasized her concern for the other students' ability to learn, and certain students should be included and others should not be, based upon the suitability of their behavior and ability. She discovered a good support system, small class size, and the individuality of the student, were factors contributing to successful inclusion. Inadequate accommodations by the support teachers and aides, large class size, and students with significant needs were listed as factors inhibiting inclusion.

General training, which addressed the characteristics of autism, was provided by the district, as was some related literature. She indicated nothing specific has been implemented that she has not done in the past. Her evaluation of program effectiveness examined individual progress and successes through observations, personal experiences, and classroom management.

Teacher #10 shared significant incidents when autistic students were included in cooperative learning groups for inquiry based science. She indicated the autistic students would often not know how to interact within the cooperative learning group. Nobody volunteered to be their partner and she questioned how much to force someone to be partners. "Other group members would often mother the autistic student or take over the activity and ignore them." She

cited instances when aides interacted too often or did too much for the student, when situations became physical, and when students wondered who was in charge. She concluded by stating the standards are not flexible, and we need to define the proper roles for aides, consider the teacher's opinion regarding student placement, and have more training opportunities. Teacher #10 reviewed her profile and provided no additional comments.

Teacher #11 is male and currently teaches sixth grade math, science, and social studies at the middle school. He has a Bachelor of Arts in Education and Psychology from the University of Maryland, Baltimore County. His certification is elementary education and he is currently working on his principal certification. He has been teaching five years, one year as a sixth grade English teacher, one year in fourth grade, one year in fifth grade in Maryland, and two years in his current position.

He acknowledged the difficulty addressing the different levels and instructional styles when trying to have all students meet the academic standards. He stated it can be extremely difficult for special needs students and "you must find creative ways for them to succeed". He also realized the need to challenge the higher level students who need to advance beyond the standards.

Teacher #11 had three autistic students in his classroom this year. "Two students did well, the other tried to choke me, I gave him a suggestion for a project, and maybe I invaded his personal space." He indicated other students need to be aware of how autistic students see the world, what sets them off, and strategies for successful group work. Graphic organizers, starter questions, and reminders were found to be helpful, while comprehensive projects and large assignments were intimidating and needed to broken down into smaller tasks. "Some students

can't write an essay on a blank piece of paper; they may sit there for 20 minutes doing nothing. Once they get started, they definitely do the work and sometimes they ask the most intelligent questions."

He was provided no formal training regarding autism or inclusion, just a packet of information and an IEP. He believed the autistic population was increasing and training would be beneficial. Strategies implemented through professional development included differentiated instruction, writing across the curriculum, and specifying group roles and independent tasks. Program effectiveness was determined by day to day success in the classroom, performance, and assessments.

Teacher #11 shared his amazement with the level of questioning of some of his students and their application of knowledge and concepts to other areas. He respected the different ways in which they observed things. He felt autistic students were generally accepted by their peers, but there were students who were afraid of their aggressive peers. He closed by stating some autistic students were a little antisocial, but could open up when peers tried to talk to them. Teacher #11 reviewed his profile and commented he was in agreement with what was written.

Teacher #12 is male and currently teaches seventh grade science at the middle school. He earned his Bachelor of Science degree in Biology and Masters in Education in Counselor Education from Duquesne University. His areas of certification are biology and secondary guidance. He has been teaching 31 years, mostly middle school and junior high science, and a few years of high school science.

"I know 15% of all students will not meet the standards due to mental limitations and there is nothing that I can do about that." Teacher #12 recalled possibly having an autistic

student a few years ago and he recently had one autistic student in his science class. He indicated nothing was done differently except there was an aide to help interpret some things for the student.

Teacher #12 reported, "I know a lot of inclusion occurs because of parental desire, with an aide it generally goes smoothly. Their body is there but they are not really incorporated; it is artificial mainstreaming but the parents are happy. I would probably want the same thing if I was the parent, but I do not know all of the alternatives." Factors contributing to successful inclusion were dual reinforcement with the teacher and aide, tutoring, adapting for their needs, and "err on their side instead of being a jerk, I see how badly off some of them are". Factors inhibiting inclusion were the degree of autism and socially unacceptable behaviors and disruptions. "The students are basically ignored by their peers at times but sometimes they are getting more feedback from their peers than we notice."

He stated he received no formal training regarding autism or inclusion and he acquired advisories as to individual's idiosyncrasies from the counselor or support teacher. He described how all special needs students are included for science at the middle school. Teacher #12 stated how he has not gained much through professional development activities, but more through experience with particular students and by using common sense and making accommodations. When a particular student did not do well on the regular tests, Teacher #12 relied on the support teachers to assist with making the necessary adaptations to the assessments. He also instituted a flexible grading system since he did not alter the curriculum, yet he questioned whether or not all of the content was appropriate. He did express, however, his belief that the student actually produced better than anticipated.

Teacher #12 concluded by sharing he has never seen a student so severe that they were a danger to others. He once required a student to verbally present on a topic and was surprised by the student's level of understanding and relevant questioning. "It is my fault that I do not expect too much. They are paying attention more than I know. I am impressed with his knowledge of relevant terms, logical sequential presentation, and he has moments when no one would know he is autistic." He added the academic standards are vague and contradictory, and political influences often change things at the federal and state level. "The standards never changed for me, they only changed on paper." Teacher #12 reviewed his profile and made no further comments.

Teacher #13 is female and presently teaches eighth grade social studies at the middle school. She earned her Bachelor of Science in Education from Indiana University of Pennsylvania. Her areas of certification are elementary education and middle level social studies. She has 13 years of teaching experience, of which, 10 are as a seventh grade English teacher.

Questions specific to her survey responses indicated her strong belief that the students are unaware or not concerned with the academic standards. Although the standards are posted and discussed, she felt most students do not care about them. She indicated there exists a lack of motivation, laziness, and only a handful of students excel at meeting the standards.

She has had experience including three autistic students in her social studies classes over the past three years. Her concerns about their inclusion were they were not getting anything out of the experience and they may have been better off in a small group setting with students with similar disabilities. She stated, "They only occasionally grasped the content and that there were no social benefits to inclusion." Teacher #13 thought tiering and adapting instruction were not

sufficient, and it was difficult for students to participate in group work. She identified the use of trained and qualified aides as a factor contributing to successful inclusion.

Teacher #13 indicated she has received no formal training regarding autism or inclusion. She implemented relevant strategies, learned through professional development activities, such as making adaptations and modifying assessments. She evaluated program effectiveness by the students' demonstration of proficiency and how well they performed on a daily basis.

She described an occasion when a student masturbated while in the classroom and his peers were quite aware of what was happening. She indicated the special needs students were "often laughed at or the butt of jokes". Teacher #13 believed students were more tolerant of their classmates in the lower grades and there was less acceptance and more teasing at the middle school. She reviewed her profile and made no comments.

Teacher #14 is female and retired three years ago. She received her Bachelor of Science in Education from the University of Pittsburgh and has a Masters plus 30 credits equivalency. She is certified in elementary education. Her teaching career spanned 30 years, mostly first and second grade.

Questions specific to her survey responses revealed her belief that not all students have the God given ability to become proficient, and teachers are often hampered by inclusion, class size, and scheduling. "Nobody really got my best and nobody was really giving me their best. We are leaving a lot of children behind because of all the different ability levels. We are not turning out well rounded individuals. There is no time for Christmas programs, plays, public speaking, or any other extras."

Teacher #14 indicated she taught a couple of autistic students near the end of her career, and she had many good experiences and many disruptive ones as well. Sometimes students

would be confused by what was going on in regular education or they would not be interested or motivated by her classroom rewards.   She was not sure if we prepared students for what they needed to do in regular education classes and thought maybe short visits to the classroom were more beneficial at first. She stressed the importance of the ability and interest of the aides and their need for training.

Her concerns regarding the inclusion of autistic students addressed the time not used for instruction and how the regular education students were often "robbed of time". She stated how so many times teachers were trained in something and not expected to use it, and how she wanted all of the teachers to be working in the same direction from year to year. Factors lending to successful inclusion were preparing the student for specific expectations, communication between the regular and special education teacher, additional planning, and choosing appropriate times and activities for inclusion. Factors inhibiting inclusion were when an aide would not accept responsibilities, lack of time for effective communication, and when activities or skills were beyond the students' capabilities.

She participated in some district in-services regarding autism and inclusion, especially when the autistic support program was initially implemented. Teacher #14 indicated she would have probably needed more training if she would have continued teaching. She utilized relevant strategies she learned through professional development activities "all of the time", such as cooperative learning, writing strategies, modeling, and identifying peer helpers. Program effectiveness was usually evaluated through observation and performance, rather than formal assessments, depending upon the content, interest level, and how the day was progressing for that particular student.

Teacher #14 shared there were constantly safety concerns when including special needs students. She mentioned how it was not always fair to the peer helpers and possibly an unfair burden on them. She acknowledged how a particular student was able to be included more often as the year progressed and how it made her feel good when her students accepted and helped students who were "different". She felt her students learned a valuable lesson about compassion. Teacher #14 reviewed her profile and indicated it was totally correct.

Anonymous Comments

"I feel that my job as a teacher is to teach each child so that he/she will be as successful as possible at his/her ability level. By focusing on the interests and skills of an autistic child, we will also enable them to be as successful and independent as possible."

"The study, in general, is very worthwhile due to the high occurrence of Autism Spectrum Disorders. As time goes on, teachers and family members find that many times these students are extremely capable, and therefore, more inclusion is expected (sometimes demanded) by family advocates."

"This is an important topic, especially with more children being identified as autistic. I hope my input was helpful and beneficial to you and others."

"I was uncomfortable with your witness, knowing that the two of you are good friends, rather than a neutral party."

"I am interested to know the results of the study. In regard to the survey and interview, I thought that the way in which they were done was convenient (for lack of a better word) for the participants involved. Good luck."

"Best of luck, I would enjoy seeing a copy of the complete study."

Chapter IV – Summary and Conclusions

Summary

Item analysis of survey responses disclosed every participant, except a single respondent, in each instance, who agreed to a lesser extent, strongly agreed with the following four statements: (1) inclusion requires additional planning and training, (2) it is important to participate in the development of Individualized Education Plans (IEP), (3) there is a strong emphasis on teaching the Pennsylvania academic standards, and (4) there is increased pressure to have students perform well on the PSSA.

The statements regarding inclusion that evoked the most neutral average responses were; general education students are accepting of their autistic peers and autistic students should receive instruction in the least restrictive environment. All other average responses to the inclusion survey were more agreeable.   The statement, students are aware of the academic standards, was the lone statement with a neutral average. The only statement with an average response favoring disagreement was all students are able to become proficient in the areas of reading, writing, and mathematics.

As the outlier responses helped disclose the range of opinions, the personal interviews expanded upon the participants' beliefs and attitudes. Examination of the survey responses and the teacher profiles revealed teachers at both levels were very concerned with having all students know and meet the academic standards. Many participants openly questioned the reality of having all students, particularly those with limited ability, become proficient. Teachers' concerns regarding the inclusion of autistic students were typically focused on aggressive or

disruptive behaviors, which interfered with the instruction and learning of all students. Teachers also acknowledged the importance of recognizing the abilities and interests of individual students, and the role, qualifications, and training of the aides.

Experiences of disruption and aggression were reported at both the elementary and middle schools. Levels of training varied significantly between teachers, yet the elementary personnel appeared to have had more relevant training opportunities, as the district provided related in-services and encouraged additional training when the elementary autistic support program was being implemented. The need for additional training for the aides and the professional staff was universally expressed.

Most teachers reported implementing strategies gained through professional development activities. Regular educators often utilized differentiated instructional techniques, adaptations, peer helpers, and behavioral interventions. The special education teachers generally received more focused training, and shared detailed adaptive strategies, such as picture schedules, varied modalities, and first/then sequencing. Awareness of behavioral antecedents, use of positive reinforcement, and modeling were also priorities for these teachers. Some veteran teachers reported gaining nothing from professional development activities and not doing anything differently than they did in the past.

Program effectiveness for individuals was generally evaluated through observation, performance tasks, and progress toward IEP goals. Opinions regarding the effectiveness of school-wide initiatives varied greatly. Some teachers believed the school-wide programs were properly supported and effectively met the needs of the students. Other teachers felt uninvolved in relevant decision making, and that students were often placed in inappropriate educational settings.

Teacher concerns with having all students meeting the academic standards were generally consistent. The participants appeared aware of the legal impetus and obligation of inclusion but struggled with the logistics and difficulties including special needs students in regular education. Teachers' attitudes, experiences, and personal philosophies regarding inclusion seemed to affect their approach to inclusion and willingness to attempt new things. Beliefs and attitudes varied more between individuals rather than between elementary and middle school personnel.

Conclusions

This qualitative study of teachers' attitudes and beliefs regarding the academic standards and inclusion produced copious information about the 14 participants. Quantitative analysis of the survey responses and review of the teacher profiles yielded information and themes that were able to be generalized. The truly meaningful data was gleaned from the realistic life experiences and open expression of beliefs.

Student acquisition of the academic standards is directly influenced by the classroom management and educational techniques and skills of the instructor. Less overt, yet equally influential, are the teachers' attitudes and beliefs pertaining to the standards and inclusion. These personal characteristics directly impact the learning atmosphere, expectations, and the levels of student achievement.

Teachers are taught, and are expected to teach, respect for diversity, yet, in this instance, some diverse beliefs, regarding inclusion and the standards, may be detrimental to the learning process. Inclusion in the least restrictive environment is required by federal law, and the specific

academic standards are determined by the state. As NCLB pushes for all students to achieve

proficiency, and IDEA 2004 demands inclusion and all necessary accommodations, educators

are faced with an unusual paradox.

Beyond the data, this researcher developed an appreciation for the genuine experiences

and beliefs shared by the teachers. Each participant is a skilled instructor in his/her own way, yet

opinions varied as much as the individuals themselves. Attitudes and concerns regarding the

standards were more consistent, while opinions about inclusion were more dispersed.

Knowledge of effective instructional and inclusion techniques was evident, as was the need and

desire for further training opportunities.

District policies must adhere to all federal laws and state mandates, and an increased

knowledge of these guidelines for all employees is beneficial. Policy implications may include a

review of the amount and type of training afforded the professional staff and instructional

assistants charged with educating special needs students. Appropriate staff should be involved in

the planning of professional development activities and in the relevant decision making

regarding educational placements. Teacher assignments can be examined and students placed

with teachers who have been successful including students with disabilities; however, fairness

and equity issues may arise. Fostering a team concept, providing the necessary supports for

positive experiences, and maintaining high expectations are essential aspects of effective

programs and can increase capacity and facilitate change.

Further Research

Recommendations for further research should acknowledge the limitations of this study

and the possible bias in the wording of the survey prompts. The potential propensity for

participants to respond affirmatively to the survey prompts could also be explored, as

respondents typically agreed with the statements on these surveys. Additional research could

further examine the personality traits of teachers, in order to determine if any correlation exists

between specific personality traits and attitudes regarding inclusion. Demographic variables

such as age, years experience, gender, and area of certification could be isolated to divulge

possible trends or themes. Distinct types of desired professional development and training could

also be identified, as could successful implementation strategies.

University of Pittsburgh
Institutional Review Board

Exempt and Expedited Reviews

3500 Fifth Avenue
Suite 100
Pittsburgh, PA 15213
Phone: 412.383.1480
Fax: 412.383.1508

University of Pittsburgh FWA: 00006790
University of Pittsburgh Medical Center: FWA 00006735
Children's Hospital of Pittsburgh: FWA 00000600

TO: Eric Sparkenbaugh

FROM: Sue R. Beers, Ph.D., Vice Chair

DATE: August 11, 2005

PROTOCOL: The Inclusion of Austistic Students in the General Curriculum

IRB Number: 0507151

The above-referenced protocol has been reviewed by the University of Pittsburgh
Institutional Review Board. Based on the information provided in the IRB protocol, this
project meets all the necessary criteria for an exemption, and is hereby designated as
"exempt" under section 45 CFR 46.101(b)(2).

The regulations of the University of Pittsburgh IRB require that exempt protocols be re-
reviewed every three years. If you wish to continue the research after that time, a new
application must be submitted.

- If any modifications are made to this project, please submit an 'exempt
  modification' form to the IRB.

- Please advise the IRB when your project has been completed so that it may be
  officially terminated in the IRB database.

- This research study may be audited by the University of Pittsburgh Research
  Conduct and Compliance Office.

Approval Date: August 11, 2005
Expiration Date: August 11, 2008

SRB:ky

Teacher Volunteers Needed

As part of my doctoral studies at the University of Pittsburgh, I am currently seeking *elementary and middle school teacher volunteers* to participate in a research study. This study will examine teachers' beliefs and attitudes regarding academic standards and the inclusion of autistic students in the general curriculum. Participation in the study is entirely voluntary and would include the completion of two brief surveys and a personal interview.

If you would be willing to participate or would like additional information regarding this study, please contact Eric Sparkenbaugh at (412) 292-5041 or via email at sparkenbaughe@mail.montourschools.com. Thank you very much for your time and attention.

July 28, 2005

Dear Potential Participant:

As part of my doctoral studies at the University of Pittsburgh, I am conducting research regarding the inclusion of autistic students in the general curriculum. This study will examine teachers' attitudes and beliefs about inclusion and academic standards.

At this time, I am seeking elementary and middle school teacher volunteers, who have had experience with students with autism, to complete two brief surveys and participate in a personal interview with an observer, which may last approximately one half hour. The information gathered will be used to develop teacher profiles. Teachers will not be identified by name and confidentiality will be maintained.

Your participation in the study is entirely voluntary and participants will have the opportunity to review their teacher profile and comment. Results of the completed study will also be shared. In no way will the information obtained be used in a supervisory or evaluative manner.

Please do not hesitate to contact me at (412) 292-5041 with any questions regarding this study or you may contact a Human Subject Protection Advocate, IRB Office, at 1-866-212-2668. Thank you very much for your time and consideration. Please complete, sign, and return the bottom portion of this letter if you are willing to participate.

Respectfully,

Eric Sparkenbaugh
Ingram Elementary School
Vancouver Avenue
Pittsburgh, PA 15205

I, _____ , am willing to participate in the research study regarding the inclusion of autistic students in the general curriculum, conducted by Eric Sparkenbaugh. This includes completing two surveys and a personal interview with an observer.

_____   _____
              Signature   Date

Beliefs and Attitudes Regarding Inclusion

		Scoring Scale		
Strongly Agree				Strongly Disagree
1	2	3	4	5

1. Students with disabilities should be included in the general curriculum as much as possible.

       1   2   3   4   5

2. It is necessary to differentiate instruction to address various learning styles and ability levels.

       1   2   3   4   5

3. Inclusion requires additional planning and training.

       1   2   3   4   5

4. Support teachers and paraprofessionals facilitate the inclusion of autistic students in the general curriculum.

       1   2   3   4   5

5. Typical and special needs students are able to benefit from inclusionary practices.

       1   2   3   4   5

6. The amount and type of inclusion are determined by the strengths and needs of the individual student.

       1   2   3   4   5

7. General education students are accepting of their autistic peers.

       1   2   3   4   5

8. Autistic students should receive instruction in the least restrictive environment.

       1   2   3   4   5

9. It is important to participate in the development of Individualized Education Plans (IEP).

       1   2   3   4   5

10. The number of autistic students included in the general curriculum is increasing.

       1   2   3   4   5

Beliefs and Attitudes Regarding Academic Standards

		Scoring Scale		
Strongly Agree				Strongly Disagree
1	2	3	4	5

1. There is a strong emphasis on teaching the PA academic standards.

       1   2   3   4   5

2. Academic instruction concentrates on reading, writing, and mathematics.

       1   2   3   4   5

3. It is important to assess students regularly and utilize the results to guide instruction.

       1   2   3   4   5

4. The Pennsylvania System of School Assessment (PSSA) tests whether students meet academic standards.

       1   2   3   4   5

5. The allowable accommodations for the PSSA are appropriate.

       1   2   3   4   5

6. All students are able to become proficient in the areas of reading, writing, and mathematics.

       1   2   3   4   5

7. Students are aware of the academic standards.

       1   2   3   4   5

8. My personal knowledge of the PA academic standards has increased.

       1   2   3   4   5

9. There is increased pressure to have students perform well on the PSSA.

       1   2   3   4   5

10. The school district's curriculum is aligned with the PA academic standards.

       1   2   3   4   5

Informal Outline for Personal Interviews

Thank for participation, introduce observer

Current position
Degree/s
Certification/s
Number of years teaching experience

Questions specific to survey responses (individualized)

1. What are your concerns regarding all students meeting the academic standards?

2. What experience do you have including autistic students in the general curriculum?

3. What are your concerns regarding the inclusion of autistic students in the general curriculum?

4. Please identify factors that may contribute to the successful inclusion of autistic students.

5. Please identify factors that may inhibit the inclusion of autistic students.

6. Have you received any individual or group training regarding the inclusion of autistic students or inclusion in general? Please describe.

7. How have you implemented any relevant strategies gained through professional development activities?

8. How do you evaluate the program effectiveness, either individual programs or school-wide initiatives?

9. Are there any significant incidents or experiences regarding inclusion that you would like to share?

10. Is there anything else regarding inclusion or the academic standards that you would like to address at this time?

Thank again, mention nominal reward for participation(10$ gift card for Barnes & Noble) Participants will have opportunity to comment on teacher profile, comments will be included, will also have opportunity to make anonymous comments about the study in general.

Bibliography

American Psychiatric Association: *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition. Washington DC, American Psychiatric Association, 1994.

Copland, M. A. (2003). Leadership of inquiry: Building and sustaining capacity for school improvement. *Educational Evaluation and Policy Analysis*, 25(4), 375-395.

Cox, R. D., & Schopler, E. (1991). Social skills training for children. In M. Lewis (Ed.), *Child and adolescent psychiatry: A comprehensive textbook*, (pp. 903-909). Baltimore: Williams & Wilkins.

Datnow, A. (2005). The sustainability of comprehensive school reform models in changing district and state contexts. *Educational Administration Quarterly*, 41(1), 121-153.

Division TEACCH. Inclusion for children with autism: The TEACCH position. Chapel Hill, NC, http://www.teach.com/inclus.htm, 2004.

Fullan, M. (1989). *Implementing educational change: What we know*. Document No. PHREE/89/18, Education and Employment Division, Population and Human Resources Department.

Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.

Harris, A., & Lambert, L. (2003). *Building leadership capacity for school improvement*. Philadelphia, PA: Open University Press.

Hollenbeck, D. F. Public Schools Autism Prevalence Report Series, 1992-2003, FightingAutism. Gibsonia, PA, http://www.fightingautism.org/idea/, 2004.

Janzen, J. (1996). *Understanding the Nature of Autism: A Practical Guide*. San Antonio, TX: Therapy Skill Builders.

Lambert, L. (1998). *Building leadership capacity in schools*. Alexandria, VA: Association for Supervision and Curriculum Development.

Lambert, L., Collay, M., Dietz, M., Kent, K., & Ershler Richert, A. (1997). *Who will save our schools? Teachers as constructivist leaders*. Thousand Oaks, CA: Corwin Press, Inc.

Lambert, L., Walker, D., Zimmerman, D., Cooper, J., Lambert, M., Gardner, M., & Szabo, M. (2002). *The constructivist leader, 2nd edition*. New York, NY: Teachers College, Columbia University.

Landrus, R. I., & Mesibov, G. B. (1986). *Structured Teaching*. Unpublished manuscript.
University of North Carolina, Division TEACCH, Chapel Hill.

Massell, D. (2000). The district role in building capacity: Four strategies. *Consortium for Policy Research in Education Policy Briefs*, RB-32 September 2000.

Mesibov, G. B. An Overview of Division TEACCH. Chapel Hill, NC,
http://www.teacch.com/mainpage.htm, 2004

O'Day, J., Goertz, M. E., & Floden, R. E. (1995). Building capacity for educational reform.
Consortium for Policy Research in Education Policy Briefs, RB-18 December 1995.

Rea, P. (2000). Educating students with autism: A unique challenge. *Special Education Law Bulletin*, 6(2), 1-3.

Riehl, C. (2000). The principal's role in creating inclusive schools for diverse students: A
review of normative, empirical, and critical literature on the practice of educational
administration. *Review of Educational Research*, 70(1), 55-81.

Smith, T., Polloway, E., Patton, J., & Dowdy, C. (1998). *Teaching students with special needs in inclusive settings, second edition*. Needham Heights, MA: Viacom

Spillane, J., & Seashore-Louis, K. (2002). School improvement processes and practices:
Professional learning fro building instructional capacity. In J. Murphy (Ed.), *National Society for the Study of Education (NSSE) Yearbook*. Chicago: University of Chicago.

Thomas, M. (2004). Adjunct Faculty, Duquesne University & George Washington University.
Original powerpoint presentation at Duquesne University.

Villa, R., & Thousand, J. S. (1995). *Creating an inclusive school*. Alexandria, VA: Association
for Supervision and Curriculum Development.

Volmer, L. (1995). Best practices in working with students with autism. In A. Thomas & J.
Grimes (Eds.). *Best Practices in School Psychology III*, (pp. 1031-1038). Washington, DC:
National Association of School Psychologists.

Wagner, S., (1999). *Inclusive programming for elementary students with autism*. Arlington,
TX: Future Horizons.

Westling, D., & Fox, L. (2000). *Teaching students with severe disabilities, 2nd edition*. Upper
Saddle River, NJ: Prentice-Hall, Inc.

Wooten, M., & Mesibov, G. B. (1986). Social skills training for elementary school autistic
children with normal peers. In E. Schopler & G. B. Mesibov (Eds.), *Social behavior in autism*
(pp. 305-319). New York: Plenum Press.

Wolery, R. A., & Cordisco, L. K. (1992). Cooperative Learning in the Inclusive Classroom, Inclusion Survey. *Early Childhood Integration Program.* Project STEEM, Allegheny Singer Project.

Yeargin-Allsopp, M., Rice, C., Karapurkar, T., Doernberg, N., Boyle, C., & Murphy, C. (2003). Prevalence of Autism in a U.S. Metropolitan Area. *Journal of the American Medical Association*, 289 (1), 49-55.