

ABSTRACT

Title of Document: TEACHER AND STUDENT PERSPECTIVES
ON THE INCLUSION AND
MAINSTREAMING OF CHILDREN WITH
MODERATE AND SEVERE COGNITIVE
DISABILITIES

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Integrated settings for educating students with moderate and severe disabilities (SWDs) have received great attention since the passage of PL 94-142. The purpose of this qualitative case study was to explore the teacher and student perspectives and interaction patterns of SWDs in two schools and how each of those schools implemented integrated programming. The two schools included a self-described full inclusion school and a mainstream school.

The researcher focused on historical information about the two schools philosophies for educating SWDs, regular and special education teachers' and students' perspectives regarding the SWDs in their classes, and observations of target SWDs to paint a picture of the way in which the schools operate. The two schools were then analyzed using qualitative analysis techniques.

Several themes emerged from the interviews regarding the teachers' and students' views of the SWDs in their classes. Student themes included: perceived responsibility for students with disabilities, defining and understanding SWDs, interactions between students with and without disabilities, and impact on and outcomes for SWDs. Teacher themes included: terminology used to describe regular education students and SWDs, personal and perceived school philosophy, student and teacher qualities perceived to effect integration, and programming issues.

Observations of the SWDs focused on establishing a rate of interactions between SWDs and others in the school, initiators of interactions, and reciprocity of interactions. The SWD at the full inclusion school was found to be more isolated and less incorporated in the regular education setting than the SWDs at the mainstream school despite what was suggested in the articulated school philosophy.

The two schools were examined based on archival, interview, and observation data. It was found that there was discordance between the articulated philosophy of the full inclusion school and the implicit philosophy that guided practice in that school.

Future directions for research were discussed including the need for more qualitative analysis of the interactions that occur between SWDs and other staff and students in the school.

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MAINSTREAMING OF CHILDREN WITH MODERATE AND SEVERE
COGNITIVE DISABILITIES

By

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CHAPTER 1

Introduction

Since the passage of the Education for All Handicapped Children Act (P.L. 94-142), educators have been struggling with determining the best way to educate children with disabilities while upholding the law (Wood, 2002). Although there have been changes to P.L. 94-142 through reauthorizations of the law since 1975, the major tenets of the law have remained consistent over time and are in effect today. One such tenant introduced in P.L. 94-142 was the idea of *Least Restrictive Environment* (LRE), which places “the responsibility on the school district to educate children with disabilities in the same settings and programs as nondisabled children to the maximum extent appropriate” (Wood, 2002; p. 15). LRE has been the driving force for educators and researchers to further explore the philosophical and practical reasons behind integrating children with disabilities into the regular education setting.

The most prominent philosophical reason for the integration of children with disabilities into the regular education environment is that all children should have the right to equal educational opportunities (Brown, Bruder, & Bailey, 1989; Gilhool, 1989; Kavale, 1979; Strully & Strully, 1985). This particular philosophical reason was punctuated in two major court cases in 1972, *Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania* and *Mills v. Board of Education of the District of Columbia* (Kavale, 1979). The outcomes of these two cases were similar in that they both helped to establish the right of children with disabilities to an appropriate publicly supported education.

Other potential benefits of integration for both disabled and nondisabled students include:

1. an increased awareness and acceptance of human differences;
2. an increase in the awareness of and sensitivity to the needs of others;
3. an increase in the self-esteem of nondisabled students;
4. increases in natural friendships between children with and without disabilities in the children's home schools;
5. an increase in the ability of general education settings to better meet the needs of all children due to the increase in instructional resources, staff development, flexibility in the delivery of instruction, and adapted instructional practices; and
6. an increase in academic and behavioral expectations for children with disabilities (Staub & Peck, 1994/1995).

These academic and behavioral benefits have been supported empirically in several studies over time for a wide range of children with different types disabilities (Avramidis & Norwich, 2002; Carlberg & Kavale, 1980; Freeman & Alkin, 2000; Jamieson, 1984; Salend & Duhaney, 1999; Wang & Baker, 1985-1986). In general, researchers have found that integrating children with disabilities into regular education classrooms has had favorable effects for children with and without disabilities (Staub & Peck, 1994/1995). In fact, in a review of 36 studies by Freeman and Alkin (2000), favorable academic and behavioral outcomes for children with mental retardation (MR), especially in the younger years, were found. They also found a correlation between positive outcomes and increases in the degree of

integration (Freeman & Alkin, 2000). These findings have been replicated overtime in different types of research designs including matched pairs studies (Fisher & Meyer, 2000; Gerson, 1995; Peetsma, Vergeer, Roeleveld, & Karsten, 2001) and case studies (Ryndak, Morrison, & Sommerstein, 1999). It could be surmised from the research that when children with disabilities are placed in classrooms with high academic and behavioral expectations they rise to the challenge as compared to their peers in self-contained settings that may not have the same expectations placed on them.

The research also indicates that nondisabled students are not adversely affected academically or socially by the integration of children with disabilities into the regular education setting (Bricker, Bruder, & Bailey, 1982; Cooke, Ruskus, Apolloni, & Peck, 1981; Odom, Deklyen, & Jenkins, 1984). Nondisabled students in integrated settings have been shown to perform as well as their peers in nonintegrated settings. After one academic year, Odom et al. (1984) found no differences between nondisabled students in integrated (disabilities of the children ranged from mild to moderate) and nonintegrated preschool classrooms on pre- and post-test measures of intellectual, communicative, social, and preacademic domains. Hunt, Staub, Alwell, and Goetz (1994) compared cooperative math groups, one of which included children with severe disabilities. All students were found to make positive gains on their math objectives with no differences found between nondisabled students in the different cooperative learning groups. Sharpe, York, and Knight (1994) found similar results when they compared integrated (mild to severe disabilities were represented in the integrated classrooms) and nonintegrated classrooms of 3rd and 4th graders. They

found that the nondisabled children in both settings performed similarly on their report cards and on measures of science and reading knowledge.

Some research has demonstrated that nondisabled students actually benefit from exposure to their peers with disabilities (Salend & Garrick Duhaney, 1999; Staub & Peck, 1994/1995). Generally, increased exposure to children with disabilities has helped to improve nondisabled students' acceptance and understanding of their peers with disabilities. As Gerson (1995) found, the attitudes toward and expectations of nondisabled children regarding their peers with moderate or severe disabilities seemed to mirror the school's standards and expectations for children with disabilities in the school. Nondisabled students in full inclusion schools had the most positive views toward and interacted the most with students with moderate and severe disabilities (SWDs) in their classes as compared to nondisabled students in other schools that provide little or no opportunity for these children to interact. Nondisabled children who are encouraged to interact with their peers with disabilities are found to better be able to meet the needs of others and were more sensitive to their emotions (Bilken, Corrigan, & Quick, 1989; Capper & Pickett, 1994; Diamond, 2001; Favazza & Odom, 1997; Helmstetter, Peck, & Giangreco, 1994; Okagaki, Diamond, Kontos, & Hestenes, 1998). In addition, nondisabled students in integrated settings also reported increases in their self-esteem and feelings of responsibility (Staub, Spaulding, Peck, Gallucci, & Schwartz, 1996). While these studies do help to explain the benefits of integration for students without disabilities, more depth and breath could be added to this body of research regarding the perceptions of students without disabilities on their interactions with SWDs.

Teacher beliefs and attitudes regarding the integration of children with disabilities into the regular education setting have received a substantial amount of attention in the literature (Avramidis & Norwich, 2002; Jamieson, 1984; Salend & Garrick Duhaney, 1999). This research suggests that teachers generally hold positive views about the general idea of integration. However, they are more negative about integrating children with moderate and severe disabilities as compared to the integration of children with mild or physical disabilities. Teacher attitudes toward inclusion seem to be affected by the amount and type of training they have received (Stoler, 1992; Jobe, Rust, & Brissie, 1996) and the amount of experience a teacher has in the classroom (Avramidis & Norwich, 2002; Beeryman, 1989; Jamieson, 1984). Teachers with more special education training and more inservice training regarding inclusion and newly trained teachers with less classroom experience appear to hold more positive views toward inclusion (Avramidis & Norwich, 2002; Beeryman, 1989; Jamieson, 1984; Jobe et al., 1996; Stoler, 1992). While these studies are useful in guiding the training of teachers when preparing to integrate students into the regular education setting, they do not speak to the views and attitudes of teachers regarding integration once they are working within an full inclusion or mainstream setting. The following study will explore teacher perceptions regarding the education of SWDs within a full inclusion setting and a mainstream setting.

Statement of Problem

The bulk of the research on integrating children with disabilities into the regular education setting indicates that full inclusion for children with MR can have a

myriad of benefits (Freeman & Alkin, 2000) and that nondisabled children are not adversely affected academically and can benefit socially from being in integrated classrooms (Staub & Peck, 1995). However, despite the extensive and diverse literature base on integration, the impact of integration on nondisabled students' and teachers' participating in full inclusion programs as compared to mainstream programs is not well understood. A major question left unanswered is how the amount of experience with children with moderate and severe disabilities in the school setting alters people's belief systems about integration, the extent to which it is feasible and beneficial to SWDs, and expectations for SWDs. Also not well documented is the extent to which the characteristics of the student with the moderate and severe disability impact the attitudes of the teachers and students regarding integration.

Research done by Gerson (1995) set out to answer this question by observing the interactions between nondisabled students and SWDs and investigating the views of middle school children who had varying levels of exposure to children with disabilities in the school setting, ranging from no exposure to full inclusion.. Gerson's study stopped short of interviewing teachers and recommended including teachers in future studies done on this topic. The present study will add to the research base by examining the perspectives of elementary school children and their teachers in a full inclusion and mainstream setting on the integration of SWDs and interactions between nondisabled students and teachers and SWDs. The educational philosophies of each school regarding educating SWDs and the impact of SWDs personal characteristics on their integration experience will also be investigated.

Observations, interviews, fieldnotes, and file reviews were completed to explore the research topic as all are key factors in gaining a more complete picture of the schools chosen for this particular case study (Bogdan & Biklen, 1982). In good qualitative research rarely is one data collection technique used to analyze a case. Given that the present study came to focus more on schools than on individual students, the observations of the SWDs helped to shape and inform the interpretation of the qualitative data.

Research Questions

- 1) What are the attitudes and beliefs expressed by the students at each school setting regarding SWDs? Are there differences in attitudes among these two groups of students?
- 2) What are the attitudes and beliefs expressed by the teachers at each school setting toward the integration model that their school follows? Are there differences in attitudes among these two groups of teachers?
- 3) Is there a difference in the amount of interactions between regular education students and SWDs in the full inclusion and the mainstream school?
- 4) What are the proportions of the attempted interactions between SWDs and regular education students, other SWDs, general education teachers and special education teacher?
- 5) To what degree is there cooperation or reciprocity in the interactions that occur between SWDs and regular education students, regular education teachers, and special education teachers?

Definition of Terms

Some terms used in the present study may represent several different ideas or meanings within the research. These terms will be defined in this section to clarify their use and meaning in this study.

Full Inclusion refers to students who receive special education services in the regular education setting with minimal pull out sessions. Generally, special education services are provided in a *push in* format, which means that the special educator supports the children with disabilities by working with the general educator within the general education classroom. A full inclusion setting will be included in this study for observations and interviews.

Integrated setting is a general term that refers to any setting in which children with disabilities participate in a general education environment regardless of the time they spend in this setting. Integrated setting can refer to both mainstream and inclusion settings.

An *interaction* is “any behavior (e.g. looking, vocalizing, gesturing, smiling) directed by the disabled student toward another person or by a person toward the disabled student” (Gerson, 1995; p. 11). Interactions observed will be between students with disabilities and nondisabled students, other students with disabilities, general education teachers, and/or special education teachers.

Mainstreaming is used to describe settings in which children with disabilities receive special education services in a regular education setting for some part of their day (usually physical education, music, art, lunch, and/or recess) and receive special education services (academic areas) in a special education setting during a portion of their day. A mainstream setting will be included in this study for observations and interviews.

A *moderate or severe disability* refers to low incidence disabilities such as autism, moderate or severe mental retardation, and multiple disabilities. A full description of the students observed in this study will be provided in Chapter 3.

Reciprocity is defined as a mutual exchange between two people in which one person initiates the interaction and the other responds. This will pertain to the interactions observed in the mainstream and inclusion classrooms (Gerson, 1995).

SWD is an abbreviation that will be used throughout the chapters in this study. *SWD* refers to students with moderate and severe disabilities.

CHAPTER 2

Literature Review

Introduction

In order to give the reader perspective and context regarding the present study this chapter will begin with a review of the literature regarding the history of special education, trends in legislation regarding special education, and subsequent movement from self-contained settings to integrated settings for students with disabilities. This chapter will also review the literature regarding the impact of mainstreaming and full inclusion on nondisabled students and students with disabilities and the educators in those classrooms. Emphasis will be given to academic and social/behavioral outcomes for students.

The reader should be aware that when reading this chapter *mainstream* is used to describe settings in which the child receives special education services in a regular education setting for some part of their day and receives special education services in a special education setting during a portion of their day. *Inclusion* refers to students who receive all special education services in the regular education setting. The reader should also keep in mind that the definition of mental retardation has changed over time. Thus, studies regarding children with mental retardation reflect the most current definition at the time the research was conducted. For example, some of the earliest research was completed when the IQ cutoff score for Educable Mentally Retarded (EMR) was 85 or below. Currently, most educational systems use the term mental retardation to describe students where IQ scores fall below 70. The specific type of disability focused on in each study presented will be noted. SWD will be

reserved for use only when discussing students with moderate and severe disabilities. Otherwise, students with disabilities will be used to broadly include a child with any type of diagnosed disability falling under special education law.

The present chapter will address research regarding the integration of students with disabilities into regular education settings. In addition, this chapter will also address arguments for and against mainstreaming and full inclusion. Finally, this chapter will address the research regarding the expectations and attitudes of children without disabilities and teachers and paraprofessionals working in mainstream and full inclusion environments. This information will help inform the results of this study.

The Evolution of the Classification Mental Retardation

The field of mental retardation dates back as far as the mid-1800s and has long intrigued those interested in the field (Hodapp & Dykens, 1996). In the 1800s special schools and training centers were opened in the US to accommodate people with mental retardation, and by 1890 there were about 20 of these facilities in existence across 15 states. It was the directors of these programs that banded together to form the American Association for Mental Deficiency, which came to be known as the American Association on Mental Retardation (AAMR). Although the AAMR existed since the late 1800's, the treatment of persons with mental retardation was not always humane and appropriate.

From the time between the 1880s and 1940s there was a shift in society's views on the mentally retarded (Horn & Fuchs, 1987). Prior to the 1880s, many felt that people with mental retardation could be "cured and reintegrated into the

community” (p. 14). Over time, when the goal of reintegration was not realized, people became frustrated and adopted a more pessimistic view of those with mental retardation. As a result, the first definition of mental retardation recognized by the AAMR emphasized the *incurability* of mental retardation, a belief that was consistent with emerging measures of intelligence and the eugenics movement of the time (AAMR, 2002). The theme of incurability was common in the definition of mental retardation through the early 1940s.

Eventually, the idea of incurability was replaced by an emphasis on present levels of functioning. As a result, more recent versions of the definition of mental retardation focus on adaptive behaviors in addition to intelligence. Adaptive behavior became a permanent requirement for the diagnosis of mental retardation in the 1973 AAMR definition (AAMR, 2002). The most current AAMR (2002) definition of mental retardation states that “it is a disability characterized by significant limitations both in intellectual functioning and in adaptive behavior expressed in conceptual, social, and practical adaptive skill” and that the “disability originates before age 18” (p. 19).

History of Special Education

Prior to the early 1900s, people with disabilities were often hidden, shunned, or persecuted in society and the idea of educating people with disabilities was unheard of (Wood, 2002). Although all states had compulsory education laws by the early 1900s, the states maintained that they had the right to exclude any student they felt could not benefit from a free education because states were paying for it (Yell, Rogers, & Lodge Rodgers, 1998). Between 1910 and 1930, some states did create

special self-contained classes to serve the needs of disabled students. However, disruptive children and children with severe disabilities were regularly expelled from school, as their needs were difficult to meet even in special classrooms. As early as 1933, advocacy groups had begun working to protect the rights of children with disabilities through litigation (Wood, 2002). This litigation helped to build the framework out of which many federal mandates would grow.

Trends in Legislation

At the start of the civil rights movements, *Brown v. Board of Education* was considered a major victory (Yell et al., 1998). In 1954, *Brown v. Board of Education* maintained that segregation based on a person's unalterable characteristics (e.g., race or disability) was unconstitutional and called for the basic right to equal opportunities for all. *Brown V. Board of Education* helped pave the way for greater constitutional protection for people with disabilities.

By the 1960s and 70s, most states began to pass laws that required schools to educate people with disabilities (Yell, et al.1998). However, funding issues and lack of consistency in the state laws allowed for considerable variability from state to state. Parents and advocacy groups began to successfully push for the rights of students with disabilities through the court system with a major victory coming in 1971. Through the *Pennsylvania Association for Retarded Citizens v. the Commonwealth of Pennsylvania* case (*PARC V. Penn.*) and several other smaller cases, the courts weighed in on the rights of children with disabilities to an education. *PARC v. Penn* and other cases established that: (1) children with disabilities had been systematically denied the right to a public education; (2) all children can benefit from

an education; (3) all children are entitled to a free and appropriate education; (4) parents are entitled to due process in order to question classification and placements decision for their children; and (5) all children are entitled to receive their education in the least restrictive environment (Bilken, 1985).

As pressure from parent and advocacy groups and court cases mounted, the federal government responded by enacting Section 504 of the Rehabilitation Act of 1973 (PL 93-112), which prevented the “exclusion of any person with a disability from vocational programs receiving federal funding” (Wood, 2002; p. 9). In 1974, the Rehabilitation Act was amended to require any federally funded program to provide equal employment services for people with disabilities. This legislation paved the way for P.L. 94-142, the Education for All Handicapped Children Act of 1975, which streamlined education laws for disabled people.

Prior to PL 94-142 children were not guaranteed an education by public school agencies. Many public school agencies developed exclusionary clauses, refused services, charged for services that were ordinarily free, and denied students with disabilities entry into integrated programs (Lipsky & Gartner, 1989). PL 94-142 was the first step in providing a free and appropriate education to all children with disabilities. As outlined by Wood (2002), PL 94-142 had five major components affecting classroom environments and instruction. All people have the right to a) free and appropriate education (FAPE); b) nondiscriminatory evaluation procedures; c) procedural due process; d) individualized education programs (IEPs); and d) the least restrictive environment (LRE).

After the passage of PL 94-142, children with disabilities, who were once totally excluded from the general education population, were starting to be served in general education classrooms (Wood, 2002). Although there have been several prior reauthorizations, a key reauthorizations occurred in 1990. In 1990 PL 94-142 was reauthorized as PL101-476, the Individuals with Disabilities Education Act (IDEA). PL 101-476 not only continued the rights of children with disabilities afforded in PL 94-142, but also strengthened them. Since 1990, there have also been reauthorizations of IDEA in 1997 and 2004.

Moving From Self-Contained Classes to Inclusion

PL 94-142 brought about the idea of Least Restrictive Environment (LRE), which mandated that school districts educate disabled and nondisabled children in the same setting or program when at all possible and appropriate (Wood, 2002). By adding the LRE clause to the law, those who drafted the law attempted to guarantee children with disabilities access to a free and appropriate education that included integration into the general education setting when possible. The idea was that alternative and creative teaching practices could make it possible for children with disabilities to benefit and compete in a mainstreamed general education classroom. Mainstreaming is the act of integrating children with disabilities into general education classrooms to the maximum extent possible. While the emphasis should be on adapting the curriculum, methodologies, and materials to the child's specific strengths and weaknesses so that he/she can make the best adjustment possible, emphasis was often on placement of children rather than on the quality and individualization of instruction. In other words, under IDEA the first requirement is

to meet the needs of the child and then consider the LRE in which this can best be carried out.

In the 1980s the Regular Education Initiative (REI) grew out of the trend of mainstreaming and began to gain momentum (Wood, 2002). The REI movement called for an end to the curricular and physical separation of special education and general education so that schools could better serve the needs of all students. The goal was to end the dual system of special and regular education. Under mainstreaming the integration of students primarily occurred during recess, assemblies, and lunchtime, and emphasized friendship-making skills. Students who spent at least half a day in the general education setting were considered to be mainstreamed (Kavale, 2000). Full inclusion on the other hand emphasized the full integration of students with disabilities into the general education setting with some programming time in different environments as needed (Sailor, 1991). Now students with disabilities were the responsibility of all educators and not just resources teachers. The REI initiative attempted to introduce more powerful teaching methodologies in addition to more inclusive practices for students with disabilities (Wang, Reynolds, Walberg, 1986). Full inclusion has been gaining momentum over time (Andrews et al., 2000).

Rationale for Integrating Students with Disabilities

in Regular Education Classrooms

Before and after PL 94-142 and the push for the LRE, the inclusion of students with disabilities into the mainstream had been discussed, supported, and challenged. In 1968, Dunn questioned the poor outcomes of students placed into

special programs and advocated for placing children with disabilities into general education classrooms to help improve their academic skills. Over time, researchers have pointed to both philosophical and practical rationales for integrating students with disabilities into regular education classrooms.

There are many philosophical reasons espoused by researchers to support the inclusion of students with disabilities into regular education classrooms (Deno, Foegan, Robinson, & Espin, 1996). Much of this research focuses on the rights of students with disabilities to have the same educational opportunities and access to the general education curriculum as their nondisabled peers (Brown, et. al., 1989; Gilhool, 1989; Strully & Strully, 1985). All children have the right to an *effective* education in the form of equal and integrated schools and access to all aspects of American society (Gilhool, 1989). Separate educational programs have lead to fragmented and artificial programs that lead to “lower expectations, uninspiring and restricted curricula focused on rote or irrelevant tasks, disjointedness from general education curricula, and negative student attitudes resulting from school failure and stigmatizing segregation” (Rea, McLaughlin, & Walther-Thomas, 2002; p. 204). Stainback and Stainback (1989) asserted that it is time to stop focusing on what children cannot do and restructure schools to fit the needs of all students to maximize on what they can do.

Researchers have found little empirical evidence supporting separate programs for students with disabilities (Carlberg & Kavale, 1980; Madden & Slavin, 1982; Peetsma, Vergeer, Roeleveld & Karsten, 2001). Although there has been some empirical evidence regarding the lack of academic achievement for children with

learning disabilities in integrated classrooms (Fuchs & Fuchs, 1995), the majority of research points to the benefits of including students with disabilities into regular education classrooms (Andrews, et al., 2000; Wang, Reynolds, & Walberg, 1988). In fact, studies have shown that integrated students with learning disabilities and mild mental retardation (Madden & Slavin, 1982; Peetsma, Vergeer, Roeleveld & Karsten, 2001) and moderate and severe disabilities (Fisher & Meyer, 2002) alike, appear to do as well or better academically, socially, behaviorally, and emotionally than their peers with disabilities in segregated programs.

Due to lack of experience in the mainstream, students with disabilities such as mild mental retardation, learning disabilities, and behavioral disorders, often display poor social, academic, and employment outcomes (Edgar, 1987). As pointed out by Lipsky and Gartner (1989), there is often no expectation for students placed in special education classes to ever return to the mainstream. Therefore, these students are denied the opportunity to navigate the mainstream, a world they are expected to operate within when they leave the public education setting. Starting in preschool, integrating students, including those with severe disabilities, into the mainstream ensures access to “life experiences both during and after their school years” (Sailor, 1989, p. 71).

Other researchers have focused on the need for inclusive settings to give students with and without disabilities practical experiences to prepare them for life after public education (Edgar, 1987; Sailor, 1989; Stainback & Stainback, 1985). Students with severe disabilities and their peers within the same classroom environment have the opportunity to “learn about each other and develop the positive

interdependence necessary to be part of the same community” (York, Vandercook, MacDonald, Heise-Neff, & Caughey, 1992, p. 244). Proponents of inclusive classrooms reasoned that nondisabled children would experience favorable attitudes and behaviors towards (Voeltz & Brennan, 1984) and develop increased expectations for their peers with disabilities (Bilken, Corrigan, & Quick, 1989). In addition, it was believed that nondisabled children would be able to sharpen their social skills through heterogeneous social relationships. These rationales have been studied, albeit in a limited way, over the last several years and have attained positive empirical support (Staub & Peck, 1994/1995). A discussion of this research will be presented later in this chapter.

Arguments Against Full Inclusion

Although there are positive outcomes in both mainstreaming and full inclusion studies, not all researchers concur that full inclusion or even mainstreaming is the best placement for all children with moderate and severe disabilities. Fuchs and Fuchs (1995) in an opinion paper contrasting full inclusion with varying levels of separate special education placements argued that children with varying types of disabilities may benefit at times from self-contained or “separate” classrooms. In fact, they contend that some of these children actually miss out on the opportunity to read or write, attend college or vocational school, control their behavior, develop a strong self-esteem, or become a responsible and productive citizen by being placed in regular education classes before they are ready. Hornby (1999) asserted that there has been a “lack of research evidence for the effectiveness of inclusive practices,” particularly in demonstrating that fully included students’ experience a significant

improvement in their daily lives. Shanker (1995) also wrote that “requiring all disabled children to be included in mainstream classrooms, regardless of their ability to function there, is not only unrealistic, but ...downright harmful ...for the children” (p. 18). These three authors suggested that each child’s case be considered on an individual basis and that special education should provide a continuum of services.

Discontinuity in the definition of inclusion (Cook, 2002; McLaughlin, Warren, & Schofield, 1996) and the services implemented for students with disabilities from state to state and after public education ends are three notable problems in special education programming (Cook, 2002). In an article by Cook (2002) it was stated that special education has come a long way since the days of institutionalizing people with disabilities. However, she questioned the adaptive and educational outcomes for students with disabilities who have matriculated through integrated classrooms and are now entering the workforce. She pointed out that there is no continuity in the way that different school systems implement inclusion programs and that there is no single definition of inclusion used by all school systems, making it difficult to quantify the success of identified students after they graduate from public schools. Therefore, she suggests that caution should be used when comparing studies regarding inclusion.

Research on the Effects of Integrating Students with Disabilities

The amount of research regarding mainstreaming and full inclusion is extremely diverse given the popularity of this topic and its ability to spark very passionate debates among parents, educators, politicians and researchers (Fuchs & Fuchs, 1995). Research regarding the effects of integrating students with disabilities

into the regular education setting can be divided into two main categories, mainstream placements and full inclusion placements. Within each of those settings, researchers use a plethora of outcome measures to determine the effects of each type of placement. Most outcome measures can be placed into two general groups: academic outcomes and social/behavioral outcomes. The following is a discussion of the research pertaining to the aforementioned settings with regard to the different outcome measures. First, research pertaining to outcomes for children in mainstream settings will be presented. Second, research pertaining to children in full inclusion settings will be presented.

Mainstreaming

The following is a discussion of research pertaining to the outcomes of students with disabilities in mainstream settings. Academic outcomes are presented first, followed by social/behavioral outcomes.

Academic outcomes. In a summary of 15 years worth of studies, Baker, Wang and Walberg (1995) found that the positive effects of integrating students with all types of disabilities into regular education classrooms were demonstrated. Baker et al. (1995) reviewed three meta-analyses on the effects of mainstreaming placements for students with disabilities (Baker, 1994, as cited in Baker et al., 1995; Carlberg & Kavale, 1980; Wang & Baker, 1985-1986). The meta-analyses reviewed indicated a positive effect size for academic outcomes for students with disabilities included in the regular education setting. The academic outcomes effect size ranged from .08 to .44. Baker et al. (1995) concluded that the “considerable evidence from the last 15 years suggests that segregation of students in separate classrooms is actually

deleterious to their academic performance and social adjustment, and that special students generally perform better on average in regular classrooms” (p. 34). It should be noted that Baker et al. (1995) did not specify the types of disabilities the children had who were included in each study they included in their analysis.

Wang and Baker (1985-1986), one of the meta-analyses included in the Baker et al. study, looked at the outcomes of research studies regarding the effects of mainstreaming on students with disabilities and the positive characteristics of mainstreaming programs. They compared 11 studies published between 1975 and 1984. Of the 11 studies considered, 53% included participants with mental retardation, 3% included children with learning disabilities, 19% included children with hearing impairments and 25% included children identified with multiple disabilities. Among other outcomes, mainstreaming was shown to have positive effects for students in the area of improving performance (academic achievement).

Carlberg and Kavale (1980), another meta-analysis cited in the Baker et al. study, looked at fifty primary research studies of special versus regular class placement for children identified as learning disabled (LD), slow learners (SL), educable mentally retarded (EMR), and behaviorally disordered/emotionally disturbed (BD/ED). While the study did find positive effects for LD and BD/ED children in special classes, negative effects were found for SL and EMR children placed in special classes. The authors concluded that the findings offer “no justification for placement of low-IQ children (SL and EMR) in special classes” (p. 304).

Social/behavioral outcomes. In the Baker, et al. (1995) study that analyzed three meta-analyses to determine the effect size for academic and social outcomes, it was found that the effect size for social outcomes ranged from .11 to .28. They concluded that mainstreaming had a positive effect on social outcomes for integrated students with disabilities. In the aforementioned meta-analysis completed by Wang and Baker (1985-1986) that was included in the Baker et al. (1995) study, mainstreaming was also shown to have positive effects on attitude (students' self-concept and/or attitude toward learning) and process outcomes (classroom processes including interaction between the student and teacher and classmates). Positive characteristics of mainstream programs were found to be "continuous assessment, alternative routes and a variety of curriculum materials, individualized progress plans, student self-management, peer assistance, instructional teaming, and consulting teachers" (p. 518).

Gottlieb, Gampel, and Budoff (1975) compared Educable Mentally Retarded (IQ < 85) students' behaviors before and after being mainstreamed into regular education classes to see if "normalized behaviors" persisted through the first school year of integration. Subjects consisted of 22 EMR students, 11 who attended a new integrated school and 11 who attended a self-contained setting. The students were all between the ages of 9 and 13 and were compared to a control group of 110 students consisting of both nondisabled and EMR students. The students were observed using a 12-category behavior coding scheme. It was found that non-segregated students displayed more prosocial behaviors than the segregated students. In addition, non-segregated children had fewer physically aggressive behaviors than did the control

group. The non-segregated children were only found to have more verbally aggressive behaviors than the control group. It was also found that despite increased prosocial behaviors by the integrated EMR students, nondisabled peers did not choose EMR students as friends. The authors of this study concluded that the results were positive for the integrated EMR children with the exception of social acceptance by their nondisabled peers.

In a study looking specifically at social acceptance, Brewer and Smith (1989) also demonstrated that mainstreaming does not necessarily increase the acceptability of students with mental retardation among their classmates. Brewer and Smith looked at whether the amount of time a student with mental retardation was mainstreamed increased the social acceptability among their nondisabled peers. In this study, 437 nondisabled children and 20 children with mental retardation across seven schools were surveyed regarding the social acceptability of their classmates. The children with mental retardation were broken into two treatment groups. The first group consisted of 11 children with mental retardation from 1st through 5th grade who had been mainstreamed for .7 to 2.6 years and 233 nondisabled children. The second group consisted of 9 children with mental retardation from 3rd to 5th grade who had been mainstreamed for 3.7 to 4 years and 204 nondisabled children. Each child was given a rating scale to measure social acceptance and social rejection.

It was found that amount of time mainstreamed had no effect on social acceptability. Children with mental retardation had equally low acceptability ratings regardless of time mainstreamed even when age was held constant. Social rejection was no different for children with mental retardation and nondisabled children and

also did not vary by time mainstreamed. Although research on the social acceptance of children with disabilities by their typical functioning peers indicates that children with mental retardation are not fully accepted by their peer, the general effects of integration of students with disabilities into general education classrooms appears to have a positive effect on the behavior of students with disabilities.

Full Inclusion

The following is a review of studies regarding outcomes for students with disabilities educated in full inclusion settings. As with the previous section, academic outcomes are presented first and are followed by social/behavioral outcomes.

Academic outcomes. A recent review (Freeman & Alkin, 2000) of 36 studies published between 1958 and 1995 was conducted to gain a better understanding of research regarding the academic and social attainment of children with mental retardation in general and special education settings. Because of changes in educational programming this more recent literature review is unique in that the authors were able to include research pertaining to full inclusion settings unlike older reviews (Carlberg & Kavale, 1980; Wang & Baker, 1985-1986). Articles included in the review met the following five criteria:

- 1) published empirical articles,
- 2) included school-age students,
- 3) included students with mental retardation,
- 4) compared students with mental retardation to nondisabled students or students with mental retardation in full inclusion or mainstreamed settings to students with mental retardation in special education settings, and

- 5) used educational placements as the independent variable and social or academic outcomes as the dependent variable.

Although the overall results of the included studies were not quantified to show statistical strength, a qualitative analysis found that the most favorable academic and social outcomes for students with mental retardation occurred in full inclusion settings. In fact these authors found that degree of integration and academic performance were positively correlated for students with mental retardation and that typically developing students were not disadvantaged by the inclusion of their peers with mental retardation. In addition, children with milder levels of mental retardation experienced greater academic success than their segregated peers.

While this review does appear to support the full inclusion of students with mental retardation into the general education setting, the authors did point out some weaknesses common to studies on this topic. First, the definition of mental retardation has changed extensively over time; therefore, children included in the studies may differ on adaptive skills and IQ scores. Second, curriculum at the high school level is more functional for children with mental retardation. In other words, self-contained classes for children with mental retardation tend to focus on functional life-skills, while general education classes are more academic in nature. Thus, comparisons between children with mental retardation in special education and general education settings are difficult. Third, the authors concluded that comparisons between children with mental retardation and typically functioning children were not appropriate. Finally, measures of social competence were generally

subjective and based on evaluations of children with mental retardation done by others.

In the following study, many of the weaknesses Freeman and Alkin (2000) noted in the studies included in their meta-analysis were addressed by using a matched sample of children. Peetsma, Vergeer, Roeleveld, and Karsten (2001) conducted a longitudinal study of matched paired primary-aged pupils in the Netherlands. The pairs consisted of students placed in special schools for learning and behavioral difficulties (LBD) and mild mental retardation (MMR) and students with similar scores on standardized language and mathematics tests placed in the regular education setting. Data were analyzed both two and four years after the initiation of the study. At the two and four year mark there were 252 and 216 matched pairs respectively.

After two years, the Petsma et al. (2001) study indicated variable results. Some students did better in regular education and some did better in special education. The only statistically significant finding indicated that the matched sample in the regular education setting made more progress in mathematics than did students in the LBD setting and school motivation for students in the regular education setting appeared to decline when compared to those in the school for MMR students. At the 4-year mark, there were 80 pairs still intact and 136 “broken” pairs (either the regular or special education students left the study). The data showed that students in the regular education setting demonstrated significantly stronger cognitive development in language and mathematics when compared with their peers in both of the special

education settings. No significant differences in psychosocial development were found between the students in the special schools and the regular education setting.

Studies using a large N are helpful in understanding the effects of full inclusion on students with mental retardation. However, case studies can add a qualitative and more personal perspective to this topic. In a case study by Ryndak, Morrison, and Sommerstein (1999), full inclusion was shown to have favorable academic and behavioral effects on one student. The study followed a girl who had had several different diagnoses including severe learning problems, mental retardation, neurological impairment, and multiple handicaps. The purpose was to compare her progress in literacy in a self-contained setting to her progress in literacy in a general education setting. The study started when the girl was 15-years-old and was being moved from a self-contained setting to a general education setting and followed her for 7 years. The researchers collected data through interviews with the girl, her family, and school, observations, and reviews of her academic files. They found that the girl's literacy skills and behaviors improved dramatically after moving to the inclusive setting. In addition, the move to the inclusive setting raised the expectations of her teachers regarding her abilities. The authors concluded that students with disabilities should be given early and consistent exposure to meaningful literacy artifacts and activities to improve their overall literacy skills.

Social/behavioral outcomes. Fisher and Meyer (2002) conducted a longitudinal study looking at a matched sample of children identified with moderate to profound mental retardation, autism, dual sensory impairments, or multiple disabilities (cognitive impairments in combination with motor and/or sensory

impairments) in an inclusive setting and a segregated self-contained setting. The researchers analyzed data for 20 matched pairs collected over a 2-year period. They found that the students in the inclusive setting performed better than segregated students on post-test measures of child development and social competence. The inclusive students' scores were statistically significantly higher than that of the children in the segregated setting.

The findings from the Fisher and Meyer (2002) study are consistent with other research regarding the social development and competence of children with mental retardation (Freeman & Alkin, 2000). The authors did point out that while the inclusive students did better overall, some individual students either made no progress or regressed on post-test measures. While the data are meaningful, it should be kept in mind that an individual's needs should be considered when making programming decisions.

Gerson (1995) compared the effects of a *traditional* (no children with moderate or severe disabilities were integrated into the regular education setting), *outreach* (mainstream setting), and *total inclusion* (full inclusion setting) program on nondisabled children and children with low incidence disabilities through interviews with typically developing children in the schools and observations of the children with disabilities in the classroom. In the traditional setting, no children with a moderate or severe/profound classification were enrolled in the school. Students with disabilities in the outreach program were placed in self-contained classrooms for core subject areas and were mainstreamed for art, music, physical education, and lunch. Students with disabilities in the total inclusion school attended classes with regular

education students and were given special education services within the regular education classroom.

Gerson (1995) found through observations of the outreach and total inclusion setting that students in the total inclusion setting interacted more with their peers and teachers and had a higher incidence of interactions per hour. Interviews with the regular education students in all three settings indicated that students attending the total inclusion school had the most positive attitudes toward their peers with disabilities, followed by students in the outreach school. Students in the traditional school, where they had no exposure to children with disabilities, held the least positive attitudes.

Research on Students Without Disabilities in Integrated Settings

Although much of the research on inclusion has been devoted to its effects on children with disabilities, there has been a small amount of research regarding the effects of inclusion on nondisabled children (Odom, Deklyen, & Jenkins, 1984; Staub & Peck, 1994/1995). As this topic was first explored, preliminary studies demonstrated that nondisabled children were not negatively affected socially or cognitively by integrating children with disabilities ranging from mild to severe into general education classrooms (Bricker, Bruder, & Bailey, 1982; Cooke, Ruskus, Apolloni, & Peck, 1981; Odom et al., 1984). Over time, studies began to demonstrate that nondisabled children actually benefit in many ways from integrated classrooms (Salend & Garrick Duhaney, 1999). Staub and Peck (1994/1995) noted that “although the research is limited, the consistency with which available studies indicate that inclusion does not harm nondisabled children – and in fact may benefit

them – is encouraging” (p. 36). The following is a discussion of the research regarding outcomes for nondisabled children being educated in integrated settings.

Academic Outcomes

Despite concerns by parents and educators that nondisabled children may experience deceleration in learning due to lack of teacher attention, diluted curriculum, or lack of classroom resources (Rafferty, Boettcher, & Griffin, 2001), the research demonstrates that children without disabilities are not adversely affected. Hollowood, Salisbury, Rainforth, and Palomabro (1994) attempted to quantify the amount of instructional time and teacher attention that nondisabled students received in integrated classrooms. Using percentages, they compared the aforementioned variables for six children in an integrated setting that included children with severe disabilities and six children in a nonintegrated setting. Allocated and engaged instructional time for students without disabilities in the two settings was found to be equitable. In addition, no difference was found between the integrated and nonintegrated settings with respect to the number of interruptions to planned instructional activities. It should be noted that the authors conceded that conclusions were somewhat limited by the small sample size.

In an attempt to determine if integrated classes had a deleterious effect on nondisabled children, Bricker, Bruder, and Bailey (1982) investigated one integrated toddler class and two integrated preschool classes (N= 41). The disabilities of the children in the integrated classes ranged from mild to severe. The educational gains of the nondisabled students were examined to determine if these children were able to maintain expected levels of developmental progress while receiving their education in

an integrated setting. Using pre- and post-test measures it was found, with the exception of one child, that children without disabilities in the integrated settings made statistically and educationally significant gains across the school year as measured by the Bayley Scales of Infant Development or McCarthy Scales of Children's Abilities and the SPR or Uniform Performance Assessments System. In other words, being in the integrated classroom did not "hinder or interfere with the developmental progress" (Bricker et al., p. 219) of the nondisabled children. Although the results did help to lend support to the notion that nondisabled children were not adversely affected by being in an integrated classroom, a weakness of this study was that there was no control sample of nondisabled children in a nonintegrated class used for comparison.

Odom et al. (1984) recognized the limitation in the Bricker et al. (1982) study and included a control group in their study of the attainment of developmental skills by nondisabled children in integrated settings. A matched set of 16 nondisabled preschool children in integrated and nonintegrated classes was compared. The nondisabled children were placed in integrated classes with mild to moderately disabled children. During the span of one academic school year the children were pre- and post-tested using a battery that included intellectual, communicative, social, and preacademic domains. The assessment tools included the Stanford-Binet Intelligence scales, the Preschool Language Scale, the Uniform Performance Assessments System-Preacademic Subtest, and the California Preschool Scale of Social Competence. No difference was found between the integrated and nonintegrated nondisabled children on any of the measures. However, the researchers

warned that due to the small sample size the results should be interpreted with caution and that further studies with a larger sample of children should be conducted.

The achievement on specific mathematic objectives of 10 nondisabled 2nd grade students in a cooperative learning group that included three children with multiple severe disabilities was compared to that of nondisabled peers in a cooperative learning group that did not include children with severe disabilities (Hunt, Staub, Alwell, and Goetz, 1994). Initially, the cooperative learning groups that included children with severe disabilities were given scaffolding by an instructor. Gradually, assistance from the instructor was decreased and the nondisabled children took on the role of teaching and guiding the children with severe disabilities through the tasks in addition to learning the introduced concepts.

The authors reported that the children with severe disabilities were able to generalize the newly acquired skills to the next cooperative learning group to which they were assigned. Additionally, the nondisabled children in the study, both those in experimental and control groups, improved their progress on their targeted mathematics objectives and preformed similarly on tests of achievement. Despite the small sample size and lack of power in this study, the outcomes were positive and lend support toward the notion that nondisabled children in classes with children with severe disabilities do achieve at a rate similar to their peers in classes that do not include children with severe disabilities.

Sharpe, York, and Knight (1994) studied the academic performance and behavior of 35 nondisabled elementary school age children in integrated classrooms that included five children with significant disabilities. Three of these students were

classified as having trainable mental handicaps (moderate to profound mental retardation). One student was identified as having an educable mental handicap and other significant social challenges. One student was identified as having a “severe emotional disorder.” Two years after the implementation of a pilot program that integrated these five students with moderate and severe disabilities into general education classrooms for at least 80 % of their day, post hoc data were collected. The children were in 3rd and 4th grade during the post hoc data collection period. The researchers’ study focused on the nondisabled children to see if their test scores decreased and behavior problems increased when children with moderate and severe disabilities were included into the general education classroom. The performance of these 35 children was compared to a group 108 peers who attended classes that did not include children with moderate and severe disabilities. The nondisabled children’s academic performance and behavior was measured using the Science Research Associates Survey, the Houghton Mifflin reading series, and the students’ reading, mathematics, spelling, and conduct and effort grades from their report cards. No significant differences between the two groups of nondisabled students were found on any of the measures.

Social/Behavioral Outcomes

The impact of inclusion programs on students without disabilities has also been measured through social outcomes. These studies lend support to the hypothesis that increases in contact between children with and without disabilities play an important role in shaping children’s acceptance and understanding of people with disabilities.

In the following study conducted by Conant and Budoff (1983), participants were interviewed to gather information regarding the developmental progression in their awareness of different types of disabilities. This study is important because it helped to shed light on people's understanding of disabilities when interactions with peers with disabilities are left to chance and informal encounters. The beliefs of children and adults with little to no contact with peers with disabilities were examined. Twenty-one preschoolers, 26 primary school students, 21 junior high students, 24 high school students, and 11 adults in their thirties were interviewed to determine their awareness of five different disabilities (psychological disturbance, mental retardation, orthopedic disabilities, blindness, and deafness). Some preschoolers were able to demonstrate awareness of blindness, deafness, and orthopedic disabilities. Primary school students were able to also identify mental retardation. Junior high students articulated an awareness of psychological disturbance. Only the high school and adult groups expressed awareness of all five disabilities. The authors concluded that a "child's cognitive-developmental level may determine the general way in which he or she adapts to experiences with disabled people" (Conant & Budoff; p. 123) and that contact, including mainstreaming, with people with disabilities and instructional programs about disabilities can provide an opportunity to alter the developmental patterns of children with regards to their awareness of disabilities. These findings were supported in a similar study conducted by Magiati, Dockrell, and Logotheti (2002) in which they sampled the attitudes and views of Greek children ranging in age from 8 to 11-years-old. The most salient point of this article is the rationale it establishes for the inclusion of students with

disabilities into the regular education setting. Inclusion can benefit children without disabilities by increasing their awareness and understanding of disabilities.

Favazza and Odom (1996) measured the effects of direct teaching about disabilities and level of contact with children with disabilities on kindergarteners' acceptance of children with disabilities. The disabilities ranged from mild to severe and included children with multiple handicaps and mental retardation. One hundred and eighty-eight kindergarteners and 64 children with disabilities across seven schools were included in this study. The children were broken into two groups, the *no contact* group which consisted of 101 kindergarten children who attend a school in which no children with disabilities were enrolled and the *contact* group which consisted of two levels of contact. In the first level, kindergarten children were within proximity of peers with disabilities during lunch, recess, and other shared school activities, such as assemblies. Teachers did not actively promote interactions between the children with and without disabilities. The second level included kindergarten classes that had one to two children with disabilities within the regular education classroom. The disabilities represented in the contact group included mild to moderate mental retardation and mild, moderate, to severe multiple disabilities. Using the Acceptance Scale for Kindergarteners, Favazza and Odom found that children in the contact schools held significantly more accepting views of children with disabilities than did children in the no contact school. They also found that girls held significantly more accepting views of children with disabilities than did boys. No significant difference was found for the interaction between gender and level of contact.

In a similar study, Diamond (2001) examined the relationship between children's ideas about helping others, their understanding of emotions, their acceptance of people with disabilities, and their contact with peers with disabilities. Forty-five preschool children from four inclusive classrooms participated in this study. Each class included 3 or 4 children with disabilities for a total of 11 children. The disabilities represented were pervasive developmental disorder or autism, multiple cognitive and physical disabilities, developmental delay, communication disorder, and spina bifida. A series of two interviews with each child in the study was conducted using dolls or drawings to illustrate the meaning of the questions asked. Observations of children during free playtime were conducted to measure social contact between children with and without disabilities. Children were then divided into two groups; those who had at least one interaction with a peer with a disability and those who had no interactions with these peers. Diamond found that children who were observed to interact with their peers with disabilities were more accepting of people with disabilities and were more attuned to emotional cues. In addition, it was found that all the children in the study generally reported a desire to help others in need. Also, helping strategies was positively correlated with emotional knowledge.

Okagaki, Diamond, Kontos, and Hestenes (1998) examined the views of 36 nondisabled children enrolled in a university-based early childhood program toward their peers with disabilities. The children with disabilities included "a boy with Pervasive Developmental Disorder, a boy with a communication disorder, and a girl with spinal cord injury that required the use of a wheelchair" (Okagaki et al.; p.71). The researchers also looked at the children's willingness to play with their peers with

disabilities and the influence of parental beliefs and expectations for prosocial behaviors on the actual interactions with classmates with disabilities. Data regarding the children's attitudes and beliefs about children with disabilities were collected through an interview process that was facilitated by the use of dolls and drawings of typically functioning children and children with disabilities. Information regarding the actual interactions between typical functioning children and children with disabilities was collected through observation. Parental beliefs about people with disabilities were collected in two ways. First, parents were asked to complete a questionnaire that had two vignettes and questions regarding how the parent would react to the presented situation. Second, parents were asked to look at a list of prosocial behaviors and indicate the age (of the child) they would teach each behavior. There were four major findings in this study. First, the children rated the hypothetical children with and without disabilities as having equal social acceptance despite rating the hypothetical children with disabilities as being less physically capable. Second, using the children's reactions to the dolls and drawings, there was no difference in their willingness to play with other children with and without disabilities. Third, given the number of children in the class, each child could spend a possible 12.3% of their time playing with each of the other children in the class (divide the number of children in the class minus one by the amount of free play time possible). In reality the nondisabled children spent an average of 10.9% of their free play time playing with the target child with a disability. The researchers concluded that there was no statistical difference in the amount of time the nondisabled peers could spend with any child and the amount of time they actually spent playing with

their peer with a disability. Fourth, it was found that “parents who expressed an increased willingness to model interactions with children with disabilities had children who more frequently engaged in play with children with disabilities” (p. 77). The researchers then compared the amount of contact the university-based cohort of children had with children with disabilities to a matched sample community-based cohort to determine if the university-based cohort was unique. No differences were found between the two groups of children improving the generalizability of these findings.

As part of a larger study, York et al. (1992) interviewed 181 students without disabilities to gain their perspective on the inclusion of students with disabilities. The children with disabilities enrolled in the school had disabilities that ranged from moderate to profound mental retardation. In general, the comments regarding the inclusion of children with disabilities into the general education classrooms were largely positive. Overwhelmingly, the students indicated that inclusion was positive, that the children with disabilities improved their social and interpersonal skills, and that they changed their own beliefs and views to encompass more realistic perspectives of people with disabilities. The students also pointed out some negative aspects of inclusion regarding the work completion and behavioral difficulties, such as “hitting” and “swearing” by the students with disabilities.

Similar to the York et al. (1992) study, Capper and Pickett (1994) compared the effects of being in an inclusive environment or a more traditional environment on the perspectives of nondisabled students toward inclusion and diversity and their conceptualization differences. Two focus groups consisting of 46 middle school

students from a traditional and an inclusion school were interviewed. The researchers reported that students from the inclusion school demonstrated an increase in acceptance, understanding, and tolerance of individual differences. Students from the traditional school were more likely to rely on stereotypes when thinking about disabilities. In addition, they generally held more negative views of diversity and students with disabilities. Although the researchers were reluctant to conclude causality between being in an inclusion school and holding more positive views of diversity and inclusion, they did acknowledge the profound differences between the two schools. These findings were consistent with the York et al. study.

Bilken et al. (1989) observed two integrated 4th grade classrooms and interviewed the nondisabled students in those classrooms regarding their experiences with the students with disabilities. The disabilities represented in the classrooms were learning disability, autism, and multiple handicaps. The authors were able to delineate teacher behaviors that facilitate student interactions and understanding. The interviews revealed the nondisabled students' thoughts and feelings about their classmates with disabilities. The nondisabled students reported that they had developed meaningful and caring relationships that were interactive and not based on stereotypes. The "students learned to interpret each others' intentions and frustrations" and they learned that "disability was not an all-defining characteristic" (Bilken et al., p. 220). These findings are consistent with the research on nondisabled children in integrated settings.

Over a two-year period Staub, Spaulding, Peck, Gallucci, and Schwartz (1996) observed and interviewed four junior high students with moderate and severe

disabilities and 31 typically developing junior high students who served as their aides in the general education setting. The purpose of the study was to show how one school with limited resources successfully integrated students with moderate and severe disabilities into general education classrooms and to describe the perceived outcomes for the aides and students with disabilities participating in the student aide program. Outcomes for the students with disabilities included an “increased level of independence, social growth and increased social network, growth in academic skills, and behavioral growth” (Staub et al., p. 201). Outcomes for the student aides included “increased social networks, increased understanding and appreciation of self-worth, increased awareness, understanding, comfort, and appreciation for people with disabilities, and increased feelings of responsibility” (Staub et al., p. 203).

Helmstetter, Peck, and Giangreco (1994) surveyed 166 typically developing high school students in integrated settings regarding their interactions and social relationships with peers with moderate to severe disabilities in their classes. Despite reports of communication difficulties with their peers with disabilities, the nondisabled students reported positive outcomes as a result of their interactions. The nondisabled students reported increases in their ability to respond to the needs of others and their value of friendships with people with disabilities, personal growth and development of values, increases in their tolerance for others and appreciation of diversity, and positive changes in their status among their peers.

Educators' Views on Integration and Disability

Educators, including teachers, administrators and paraprofessionals, play an integral role in the successful integration of students with and without disabilities into

the general education setting. It has been shown in the research that a teacher's attitude toward integration and students with disabilities is vital to making integration work (Jamieson, 1984; Scruggs & Mastropieri, 1996).

There have been many interesting and mixed findings regarding teacher attitudes toward the integration of children with disabilities into the special education setting. For example, some studies have found that newer teachers hold more positive views of integration than do experienced teachers (Avramidis & Norwich, 2002; Berryman, 1989; Jamieson, 1984). In a review of the literature on integration and inclusion, one important finding made by Avramidis and Norwich (2002) was that there is evidence both supporting and negating the idea that an increase in contact with children with disabilities results in more positive views of integration. A closer look at these findings revealed that contact with children with disabilities with no training leads to less favorable views of integration. While the more practical experience teachers have with integration coupled with specific skill development, the more favorable their views of integration become. The effects of many factors, such as gender of the teacher, teaching experience, grade level taught, experience of contact with people with disabilities, teacher beliefs about disabilities, training, socio-political views, severity of a child's disability, and support systems on the attitudes of educators toward inclusion and people with disabilities have been studied (Avramidis & Norwich, 2002). The following is a discussion of the research regarding educators' attitudes toward children with disabilities and integration.

Attitudes Toward Integration

There have been several studies that have looked at educators' attitudes toward the integration of students with disabilities into the general education classroom. In a meta-analysis by Scruggs and Mastropieri (1996) an attempt was made to synthesize 28 studies regarding general education teachers' perceptions of inclusion. The researchers found that about two thirds of the general educators favored inclusion of children with disabilities (the types of disabilities possessed by the children were not delineated) into the general education setting. However, less than a third of the teachers felt that they had the time, expertise, training, or resources to effectively teach these students. Jamieson (1984) noted that the best way to support teachers and improve their attitudes toward integration was to systematically implement integration programs by providing training, smaller student/teacher ratios, restructuring the school environment, and providing adequate external supports.

Hammond and Ingalls (2003) surveyed elementary school teachers in rural districts in an area in the southwest regarding their attitudes toward implementing inclusion programs. The researchers found that the teachers held generally negative attitudes toward inclusion despite indicating that they felt they had the resources to implement such a program. They also felt that they would need support from their administrators if such a program were to succeed. It was concluded that teachers must be given the opportunity to collaborate on inclusive programs implemented in their schools. In addition, Hammond and Ingalls suggested more preservice and inservice training and ongoing support from administrators to develop a successful program.

Stoler (1992) surveyed 182 regular education high school teachers from six different suburban school districts to measure their perceptions of inclusion for all students with disabilities. Stoler set out to discover if there was a difference in the attitudes and perceptions of the teachers based on their level of education and if teachers with previous training in special education had more positive attitudes than those without previous special education training. Teachers who had had special education coursework or training had more positive views toward inclusion than those who had none, a finding supported in the literature (Avramidis & Norwich, 2002; Jamieson, 1984). Stoler (1992) also found that teachers with master's degrees held less positive views toward special education than teachers who had not achieved this degree status. This finding is less intuitive and difficult to interpret. Stoler did not offer any explanations for this finding in the discussion of his study.

In a study similar to Stoler's (1992), Jobe, Rust, and Brissie (1996), who investigated the attitudes of 162 elementary school teachers from 44 states and the District of Columbia regarding the inclusion of students with disabilities into the regular education setting, found comparable results. Although they found that teacher attitudes in relation to inclusion were neutral on average and no gender differences were apparent, teachers with more inclusion inservice experience and special education training were more likely to feel positively about inclusion.

In order to gain information from general educators and special educators regarding the inclusion of students with severe disabilities integrated into general education classes, York et al. (1992) conducted open-ended interviews at the end of the first year of implementation of a full inclusion program. Eleven general educators

and seven special educators were interviewed. All teachers indicated that the most positive outcome was the acceptance and inclusion of the children with disabilities by their typical functioning peers. Teachers also indicated that they saw positive changes in social and communication skills. One area in which the general and special educators differed was on identifying other specific areas of change. General educators could not specify other areas of positive change for children with disabilities. Special educators were able to identify specific areas of growth such as improvement on specific IEP goals.

Attitudes Toward Students with Disabilities

While the attitudes of educators towards inclusion have been well researched in the last 20 years (Avramidis & Norwich, 2002), there has been a paucity of data regarding the global attitudes of educators toward people with disabilities. Studies that did look at this issue consistently noted that educators who hold more positive views toward and an empathetic understanding of people with disabilities generally hold more positive views toward including students with disabilities into the general education classroom (Berryman, 1989; Horne & Ricciardo, 1988; Jamieson, 1984) and are more likely to utilize more effective teaching strategies with those students (Jordan, Lindsay, & Stanovich, 1997). Also consistently found in the research was that there was no one variable in particular that was a strong predictor of teacher attitudes toward students with disabilities (Avramidis & Norwich, 2002; Jamieson, 1984; Jobe et al., 1996).

Jordan et al. (1997) distinguished two separate teacher beliefs about students with disabilities in an effort to see how those beliefs influenced their teaching

practices with exceptional and typically achieving children. The researchers interviewed nine 3rd grade teachers and then observed their interactions with their 54 students in an integrated classroom. For observations of interactions, each teacher nominated six students from their respective classrooms, three of which were identified for or thought to be in need of special education services (the specific disabilities of the children were not revealed). Teachers with a *pathognomonic* perspective believe that disabilities are inherent in the student and *interventionists* attributed student difficulties to an interaction between the student and the environment. Interventionist teachers were found to engage in many more academic interactions with students with disabilities and were more persistent in helping students learn. These teachers were also more willing to differentially deliver instruction to fit the needs of the student and help them construct their own knowledge. Teachers with a pathognomonic perspective demonstrated the least effective teaching interactions. These teachers interacted with the children with exceptionalities less frequently than the interventionist teachers and failed to persist in helping students construct their own learning; rather they settled into checking for comprehension of the material covered. The author's concluded that pathognomonic teachers feel less efficacious in teaching children with exceptionalities so they tend to less frequently use higher order queries and engage these students and rely on a *transmission style* of instructional delivery. It could be concluded that teacher beliefs about students with disabilities can influence the effectiveness of the integrated setting for those students.

In a study of teacher attitudes toward their included students, Cook, Tankersley, Cook, and Landrum (2000) surveyed 70 kindergarten through 6th grade regular education teachers from nine schools that practice mainstreaming (students were included in the regular education setting for at least some part of their day). There were 221 students with disabilities spread across 70 classrooms. A wide range of disabilities were included in the study including 26 with mental retardation, four with multiple disabilities, and three with Autism. Other disabilities included specific learning disability, attention deficit disorder, behavior disorder, orthopedic disorder, hearing impairment, visual impairment, and other health impairment.

Teachers were asked to consider their students with and without disabilities in regard to several prompts corresponding to attitudinal categories (attachment, concern, indifference, and rejection). Attachment referred to a teachers desire to keep a student in class another year if possible. Concern referred to a teachers desire to give a particular student of concern all their attention if feasible. Indifference referenced the student that the teacher would be least prepared to talk about if a parent showed up for an unscheduled conference. Rejection referred to the teacher's choice to drop one particular child from their roster if given the option.

The researchers found that students with disabilities were underrepresented in the attitudinal category of attachment and significantly overrepresented in the categories of concern and rejection. Special education and inclusion training, collaboration, classroom support, and class size did not appear to effect the nomination of students to the concern and rejection categories. However, teachers with the greatest amount of inclusive teaching experience did seem to nominate more

students with disabilities in the concern category. These results are important because it has been suggested that a teacher's ability to work effectively with students with disabilities is influenced by their attitude toward students with disabilities (Avramidis & Norwich, 2002; Jordan et al., 1997).

In a recent cross-cultural study of pre-service teacher attitudes toward people with disabilities (type of disability was not specified in the study), Alghazo, Hamzah, and Ibrahim (2003) surveyed 597 pre-service teachers from three universities in Jordan and one university in the United Arab Emirates (UAE). The researchers measured the amount of contact the pre-service teachers had with people with disabilities using a single question with five categories and their attitude toward persons with disabilities using Yucker, Block, & Young's (1970) Attitudes Towards Disabled Persons (ATDP) scale (as cited in Alghazo et al., 2003). It was found that these preservice teachers held negative views toward people with disabilities and that the amount of contact with people with disabilities did not seem to affect their global views. Alghazo, et al. had predicted that increases in contact would be associated with more positive views of people with disabilities. They speculated that this relationship was due to the fact that the contact may have been random, unstructured, and not for educational purposes, thus having no profound effect on their global views. Another finding was that pre-service teachers in Jordan held more favorable views than pre-service teachers in the UAE. The researchers postulated that this was because Jordan has had a longer history of educating people with disabilities (since 1938 as opposed to 1979 in UAE). This hypothesis is consistent with research that suggests that teachers in countries with laws favoring integration hold more positive

views of including students with disabilities into the regular education setting (Bowman, 1986).

Given the research on the positive outcomes for both children with and without disabilities, it is difficult to interpret the inconsistent and sometimes negative findings regarding educators' attitudes toward students with disabilities and inclusion (Avramidis & Norwich, 2002; Salend & Garrick Duhaney, 1999; Jamieson, 1984). As Jamieson (1984) pointed out, a teacher's negative attitude toward integration does not necessarily mean that they will not be able to provide children in integrated settings meaningful and worthwhile learning opportunities. However, educators are key stakeholders in inclusion programming and their input into inclusion programs is important in developing the most effective and successful program possible (Downing, Eichinger, & Williams, 1997).

Conclusions

The history of mainstreaming and including children with disabilities into the regular education setting is relatively short. It first gained significant recognition in 1975 after P.L. 94-142 was passed mandating, among other things, a least restrictive environment for children with disabilities. At that time researchers set forth to explore this mandate and its effects on both children with and without disabilities.

The research indicates that both mainstreaming and inclusion benefit children with a wide range of disabilities academically and behaviorally as compared to children educated in self-contained classrooms (Avramidis & Norwich, 2002; Carlberg & Kavale, 1980; Freeman & Alkin, 2000; Jamieson, 1984; Salend & Duhaney, 1999; Wang & Baker 1985-1986). In fact, some research indicates that

academic and behavioral benefits are positively correlated with degree of integration (Freeman & Alkin, 2000).

Favorable effects were also found for nondisabled children in integrated classrooms (Odom et al., 1984; Staub & Peck, 1995). Staub and Peck (1995) noted that despite the limited research, the consistency of the research available showing that integration actually benefits nondisabled children is encouraging. Nondisabled students were found to be more sensitive to the needs and emotions of other (Bilken et al., 1989; Capper & Pickett, 1994; Diamond, 2001; Favazza & Odom, 1997; Helmstetter, et al., 1994; Okagaki, et al., 1998). In addition, nondisabled children reported increases in their self-esteem and feeling of responsibility (Staub, et al., 1996). Although the research in this area is limited, it was found that the more inclusive the setting, the more favorable view nondisabled children had of people with disabilities in general (Gerson, 1995).

Teachers' attitudes toward the integration of children with disabilities into regular education classrooms have also received a lot of attention (Avramidis & Norwich, 2002; Jamieson, 1984; Salend & Duhaney, 1999). Specifically, the factors that affect teacher attitudes toward integration were studied. Type and amount of training were found to affect teacher views of integration. Specifically, teachers with more special education training and inservice training regarding inclusion and newly trained teachers with less classroom experience hold the most positive views toward inclusion (Avramidis & Norwich, 2002; Beeryman, 1989; Jamieson, 1984; Jobe et al, 1996; Stoler, 1992).

Although the topics of mainstreaming and inclusion have received a lot of attention in the literature, little research has been done regarding the effect of the amount of integration on teacher and nondisabled student views of integrated students with moderate and severe disabilities.. Therefore, research regarding the views of nondisabled students and teachers currently working in integrated settings is needed to help add breadth and depth to the current literature on the integration of students with moderate and severe disabilities into the regular education setting.

CHAPTER 3

Methods

Purpose

This chapter will describe the observation and interview participants, the manner in which the data was collected, and the researchers who collected the data. Data collection included observations, interviews, and record reviews on each participant with a disability. The settings in which the study took place are described. The classrooms with students with disabilities were observed to ascertain the amount and type of interactions taking place in integrated classrooms and at recess. This information was reviewed in conjunction with information gathered from file reviews on each child being observed. In addition to observations, nondisabled students, general education teachers, and special education teachers were interviewed to gain an understanding about their views toward people with low incidence disabilities. It should be noted that all individual and school names presented in this chapter are fictitious and were changed to protect the anonymity of those who participated in the study.

In her conclusions, Gerson (1995) suggested using teacher interviews to expand the research base on inclusion. This study goes beyond Gerson's research by conducting interviews with regular and special education teachers. At least two general education teachers and two special education teachers/assistants were selected for interviews from each setting. Teachers in the inclusion and mainstream settings whose classrooms were observed were interviewed in addition to other staff in the school.

A case study format was chosen to gather in depth information about the two included schools and to shed light on each one's approach to serving students with moderate and severe disabilities. Case studies are a "way of organizing social data for the purpose of viewing social reality" and "examining a social unit as a whole" (Best & Kahn, 1998; p. 248). A case study is a good method for deeply probing and analyzing "interactions between the factors that explain the present status or influence change or growth" in the unit studied (p. 248). Examining phenomena in its usual context and involving multiple data sources are both techniques for improving the validity of the case study (Borg, Gall, & Gall, 1993). Using multiple data sources (i.e. interviews, observations, archival data, etc.) is advantageous because it allows the researcher to check information against other information for consistency. Stake (1995) refers to this as triangulation of data.

Although the case study format has merit and offers important contributions to research, it also has drawbacks like any research format. Broad generalizations can not be made from case studies findings as the N is often a very small number or 1 (Best & Kahn, 1998). The case study unit may be atypical rather than typical leading one to make generalization that may not extend past the unit of study. Additionally, subjective bias of the researcher can influence results and the researcher may attribute an effect to "factors that are... associated rather than cause-effect related" (p.250). Despite these drawbacks and cautions the case study format is a well excepted form of research with a long tradition in many fields (Borg, Gall, & Gall, 1993; Best & Kahn, 1998).

Originally, this study began as a comparison between how a full inclusion school and a mainstream school implemented these two respective philosophies and the outcomes for and impact on the SWDs, regular education students and special and regular education teachers in the school. While the outcomes for and impact on the students and teachers were described in each setting it became clear as the study progressed that these two schools were far too different to simply make direct comparisons. In addition, the sample of SWDs observed at each school was too different to make any type of meaningful comparisons. Therefore, this “intrinsic case study” (Stake, 1995) became about how each school handles special education services for SWDs. Though interesting, it became clear that each school was not necessarily representative of how other schools with similarly stated education philosophies operate. Although the goal of the present study evolved from a comparison between two schools to a description of how the two schools each operate, the information is valuable in understanding the culture of a school and how a school comes to operate in the way that it does.

Settings

The schools in this study were chosen due to their stated philosophies regarding educating children with moderate and severe disabilities. Both schools are within the same school district. In this section the philosophy and history of each school is presented. It is important to understand the philosophy and history of each school to add a contextual background to the data presented.

School District

The school district in which this study took place is fairly urban as it is located in a very densely populated area. The district's website boasts that it serves "one of the nation's most diverse and sophisticated student populations." Students in the district come from 127 countries and speak 105 different languages. There are 30 schools and programs in the school district and families are offered a wide variety of individualized programs for gifted to severely disabled students. Parents of students with moderate and severe disabilities can work with the IEP team to develop an individualized education plan that best meets the needs of the child. Services available at the elementary school include a district-wide Functional Life Skills program for children with moderate and severe disabilities, full inclusion programming at particular elementary schools, and a combination of regular education and self-contained classes available at school not implementing full inclusion programming. In the upper grades students can participate in school based Functional Life Skills programs, a combination of regular education and self-contained classes, or attend the district's school that specializes in serving the needs of children with moderate and severe disabilities only.

School Descriptions

Full Inclusion Setting. The following information on the Clarke Elementary School and its history was obtained through personal knowledge, informal interviews with school staff, and the schools website. Clarke Elementary School first opened 13 years ago as Chester Early Childhood Center and was the brainchild of an early childhood specialist and a principal working in the school district. These two

individuals believed that children would benefit most when grouped developmentally. Further they believed that these developmental groups should be representative of the larger society. Thus, it would be important to fully include children with disabilities into the regular education setting.

The school first started with a preschool special needs program that would feed into a kindergarten, 1st grade, and 2nd grade combination classroom. The founding women both brought staff people into the school that they believed were exemplary teachers who would fit well into the model they conceived. The school started with approximately eight classroom teachers, one special educator, and one special education preschool teacher. The classrooms were set up with developmentally based learning centers to encourage experiential learning. It was believed that the children with special needs would benefit from being in a classroom with a wide variety of developmentally appropriate peers.

During the first few years of the program, one of the pioneering teachers shared that it really “seemed to work” for all the children. Teachers regularly collaborated and shared responsibility for all children in the school. The team delivery model was reflected in special education Individualized Education Plans with regular and special education teachers both delivering instruction to children with disabilities. Even as the school expanded, one special education teacher would be assigned to three or four classrooms at a time and would “push in” to deliver services during the school day. However, while this worked for a few years, over time as the program grew and changed, the school moved away from the original

principles and staffing delivery methods that once worked logistically became more difficult and began to not have the same impact.

Despite this positive start, many things changed over time changing the way in which the school operated despite touting the same model. As the school became more established, one of the founding women began to assume new and different responsibilities in the school district. Also, the word got out to educators and families in the school district that the Chester Early Childhood Center was an ideal place for children with all types of special needs. Families started to seek out Chester Early Childhood Center and other schools began to recommend to families that they move their children to Chester. The principal of the school began to take all students with special needs who requested entrance into the school. Quickly, the school became about half special education students and half regular education students, throwing off the delicate ratio of special education students to regular education students that was originally believed to be most beneficial for modeling.

While the concept of the school was based on preschool through 3rd grade, the needs of the school district became such that after about two years the school had to expand to take children through the 5th grade. The school name was changed to Chester Academy. In order to accommodate the increase in population, new staff members who did not know the philosophy or were not as committed to it were hired. Around the same time, the state implemented statewide proficiency exams that mandated children in 3rd and 5th grade being tested in order to determine if they were meeting the benchmarks. The trickle-down effect was that all teachers began to follow a more rigorous and less flexible curriculum that was more academically focused. As

a result, teachers began to focus more on preparing the regular education students to pass the exams and less on the needs of the special education students. Thus, special educators began to be viewed as having the most responsibility for the education of the special education students. Approximately four years ago, the school moved from its original location to its present location. While the principal, staff and students largely remained the same, the name of the school was changed to Clarke Elementary School by the school district, no longer carrying the early childhood center or academy title.

Despite these changes to the school, the principal still held onto the idea of the original model. Parts of the original model that are still present in the school include the multiage classrooms, portfolio assessments, and “push in” special education for all students with IEPs. Also, about ten of the original staff members (i.e. school nurse, classroom teachers, special education and preschool teachers, and principal) from the inaugural year of Chester Early Childhood Center still remain at the school in some capacity.

Presently, this setting is one in which all children with disabilities, including those with moderate and severe disabilities are purported to be included in the general education classrooms for nearly all, if not all, of their day. Although all the children are grouped for instruction based on ability for subjects like math and language arts, children spend the majority of class time together in the same classroom (this includes all children IEPs). Regular and special education teachers work together to plan and deliver instruction to all children within the classroom. While this school is known for using the inclusion model for teaching children with and without

disabilities, it is also known for its commitment to multi-age classrooms, its alternative approach to assessment through a work sampling system, and its integrated approach to the curriculum. One exception to the school's model is the one school district wide special needs preschool classroom that is tied to the school district's IDEA Child Find process. There are other preschool classrooms at the school that do follow the school's inclusion model.

At the inclusion school, each classroom, with the exception of the preschool classes, has a combination of two grades of students. Teachers have a combination of kindergarten and 1st graders, 2nd and 3rd graders, or 4th and 5th graders. Generally, teachers will have a student for two years at a time. The core curriculum mandated by the district and the state are embedded in two-year thematic cycles that include intensive projects that attempt to incorporate all subjects (i.e. math, language arts, music, etc.). Children are encouraged to work with other children that are at their same level as opposed to grouping by age. Teachers are encouraged to adapt the material to the level of the students with whom they are working. The progress of the children in the school is measured using the Work Sampling System. No letter grades are given at the school; rather information regarding a child's developmental progress is assessed using developmental guidelines and a checklist. In addition, portfolio work and summary reports are compiled. All this information is shared with parents and put into the child's permanent school file.

This school is a *choice* school rather than a neighborhood school, which means that parents must request that their children attend the school. While some parents do send their children to the school simply because it is closest to their home,

one can assume that many of the children attending the school are there because their parents value the school's educational model. For the 2004/2005 school year, there were 314 children enrolled in the school. Of those students, 0.4% were classified as American Indian/Alaskan Native, 7.5% Asian Pacific Islander, 15.8% Black, 53.1% Hispanic, 22.8% White, and 0.4% Unspecified. Fifty-Five percent were enrolled in the limited English proficiency services and 74.37% of the students were enrolled in the free and reduced lunch program. Sixty-eight of the students (21.6%) were identified with a disability. At the time the present study was conducted and outside of the special needs preschool class, which is self-contained, only one student with moderate or severe disability was attending the school.

In order to meet the needs of the students at Clarke elementary school, the principal created a plan that is unique to Clarke. Special educators do have a caseload of special education students, but do not have a set classroom. The teachers float between several classrooms designated to them and provide small group instruction (groups can be made up of special education and regular education students as groups are based on ability level) and support to the regular education teachers who actually carry all the students (regular and special education) on their class roster. Some special educators split time between multiple grades. For example, Ms. Cook split her time between two 1st/2nd grade classrooms and two 4th/5th grade classrooms which were on opposite sides of the school. The special educators must divide their time between multiple classrooms in addition to creating multiple lesson plans and maintaining IEPs for SWDs and students with mild disabilities. The special

education assistant that participated in this study, Ms. Vargas, was assigned to one student based on his level of need in the classroom.

Mainstream Setting. The second school, Garrison Elementary School, follows a *mainstream* model. In this setting, children with moderate and severe disabilities receive instruction in self-contained classrooms for academic subjects. They have the opportunity to interact with their nondisabled peers during lunch, art, music, recess, and/or physical education. Although this school is a neighborhood school, it is unique in that it houses the school district-wide “Functional Life Skills Program.” The school district’s website describes this program as being for students “with significant cognitive impairments coexisting with significant deficits in adaptive behaviors.” The stated goal of this program is to address “the daily living skills (i.e. emerging feeding skills, dressing, hygiene), communication (i.e. pre-symbolic or emerging symbolic skills), motor/mobility (i.e. positioning, equipment needs, safety issues), and sensory development (i.e. tactile, vestibular, auditory and visual stimulation and tolerance)” for students with moderate and severe disabilities. Because of this program, Garrison Elementary School does have a higher proportion of students with moderate and severe disabilities than other neighborhood schools in the school district. It should be noted that some SWDs are educated in their neighborhood schools and do not attend the life skills program at Garrison; this placement decision is left up to the IEP team for an individual student.

The self-contained functional life skills classrooms are multi-age and instruction is tailored to the individual needs of each child. Regular education classrooms contain one grade level. Special education teachers who work with

SWDs maintain their own self-contained classroom with a roster of students. The self-contained classrooms have approximately five to seven students in them and two special education assistants. Regular education teachers are responsible for their classroom of approximately 20 students. There is a predominance of regular education students in the classroom, though they also may contain some students with high incident disabilities (e.g. learning disability or speech language impairment). Those with high incidence disabilities are also on the caseload of a special educator. For students with IEPs for high incidence disabilities services can range from being fully included in the regular education classroom with the special education teacher pushing in to a combination of instruction time spent in the regular education classroom and instruction time in a small group or individual pull out setting. The type of service for each child is determined by the needs of the child and is outlined in the IEP. This school follows the curriculum mandated by the school district; children are graded using a standard grading scale (A, B, C, D, and E) and report cards are sent home each quarter.

The mainstream school included in this study is a neighborhood school. All children from the neighborhood are required to attend this school unless their parents choose to send them to an alternate location (e.g. private school or choice school) for their education. For the 2004-2005 school year, there were 497 children in attendance at this school. Of those students, 0.0% were classified as American Indian/Alaskan Native, 15.7% Asian Pacific Islander, 22.1% Black, 22.7% Hispanic, 38.8% White, and 0.7% Unspecified. Twenty-six percent were enrolled in the limited English proficiency services and 34.08% of the students were enrolled in the free and

reduced lunch program. One hundred and nine students (21.9%) received special education services. Approximately, twelve students were identified to have moderate or severe disabilities, a sizable difference from the one student identified at the full inclusions school. This difference is due in large part to the Functional Life Skills Program at the school.

Participants

This study included both observations and interviews to collect data. Children with disabilities were observed but not interviewed. Nondisabled children and regular and special education teachers from each setting were interviewed.

At the full inclusion school the SWD was chosen because he was the only student at the school who fit the criteria for SWD in this study. Permission was obtained from his family using a translator to explain the study and a permission slip translated into Spanish. At the mainstream school, several students fit the criteria for this study. Therefore, a random numbers table was used to select three students for whom permission slips would be sent to the families. Of the first three SWDs selected, all returned their permission slips. One permission slip was translated into Mongolian for a family. The pool of nondisabled children from which those interviewed were selected came from the regular education classes in which the SWDs at each school attended. Students for interview from each class were also selected using a randomization chart. The first four students selected using this chart received permission slips. All students returned their permission slips promptly. Regular and special education teachers were chosen based on their contact with the SWDs in the study. Teachers who currently had contact with the SWDs were chosen.

Four teachers (two special and two regular education teachers) at each school were initially chosen for interview and all agreed to participate. However, at the full inclusion school two additional teachers were chosen for interview to gather additional information about the school since there was only one SWD observed. The two additional teachers were chosen because they both had been at the school since its inception and had had first hand experience with the SWD in the study at some point in his time at the school. The following is a description of each of the participants.

Description of Students with Moderate and Severe Disabilities

Each student with a disability observed for this study is presented below. An in depth review of each student's cumulative file was completed in order to help the reader understand the nature of the child's disability. Information provided will include basic demographic information as well as a description of the manifestation of the child's disability as garnered from the documents in the cumulative file. All students observed in this study were male and in the 4th or 5th grade.

Full inclusion school student. Emilio was a 10-year-old male at the time this study was completed. He was born at 41 weeks with Down's Syndrome. He is the youngest of nine children. His parents are from El Salvador and speak only Spanish. Emilio is bilingual, though he generally speaks English with his classmates. Emilio's 28-year-old brother is very involved in his education and helps the parents with translation and decision-making. Emilio was identified through the Individuals with Disabilities Child Find project around the age of one and has been receiving

specialized services ever since. His original classification was Developmental Delay, but that was changed in 2003 to Cognitive Disability.

Emilio was reportedly in good health throughout his early years. When he was 1.5-years-old, his cognitive, social, fine motor, and feeding, and dressing performance levels were estimated to be between 10 and 15 months. In 2003, his functional level was estimated to be between 3 and 4-years old. In 2005, his IQ was measured to be a 36 with adaptive skills measured to be a 44.

When Emilio was younger, he was described as a sweet child who got a long well with his regular education peers. He was always very interested in playing with the other children in the classroom. His temperament was outgoing and curious. He had few absences other than an extended stay of about a month in his parents' home country. He always worked with a one-to-one assistant, but within the general education classroom. More recently during his 4th and 5th grade year, Emilio's behaviors became a problem in the classroom. He began to be defiant by refusing to do his work or engage in activities such as music class and aggressive by spitting and hitting his assistant on occasion. However, his interest in playing with the other students did not change. It is unclear how his communication skills, including being bilingual, impacted this change in his behavior. Emilio has been a student at Clarke Elementary School since preschool.

Mainstream school students. Three students were observed in the mainstream setting. The following is a description of the three students that were observed.

At the time this study took place Walt was 10-years-old and in the 5th grade. He is a white male who was first diagnosed with Down's Syndrome soon after birth.

His twin sister displayed no identified disabilities. Developmental milestones were delayed, including language development. Notably, Walt's language development regressed over time until he used only a few words. Testing revealed extremely low cognitive and adaptive behavior skills.

Walt began preschool in a neighboring school district and moved over seas with his family until 3rd grade. He came to the present school district during the summer of 2004 at which time he attended summer school at Garrison Elementary School. He continued to attend Garrison in the next school year in a self-contained multiage special education classroom that was created to serve students with moderate and severe disabilities. His attendance is very regular.

Walt's teachers described him as stubborn and reluctant to comply with requests. However, with prodding he will comply with demands. Due to his limited language abilities, Walt expresses himself with vocalizations and gestures. Walt can display low frustration tolerance, but does respond to positive reinforcement, high fives, and verbal praise. When in the classroom or at recess, Walt generally does not seek out others to engage in activities.

Blake's parents were told that he had Down's Syndrome within 45 minutes after he was born. At the age of 3 months and at one year he experienced seizures with high fever. He continues to suffer from upper respiratory problems. He speaks in simple phrases and uses signs and sounds to communicate. Blake began receiving special education services shortly after birth; however, when he was five his mother kept him out of school because she felt he was not ready for kindergarten. He has

been continuously educated in a self-contained classroom since returning to school. Cognitive and adaptive skills were reported to be within the extremely low range.

Blake was 10-years-old at the time of the study. He is described as a friendly boy who enjoys being around adults and peers. His teacher commented that students in the regular education setting greet him, something he responds to with a big smile. He is very social and gets along well with the other students in his self-contained class. Blake's school attendance is generally good. However, he does miss a few days every couple of months due to respiratory issues.

At the time of the study JB was 11-years-old and in the 5th grade. JB and his family moved to the school district from Mongolia two years earlier to pursue better educational opportunities and medical care for him. JB has two older teenage brothers who remain in Mongolia. He understands Mongolian and English, but has difficulty with verbally expressing himself in both languages. He communicates with classmates mostly through nonverbal methods, but does use single words and short phrases in English at times. One regular education student at the school who speaks Mongolian does communicate with JB in that language on occasion.

At about 2 months of age, JB had a series of serious convulsions and a suspected stroke which left him paralyzed on his right side. He was heavily medicated at that time. Records indicate that he developed slowly and did not walk or talk until about 4-years-old. In Mongolia JB attended a school for children with special needs from age 2 to age 5 and was mainstreamed with typically developing children from age 6 to age 9. His cognitive and adaptive skills were measured to be within the extremely low range.

JB's teacher described him as happy and active, despite some limited mobility due to right side paralysis. He seeks out interactions with both nondisabled peers and peers with disabilities. Although he has a very limited vocabulary, JB expresses himself through gestures, actions, and vocalizations. He attends school regularly.

Description of Teachers

Special education, regular education, and teacher assistants were interviewed for the present study. A short description of each interviewee will be presented in this section. The descriptions are broken down by school with the full inclusion school staff being described first followed by the mainstream school staff.

Full inclusion staff. Ms. Anderson holds a position as a half time PE teacher and half time Assistant Principal. She regularly teaches Emilio in a regular education PE class. Ms. Anderson taught adapted PE for 1 year prior to coming to the current school district and Clarke where she has been for 13 years. Her ethnicity is White.

Ms. Tawes is a White female who is the lead special education teacher at the full inclusion school. While she does not teach classes, she is responsible for completing many of the educational assessments of students going through the special education process. She is also responsible for overseeing programming for special education students and disciplining any student who has had to leave the classroom due to behavioral problems. Ms. Tawes is a key player in helping to ensure that the philosophy of full inclusion is implemented at the school. Ms. Tawes has known Emilio since he started at the school in preschool. In that time, she worked closely with his family to complete numerous special education reevaluations and IEPs. Most recently she participated in the transition IEP team that determined his IEP at

the middle school he will be attending in Fall 2006. She also has been involved in disciplining him at times. Ms. Tawes has been in education for about 23 years and at Clarke since its inception.

Mr. Townsen is a regular education teacher who teaches 4th and 5th grade combination classes. Mr. Townsen has had Emilio in his class for the past two school years. Mr. Townsen is White. He has been a teacher for 17 years and has been at Clarke for 10 years.

Ms. Cook is a White special education teacher who just completed her first year (2005/2006) at the full inclusion school. Prior to this past school year, Ms. Cook worked for about 13 years as special educator at a high school that practiced mainstreaming for students with moderate and severe disabilities. At the high school she worked mainly with students with mild disabilities. She has been teaching for about 25 years. Ms. Cook has Emilio on her special education caseload. Although she writes the IEP and monitors his programming, her direct contact with the student is minimal.

Ms. Vargas is a Hispanic special education assistant who has been working with Emilio for 2 school years. She provides daily direct instruction and has regular contact with his family to provide feedback on his academic and behavioral progress. Ms. Vargas has been working as special education assistant for about 20 years and has been at Clarke Elementary School since it started.

Ms. Stoll is a White regular education teacher who works in a 1st/2nd grade classroom. She is a special educator by training who used to work with the 4th/5th grade teachers and students until she took her current position. Ms. Stoll knows

Emilio, as she has worked in the school as long and he has been a student there, but did not have regular contact with him at the time of the study. Ms. Stoll has worked with students with moderate and severe disabilities in previous years and had a student with a moderate disability in her classroom at the beginning of school year. That student transferred to a new school during the 2nd quarter of the school year. Ms Stoll has been teaching for 35 years and has been at Clarke for about 5 years.

Mainstream Staff. Mr. Thomas is a Black regular education 5th grade teacher who has been teaching for 14 years, with the last four being at Garrison. A couple of times a week, Walt, Blake and JB spend time in his class with the regular education students. In addition, these students generally take recess at the same time as Mr. Thomas's class. A special education teacher or assistant usually accompanies Walt, Blake and JB when with Mr. Thomas's class.

Ms. Monroe is a Black special education assistant. She works in the self-contained classroom with Walt, Blake and JB. She assists the special education teacher with classroom and behavior management and supervision at recess and in the regular education classrooms. She also provides some direct instruction. Ms. Monroe has been and special education assistant for 19 years and at Garrison for four years.

Ms. Rivera is a Hispanic regular education 3rd grade teacher. A couple of times a week, Walt, Blake and JB spend time in her class with the regular education students. In addition, these students generally take recess at the same time as Ms. Rivera's class. A special education teacher or assistant usually accompanies Walt,

Blake, and JB when with Ms. Rivera's class. Ms. Rivera has been at Garrison for all 3 years she has been teaching.

Ms. Crawford is a half time special education teacher and half time assistant principal at the mainstream school. Walt, Blake and JB are in her special education class. She is responsible for developing their programming and writing their IEPs. Ms. Crawford's ethnicity is Black. She has been in education for 10 years. Ms. Crawford has been teaching special education for 8 of those 10 years and has been at Garrison for the past 4 years.

Description of Regular Education Students

Three 5th grade students and one 4th grade student at the full inclusion school were interviewed. Information about the background of these students is limited as permission to go into their cumulative files was not sought for this study. This sample included three boys and one girl. Four 5th grade students at the mainstream setting were interviewed. All of the students were girls. None of these children participated in special education programming. The ethnic backgrounds of these students varied. At the full inclusion school, two children were Hispanic and two were white. At the mainstream school, one child was Black, one was White, one was Mongolian, and one was Indian.

Procedures

Field notes, an observation system, and an interview process were used to collect data in order to add richness and depth to this study. Because of the small number of participants in this study, using more than one data collection method helped to validate the information collected (Gall, Borg, & Gall, 1996). In addition

Table 1

Observation and Interview Participants			
	Participants		
	Observation	Teacher interviews	Student interviews
Full Inclusion	1	3 regular education 3 special education	4
Mainstream	3	2 regular education 2 special education	4

to enlisting more than one data source, two observers were utilized to complete the observations to increase reliability (Miltenberger, 1997). Table 1 outlines the number of observation and interview participants in each setting. For each observation participant three observations were completed at recess and three were completed in the classroom for a total of six observations per participant.

Pilot Study

Before collecting data using the aforementioned procedures, a pilot study was conducted to perfect the observation form and interview format and to establish interrater reliability between the two observers. The pilot study was necessary because it helped to yield the most accurate, valid, and reliable data possible during the study. The following is a discussion of the process that was used in the pilot study.

Observations

In order to increase the reliability of the data being collected via observation, the following procedures recommend by Borg, Gall and Gall (1993) were used. The

author and a second observer met to discuss the research questions addressed through the observations and review the target behaviors to be observed so that both developed a common understanding. Second, the observers reviewed the observation form and determined a standard way for recording the data. Third, the observers used the observation form to code interactions between a target student, classmates and a teacher during a lesson from video footage. The observers then discussed the data they independently recorded. This process was repeated until consensus was reached and interrater reliability (IR) was at an acceptable level.

Although 80% is commonly thought of as a minimally acceptable level of IR, Miltenberger (1997) recommends 90% or better. Miltenberger also recommends dividing the smaller frequency by the larger frequency and multiplying by 100% to establish IR for frequency count recordings. This method was used to determine IR. During this practice period necessary changes to the observation forms were made.

Interviews

Interviews are an excellent way to gather information, as people are usually more willing to talk than to write. Interviews are particularly useful when working with children who may have thoughts that are more sophisticated than their writing skills will allow them to record (Best & Kahn, 1998). In the present study, standardized open-ended questions were used, as they allow for greater flexibility to gather in depth information, but also ensure that the same data is collected from each person interviewed. In order to ensure the most reliable data collection using an interview format, Borg, Gall, and Gall (1993) recommend conducting a pilot study to perfect the questions being asked, order of the questions, and interviewing techniques.

For this pilot study, two practice interviews with teachers and nondisabled students were conducted. Based on the outcomes of the interviews completed in the pilot study, changes were made regarding the order and content of the questions and the style in which the participants were interviewed. Based on the pilot interviews it was discovered that a common definition of moderate and severe disabilities needed to be established. As a result, student interviews began with the reading of the short story called *Way to Go, Alex!* (Pulver, 1999) and a short statement about mental retardation to establish a basic definition for all children interviewed. Also, teachers were provided with a description of children with moderate to severe disabilities before being asked the interview questions.

Present Study

After the completion of the pilot study the present study was undertaken. Information learned in the pilot study guided the implementation of the methodology used to collect data.

Observations

The four students with moderate and severe disabilities (one from the inclusion school and three from the mainstream school) described above were observed in regular education classrooms and at recess as part of this study. While there was only one student with a moderate or severe disability fully included at the Inclusion school, there were several students who fit this description at the mainstream school. After all students with moderate or severe disabilities were identified at the mainstream school, three of these students were randomly selected for observation using a random number table. Parent permission was obtained for all

of these students. These students were observed during content instruction time in the classroom when teacher interactions were more likely to occur and at recess time when the students with disabilities were most likely to interact with their nondisabled peers.

For each of the observed students, three observations were completed in the classroom setting and three were completed at recess. A total of six 20-minute observations were completed for each student with a disability in each type of setting (see Appendix C). It should be noted that the classroom setting is far more structured than the recess setting. Generally, any student in a classroom setting should be engaged in more teacher directed activities. Interactions may be minimal between students or interactions are specifically dictated by the teacher. At recess, students feel freer to interact, though they may reveal preferences with whom they interact. The reader is reminded of this phenomenon when the observation data and analysis are presented in later chapters. The observations helped to establish a pattern of interaction between teachers and nondisabled students and the students with disabilities integrated into the classes.

A specific frequency count coding system was used for describing the observed interactions that took place between students with disabilities and nondisabled peers, special education teachers, and general education teachers (see Appendix A). As previously stated, an interaction is defined as “any behavior (e.g. looking, vocalizing, gesturing, smiling) directed by the disabled student toward another person or by a person toward the disabled student” (Gerson, 1995, p. 11).

Reciprocity occurs when one person initiates an interaction and the other person responds.

Interviews

One of the goals of this study was to determine the effect of integration on nondisabled students' views of students with moderate and severe disabilities in their classes. It is believed that the type of program each school adopted (mainstream, inclusion) has an effect on the culture of the school (Gerson, 1995). Thus, student views tend to reflect the attitudes and standards of the school. Four nondisabled students in mainstream setting and five students in the full inclusion setting were selected from the observed classrooms for interviews regarding their attitudes toward their classmates with disabilities. Students chosen for interviews were selected randomly in each setting using a random number table. Parent permission was secured for each student interviewed.

The interviews conducted were semistructured in nature (Gall et al., 1996) and followed an interview guide approach (Best & Kahan, 1998). A set of open-ended questions were used to guide the interview (See appendix B). However, the interviewer had the freedom to ask more probing questions to gather additional information. This format was used because it allowed for the collection of relatively standard information, but also provided flexibility to gather more in-depth details when warranted.

Interviews lasted approximately 20 minutes per student or teacher. Prior to asking questions, the nondisabled students were read a story about a child with a moderate to severe disability. This helped to add consistency to the interview process

by establishing a basic definition of the type of child to which the interview questions pertained. A description of children with severe and moderate disabilities was provided to all teachers being interviewed to establish a basic definition of children with disabilities. All interviews were recorded and transcribed to aid in the analysis process.

Field Notes

In order to add richness and depth to the observation and interview data collected, field notes were taken in each setting observed. Bogdan and Biklen (1992) regard field notes as central to participant observations and important in other types of data collection. The context the data was collected in will help in analyzing and drawing conclusions from all the sources of data.

Field notes included a description of the people, objects, places, events, activities, and conversations (Bogdan & Biklen, 1992). A data collection sheet was developed to prompt the observers to keep the following notes (see Appendix D):

1. Description of the participants. This section described the dress, mannerisms, and style for interacting with others of those being observed. More specifically, this description included information regarding those aspects of the participants that set them apart from others.
2. Reconstruction of conversations. The observers attempted to record as much as possible about the conversations taking place in the observation setting. This included a description of the topics discussed and the gestures and facial expressions of the participant. The observer, when

possible, wrote down the specific phrases and words used within the observation period or paraphrased the conversations.

3. Description of physical setting. A verbal description of the proximity of the participant to the other people and objects in the room or setting was completed.
4. Description of activities. The observer recorded the ongoing activities that took place during the observation period.
5. Description of particular events. An account of particular events that took place in the setting was recorded. This account included those involved in the event, their role, and the outcome of the event.
6. Description of observer's behavior. The observer described their place in the setting. This included their physical location in the room, any interactions that took place with individuals in the observation setting, and the possible effects of their presence in the setting.

This format yielded a good description of the setting and aided in the analysis of all the data collected.

Analysis

Presented below is the way in which the observation and interview data was analyzed in order to best answer the research questions outlined in chapter 1.

Observation Data

Observations were conducted in integrated classrooms and at recess in the inclusion and mainstream settings. Frequency count recordings were used to gather information about the number and type of interaction that took place (Gall, et al.,

1996). The observations first focused on who initiated the interaction (regular education teacher, special education teacher, nondisabled student, or student with a disability). After the initiator was identified, the interaction was coded using the following categories: 1) verbal or nonverbal interaction, 2) was there a response, 3) who responded, and 4) was the response verbal or nonverbal (Gerson, 1995). A standard observation form was used to help increase interrater reliability among the observers (see Appendix A).

Data collected during the observations was summarized for each student in each setting. The frequency counts collected were tallied and averaged for each setting for each student. In other words, each code was added up for the three observations in the recess and classroom settings, respectively, and divided by three to get a percentage. In the cases where two observers were used, IR was checked to make sure it met the 80% agreement rate and then averaged together to get a single percentage. All ratings exceeded 80% IR agreement.

Interview Data

The interview data was prepared and analyzed using procedures described by Bogdan and Biklen (1992). Those procedures are described in this section. First, the interviews of the nondisabled students and the regular and special education teachers were recorded and transcribed. Each type of interview (student or teacher) was typed up in a different font to make quick identification of each set of interviews easier and each page of the transcriptions was numbered consecutively. In addition, each interviewee's responses were copied onto different colors of paper so that when statements were cut apart they could still be attributed easily to the interviewee. This

system helped to make the information obtained in the interviews manageable for analysis. As described by Bogdan and Bilken, an initial review of the interview transcriptions was completed by the primary researcher to identify key themes and words. Similar themes and words were then grouped together to come up with larger concepts. Twenty-six larger concepts were developed.

Following techniques outlined by Bogdan and Biklen (1992), the interview transcripts were then reviewed a second time by two coders using the 26 themes. Each theme was given a unique number. Phrases, sentences and paragraphs were coded using the 26 larger concepts. The two coders then met to discuss the codes and establish agreement. The phrases, sentences, and paragraphs of the transcripts were then broken apart by code number. The coders cut apart the phrases, sentences and paragraphs and regrouped the pieces of paper by codes into piles. The piles were then glued into folders so that each folder represented a theme. This technique is called the “Cut-Up-and-Put-in-Folders” approach by Bogdan and Biklen. Folders were then grouped into four broad themes for the interviews with students and five broad themes for interviews done with the teachers. These broad themes were used to address the research questions.

Researchers

There were three researchers employed to carry out the present study. Each researcher will be described along with there connection to the school district, if any. The primary researcher, and author of the present study, works as a school psychologist in the full inclusion school one day a week. She has been in the school district and the full inclusion school for six years. Therefore, she has first hand

knowledge of the staff and students and of some of the history and inner workings of the school. She completed about half of the interviews and observations in the full inclusion school and half in the mainstream school. She was also integrally involved in all aspects of the data analysis process.

The second research is also a school psychologist and has worked in the present school district for six years. She has worked one and half days a week at the mainstream school for the last five years. She is familiar with the staff and students and the school and has some knowledge of the history and daily operations in the school. She completed about half of the observations and interviews at each school, but was not involved in the analysis process.

The third researcher is a school psychologist with no affiliation to the school district in which the present study took place. The third researcher is experienced in case study methodology and the analysis of interview data. She served as a consultant to the primary researcher and the second coder in the analysis of the interview data. She worked with the primary researcher exclusively on the interview data.

Approval Process

Approval to carry out this study was obtained from both the Human Subjects Review committee at the University of Maryland and the school district where the data was collected prior to starting data collection.

Chapter 4

Results

In this chapter the results from the observations and interviews will be reported. The purpose of the current study was to present teacher and student perspectives on the inclusion and mainstreaming of students with moderate and severe disabilities, the impact of the school philosophy on educational planning for students with moderate and severe disabilities, the interactions between students with disabilities and teacher and students without disabilities, and the impact of students with moderate and severe disabilities on the degree to which the child is integrated into the regular education curriculum. Through observations, field notes, and interviews, this study explored how two schools with very different philosophies on special education managed the education of students with moderate and severe disabilities.

The chapter is organized into three major sections: (a) Analysis of themes from interviews with students without disabilities; (b) Analysis of themes from interviews with school staff; and (c) Analysis of the observations of the students with disabilities in the regular education setting. Whenever possible, direct quotations are used to add richness and attempt to convey the true meaning the individuals interviewed intended to get across. Names have been changed to protect the anonymity of the study participants. Students with moderate and severe disabilities will be referred to as SWD. Teacher will be used to describe any staff person responsible for delivering instruction or supervising students thus including special education teachers, regular education teachers, and special education assistants.

Student Interviews

Through their answers to the interview questions, students expressed their perspectives on various aspects of having SWDs integrated into their respective regular education classrooms. The following research question was addressed:

What are the attitudes and beliefs expressed by the students at each school setting regarding SWDs? Are there differences in attitudes among these two groups of students?

Every student interviewed at the full inclusion school identified Emilio as a SWD. Every child at the mainstream school identified at least one of the three SWDs observed as part of this study. Four major themes stood out when looking at the interviews across both the mainstream and the inclusion settings. The four major themes that emerged from the interviews with students were “perceived responsibility for students with disabilities”, “defining and understanding students with moderate and severe disabilities”, “interactions between students with and without disabilities”, and “impact on and outcomes for students with and without disabilities.” The following is a description of the views expressed by the students broken down by major theme and school setting.

Perceived Responsibility for Students with Disabilities

“Perceived responsibility for students with disabilities” refers to whom the students without disabilities feel is the SWDs teacher and the degree to which they see that student as part of the class. Students in both school settings revealed, subtly

and overtly, the degree to which they included the SWDs into *their* classroom. This was evidenced through the use of pronouns such as “my”, “their”, “his” and “our”.

Full Inclusion. Within the transcripts, there were four clear responsibility examples. Some students made reference to Emilio physically being in the regular education classroom as evidenced when Natalie said “Emilio, he’s in our class.” However, many examples placed the responsibility for him and his education with the special education assistant.

He doesn’t work with us very much, but he has a special teacher, Ms. Vargas, and she helps him a lot and they just work in the corner of the room (Natalie).
...he has a teacher that helps him out and study and he usually makes his way some how...he is usually with his teachers and stuff and our teacher is usually doing different classes (Paul).

He sits with his teacher and does his work (Robby).

By use of the aforementioned pronouns, the students at the full inclusion school have gotten the implicit message that they and Emilio do not have the same teacher despite receiving their education in the same classroom.

Mainstream. There were far fewer direct examples of responsibility issues expressed in the interviews with students from the full inclusion school. Interviewed students did not make reference to their own classroom or teachers or the classrooms and teachers of SWDs often. Though in the following two examples, the students made a clear distinction regarding who was responsible for different students.

I know a person, he's downstairs in Ms. Crawford's class. I think his name is Walt. He's very slow and so I was told to help him. I help him. I don't really think he can talk (Emily).

From this example one can see that this student has made a clear distinction about what teacher is responsible for Walt. Similarly, another student at the mainstream school talks about playing with a SWD.

...Blake, I play with him at recess and when the teacher of Blake tells me to play with him, I do (Pasha).

Students at the mainstream school generally expressed a desire and/or willingness to interact with SWDs, but gave an impression that they saw their teachers and classes as separate from those of the SWDs. While the two examples above illustrate this, it is also apparent from the absence of references to the classroom environment by two of the students and the description of interactions outside the classroom by all of the students that they see teachers other than their own classroom teachers as responsible for the SWDs. The following quotes are examples of interactions that illustrate the above assertion.

I always wave at him when I see him [in the hallway] (Pasha).

Sometimes at recess, I go to them and talk to them and say hi and stuff (Alisha).

Both the students at the full inclusion school and the mainstream school expressed that they viewed the particular teacher who had responsibility for students with and without moderate and severe disabilities as different. Regardless of the

amount of time the SWD were integrated into the regular education classroom setting, the students interviewed for this study described similar views on responsibility.

Defining and Understanding Students with Moderate and Severe Disabilities

This theme encompasses the students' expressed knowledge of moderate and severe disabilities, the ability to identify someone with this level of disability, and the impact that the disability has on the functioning of the person. Stated another way, students' stated awareness level of moderate and severe disabilities were examined to see if there was a difference in this awareness level across settings. The theme is broken down into three key components: definition, concerns regarding schooling for SWDs, and perceptions of behavior. In this section, data from the interviews with full inclusion and mainstream students will be presented by key component.

Definition. During the interview students were asked if they knew what the words "mental retardation" meant. At the full inclusion school three students gave descriptions and one student said he was unsure. The students who gave definitions generally described SWDs as being a little delayed or unable to do thing like "normal" people or "most kids". The definitions generally focused on what SWDs could and could not do. One student's definition of mental retardation is as follows.

When somebody has problems learning and when they have problems doing things that most kids can do (Natalie).

Another student used a similar description noting the "problems" of SWDs as compared to "regular" or "normal" people.

To me it just means troubled and born with problems unlike regular people.

They have their problems, but other than their problems to me they're just like regular people (Paul).

Despite being able to articulate a definition of mental retardation, one student demonstrated confusion regarding a specific condition of which mental retardation is part.

There's not many people I know, but one kid I do know doesn't have mental retardation, but he has Down syndrome, it's Emilio and he's in our class (Matt).

The following examples illustrate three main elements in the definitions given by the students. In general, the students recognized that the SWDs are cognitively delayed as evidenced by being slower than their peers, having more "problems", and, although reluctant to give them a label, the students knew that there was some sort of different classification for SWDs.

The following is a description of the findings from the interviews done with the students at the mainstream school in regard to defining and understanding students with moderate and severe disabilities. Students at the mainstream school defined mental retardation in a similar way to the students at the full inclusion school. Students tended to highlight cognitive delays and difficulty understanding the curriculum of the regular education classroom. This is illustrated in the following two examples.

...his brains work different from us. He understands me, but he can't talk very good (Tara).

I think it means a person that's not really stupid, but just needs help. They also do stuff slower than people; they're not so fast, it takes them more time to understand (Emily).

One additional element noted from Emily's definition is the idea that SWDs may need more help to get along in class.

Concerns regarding schooling for SWDs. Students at the full inclusion school expressed concerns over where SWDs could receive schooling. In the interview students were asked if they would change their school to not have SWDs in them. All students agreed that they would continue to have SWDs attend the school and would not change anything. However, some students interpreted this to mean that if SWDs didn't attend their school then they would not attend any school.

...Everybody should go to a school because they're just kids (Matt).

...I wouldn't change the school. It is hard for parents to find a school for kids like Emilio. They might not be accepted (Robby).

Another student highlighted altruistic reasons for having SWDs attend his school while simultaneously capturing the difficulty he believes it entails to integrate SWDs into school.

Well, sometimes I think that if I was head of a school or something that it might be a challenge or problem sometimes with teachers, but it's good to have them to help kids feel better about themselves by helping other people, it helps people feel they make a difference (Paul).

From these quotations, it can be seen that the students understand that SWDs need to be in school, but did not have a clear understanding that they are entitled to an

education just like any student. These students also expressed concern that SWDs might not be accepted at other schools.

When asked whether or not they would change their school to not include SWDs, the interviewed students unanimously agreed that they would not change the school. The students at the mainstream school did not share concerns with the full inclusion students that the SWDs would not be able to attend school, rather three shared that they enjoyed having the SWDs in the school so that they could learn how to help people with disabilities.

...you have a better understanding of how it's like to be a person with disabilities so you would know if you want to be his friend, so you get a better experience of how it's like to be a disabilities child (Pasha).

Another student shared a similar sentiment regarding helping and learning from SWDs.

...I want to learn new people and how handicapped people work and stuff (Tara).

This element of wanting to learn from students with SWDs was unique to the interviews done at the mainstream school, just as concern for SWDs not being able to go to school was unique to the interviews at the full inclusion school.

Perceptions of behavior. Throughout the interview, the full inclusion students often commented on the behaviors of the SWDs, showing differing levels of expectations and understanding. When talking about the behaviors of the SWDs the students seemed to draw on their experience with the SWD in their class.

He does stuff he is not supposed to do...they don't know what they are doing wrong (Matt).

He is funny sometimes. He does things more slowly, like talking. He is more behind the other kids (Robby).

...he has a teacher help him out. He usually makes his way some how (Paul).

These statements illustrate that the students sense that SWDs have little control over their behavior or knowledge about the effects of their behavior. They tended to describe the behaviors of the SWD as not being goal directed and pointed out how they often make classroom rule violations.

Using behavior to help define SWD was also noted in the interviews completed at the mainstream school. Like the students at the full inclusion school, students drew from personal experiences to shape their understanding of the SWDs' behavioral functioning.

...JB...doesn't know how to talk, but he does stuff, he knows how to, he listens to other people...he knows how to talk a little, but he doesn't really know how to communicate and stuff (Pasha).

They talk different and I feel sorry for them...They don't talk much and they don't listen (Alisha).

Like the full inclusion students, the mainstream students tended to focus on communication deficits and noncompliance.

Interactions Between Students With and Without Disabilities

Students were asked to comment on the types of things they do with SWDs in their class. This question was asked to gain a better understanding about the types of

interactions that were occurring among students with and without disabilities. While every student at both schools described interactions that they had with SWDs, the students at the mainstream school described relatively more in depth interactions with SWDs. Although the mainstream students engaged in relatively more in depth interactions, if interactions occurred at all they were still generally minimal and most often confined to unstructured time such as recess or lunch. The following two sections will illustrate more clearly the types of interactions about which the students spoke.

Full inclusion. Students at the full inclusion school often referred to the interactions between Emilio and his assistant when asked about their own interactions with him. There was very little range in the type and amount of interactions they reported. When talking about interactions, Natalie said that Emilio “doesn’t work with us very much, but he has a special teacher, Ms. Vargas, and she helps him a lot.” She went on to say that “they just work in the corner of the room.” Later in the interview, Natalie remembered that Emilio “goes on fieldtrips” with the rest of the class and that she worked with him in PE a couple of times. Other students shared similar sentiments. Robby noted that Emilio works with the other teacher so he doesn’t do much with him, though he was quick to add that sometimes the other kids in class talk to him. Matt shared that he hasn’t “done anything with him, but mostly...see him.” The most interaction that the students at the full inclusion noted was sometimes talking with Emilio and working with him a few times when paired up by the teacher. Although, Emilio is almost always in the classroom with the regular education students very few interactions are taking place between the students.

Mainstream. Students at the mainstream school report more interactions than those at the full inclusion school. Students described both self-directed and teacher directed interactions. Tara described an incident at recess where JB pulled on her arm to play with him. She reported that she obliged and played with him for a while. Pasha described how she has observed her friend talk with JB because they are from the same country and he understands her. While it is not clear if this means that the friend is speaking a language other than English, this may be the case given that JB is bilingual.

Students also commented on how they think the SWDs feel when no one interacts with them. When speaking of JB Tara observed that “he’s lonely because some of the other kids don’t like him because he’s handicapped...the other people don’t know about him.” She went on to say that others “might not understand that [JB] is out there and...wants to play like everyone else.” Another example of this type of insight was given by Alisha in the following statement.

I try to help them. I try to talk to them and make them happy; to play with them...Sometimes at recess I go to them and talk to them and say hi and stuff
(Alisha).

Students at the mainstream school described many interactions and feelings of empathy toward the SWD. There were fewer descriptions of this nature at the full inclusion school.

Impact on and Outcomes for Students With and Without Disabilities

Throughout the interviews, students commented on both the positive and negative impact having SWDs in their school had on the SWDs and other students.

Students clearly articulated the numerous perceived outcomes for all parties. Below is a description of outcomes the interviewed students articulated for SWDs and regular education students by school setting.

Full inclusion. Three major points were made by the interviewed students regarding the impact and outcomes of having SWDs in the regular education setting. First, students noted that exposure to SWDs helps to give regular education students a clearer picture of what having a moderate or severe disability looks like. Second, the students discussed the effects of having SWDs in the classroom on the self-esteem of regular education students. Finally, students reflected on the impact on and outcomes for SWDs in integrated settings.

Two students at the full inclusion school mentioned outcomes specific to SWDs when talking about having SWDs attend their school. Robby stated that “you can see [SWDs] feel good when they do something.” He went on to say that watching SWDs feel good also makes him feel good. Paul, described a more neutral outcome, stating that although Emilio “has his problems”, with the help of a teacher he “usually makes his way somehow.”

Although the stated outcomes for SWDs were few, students were able to identify several broad outcomes for regular education students in classes with SWDs. While many outcomes for regular education students were noted, they were more global and theoretical as opposed to being linked to personal experiences. For example, Natalie stated that having a child like Emilio in the school “teaches kids what it is so that they’ll know, you know because it is around you.” She expanded on this point in the following statement.

Some kids know what [mental retardation] is when people talk about it, or they say that they know somebody like that they know what they're talking about. Or, when they see that someone looks different, they know why (Natalie).

Paul also talk about the positive impact exposure has on what he described as “regular” kids.

It gives some definition in difference to another person...you might have a difference in voice or skin color or age or something like that, who has challenges like that is a big difference between everyone else and him or her (Paul).

These students articulated the outcome of having SWDs in the school helps the other students to gain a better understanding of or definition for moderate and severe disability.

Two students discussed the impact of having SWDs in the school on the feelings of regular education students. Robby stated that “you can see them feel good when they do something and then I feel good.” Paul also noted that the difference between SWDs and other students “will make people feel like they help people” and that makes “people feel better”. With a slightly different view, Matt noted that having SWDs in the school is “fun because you can know more stuff about [Emilio].”

Although only one student mentioned the impact of having SWDs in the school had on teachers, it bears mentioning. Paul stated that if he was “head of a school or something that it might be a challenge or problem sometimes with teachers.” He continued by stating that it’s “good to have [teachers] help kids feel

better about themselves by helping other people, it helps people feel they make a difference.” In this statement, Paul captured both the difficulty of integrating students with SWDs into regular education classroom and the benefits for those involved in the process.

Mainstream. The outcomes and impact of having SWDs in school on SWDs was discussed by three students at the mainstream school. The interviewed students talked about social and learning outcomes for students with SWDs. Tara and Pasha both highlighted social outcomes for SWDs. They shared that having SWDs in the school allows the SWDs to have friends and play like other students. Tara’s comments illustrate this well.

Sometimes, it’s good for JB to have friends to play like other people do. I know his feelings. If he is alone he’s sad and he doesn’t really talk or scream that much. I know how he’s feeling (Tara).

Here, Tara highlighted her perception that when playing like other students, JB is happier. Also in this statement, it can be seen that she feels that she has gotten to know his mannerisms and behaviors and feels that she can tell when he is feeling down.

Emily discussed learning outcomes for SWDs during her interview. She talked about the impact of SWDs in the classroom. She stated that “once you teach [SWDs] and they understand, they do better” and that they “need more help than other people.”

Like the students at the full inclusion school, students interviewed at the mainstream school articulated a greater amount of outcomes for regular education

students than SWDs. Students at the mainstream school also tended to talk globally about impact and outcomes and with few comments on specific experiences they had. Comments on this topic included sympathetic feelings, a recognition of or desire to have a deeper understanding of SWDs, and feelings of altruism.

One student described how having a student like Blake in her school made her feel sympathy. The following statement illustrates this point.

They act different and I feel sorry for them (Alisha).

However later in the interview Alisha reported that having SWDs in her school helps students to respect SWDs more. She stated “we would know how to respect them and then not be mean” and, like other students interviewed at the mainstream school, she shared some altruistic feelings.

I would be in this school only, like the school with children [with SWDs]...I

really want to help people...I would like to help them a lot (Alisha).

Another student also discussed wanting to help SWDs. The following is her answer to the interviewer’s questions.

Would you change your school to not have [SWDs] (Interviewer)?

No...because they need help. [SWDs] need more help than other people.

Some people don’t want to help them because they are slow and they don’t understand (Emily).

Two interviewed students discussed the impact of having SWDs in their school on the regular education students’ understanding of SWDs. In a rare example of personalization, Tara stated she would not want to attend a school without children

with SWDs. She said “I want to learn new people and how handicapped people work and do stuff.” Pasha shared a similar sentiment in the following quotation.

...you have a better understanding of how it’s like to be a person with a disabilities so you would know if you want to be his friend, so you get a better experience of how it’s like to be a disabilities child (Pasha).

Broadening their experience with SWDs seemed to be a key factor for these two students.

Teacher Interviews

Six teachers at the full inclusion school and four teachers at the mainstream school were interviewed to gain their perspectives on inclusion. The interviews were analyzed for major themes across and within the settings keeping in mind the following research question:

What are the attitudes and beliefs expressed by the teachers at each school setting toward the integration model that their school follows? Are there differences in attitudes among these two groups of teachers?

Five major themes surfaced. The five major themes that emerged from the interviews with teachers were “terminology used to describe regular education students and SWDs”, “personal and perceived school philosophy”, “student and teacher qualities perceived to effect integration”, “programming issues”, and “interactions and outcomes.” In the following sections, these major themes will be described.

Terminology Used to Describe Regular Education Students and SWDs

While most teachers adopted the language used by the interviewer to describe both regular education students and SWDs, one teacher at the full inclusion school

and two teachers at the mainstream school found themselves searching for the right words to use to describe regular education students and SWDs.

Full inclusion. At the full inclusion school one teacher had difficulty finding the right terminology to describe the students. Ms. Anderson had difficulty describing SWDs. In the following example, Ms. Anderson was not sure how to refer to children with mental retardation. This is exemplified in the following exchange.

He does not have any physical disabilities; his is more of a mental disability (Ms. Anderson).

Like as in mental retardation (Interviewer).

Yes (Ms. Anderson).

Mainstream. At the mainstream school, the teachers did not seem to have issues finding the right words to describe the SWDs rather; they appeared to be searching for the appropriate way to reference regular education students. For example, this can be seen when Mr. Thomas was discussing his views on inclusion in relation to learning for regular education students and SWDs.

...kids should be included as much as possible as long as it doesn't take away from their learning or the mainstream kids. I don't want to say regular ed...but all the mainstream kids...typically developing kids (Mr. Thomas).

Similarly, when Ms. Monroe in talking about integrating regular education and special education students she said “[SWDs] are outside with the normal kids so like the older ones...did I call them normal?” These quotations illustrate the issues that two teachers at the mainstream school and one teacher at the full inclusion school had in finding the right words to reference the students involved in inclusion.

Personal and Perceived School Philosophy

Through the interview process, insight into the teachers' personal philosophies and what they perceive to be the philosophies of their respective schools regarding inclusion was gained. During the interview teachers were asked about their level of agreement with their school's philosophy. Teachers at both schools stated that they generally agreed with the philosophy of the school they were in and expressed that they would make few, if any, changes to the way in which the school operated. Below the views of the teachers are illustrated along with their perceptions of the school in which they work.

Full inclusion. Despite the school's stated philosophy of full inclusion, the teachers at this school made many comments about fitting the SWD to the school rather than the other way around. In other words many stated that full inclusion is right for the right student. This seems to be in contrast to the school's philosophy of full inclusion. Ms. Tawes stated that you "can't just adhere to one philosophy no matter what, you have to look at the [student] population and it changes every year." Ms. Stoll shared a similar sentiment when she said that there is a "profile of a child" that works best in inclusion despite stating earlier in the interview that she was a "100% proponent of [full inclusion]."

Four teachers expressed concern regarding the ability of the school to meet the needs of some fully included SWDs. The following quotation best sums up this concern.

I think that inclusion is a good model to have. I've been in schools where there's been students that are fully included in, such as our school. I've also

been in schools where students have been in separate classrooms. I think that students with disabilities, if their needs can be met in that setting, can get a lot out of that setting, both academically and also socially (Ms. Anderson).

When asked if they would keep the school the same or make changes, four of the six teachers said they would generally keep the school the same, but again stated that they would practice more discretion regarding the type of students served by the school. Ms. Tawes stated that she “would in large part keep [the school] the same, but as the children get up into 4th and 5th grade” she “would probably do a little more.” She continued on saying that special educators “do pullout when it’s needed and when the IEP requires it” but, “the gap gets a bit huge and the demands are too great for some of the children.” In a similar theme Ms. Anderson and Ms. Stoll also talked about having more flexibility to choose those students who would best fit into the school. This can be seen in their statements below.

It’s a great model, and as long as we look at each child individually, see what their needs are and whether we can meet those here, then it’s a great place (Ms. Anderson).

I’d like to see a little more flexibility on the part of the assigning person, whether that be the principal or whoever, so that they can actually hold slots for children who might benefit best from the setting instead of being at the mercy of the random sign up, but that’s the way the system works and for the most part it works out pretty well (Ms. Stoll).

On a different note, Mr. Townsen expressed that he would give teachers more responsibility for students in their “zone.”

...if a student, regular education or special education, whatever disability they have, if that student is in their classroom, their zone, then they'll take care of them (Mr. Townsen).

However, he conceded that there were too many students in the schools with special needs for that to happen.

Two teachers at the full inclusion school, Ms. Vargas and Ms. Cook, said that they would keep the school the same. However, these teachers gave different reasons for this. Ms. Vargas stated that she thought it was good for the SWDs to have more structure and to follow the regular education peers as models. Ms. Cook stated that since she was so new to the school she didn't feel that she had a good alternative to the current program.

Because I don't have a clear cut idea of what a better plan would be and because I'm so new to the elementary school, I would probably keep it until I had more of a basis to have a different opinion (Ms. Cook).

Ok, so you would keep it the same because there's not a whole lot to influence you yet (interviewer).

...certainly among teachers you hear some talk...I listen to the talk but I am still learning. I guess that is what I am saying (Ms. Cook).

Teachers stated clear ideas about their beliefs regarding inclusion. Most teachers noted that they would make changes in the way inclusion is operationalized in their school. From these interviews, it is not clear that the teachers understood the stated philosophy of the school.

Mainstream. All the teachers interviewed at the mainstream school were very positive about the way the school currently implements the school philosophy. They agreed that they would keep the school the way it was. Mr. Thomas said that he would include the SWDs as much as possible as long as it “doesn’t take away from [their] learning or the mainstream kids.” In Ms. Rivera’s comment below her positive view of the school is clear.

I think that we do a really great job and I think that the system they have here is awesome. I think by having so many activities for special ed. students in the school and bringing them out to field day and all the assemblies, not leaving them out makes them feel like members and bringing them in when we do presentations and whatever, whatever they can handle, fitting them in, I think the school does a good job with that (Ms. Rivera).

The other teachers were equally as positive about the way in which the school operates.

Three teachers noted small changes that they would make to improve the way in which the school implements mainstreaming. Unlike the teachers at the full inclusion school who suggested changes to alter the school’s philosophy, the teachers at the mainstream school made suggestions that would enhance mainstreaming. Ms. Monroe suggested mainstreaming the SWDs more at a younger age to help them learn more social and communication skills. Mr. Thomas said that he would change the staff if they did not agree with mainstreaming. He stated that “kids are going to be included and either you can do it or you can’t and if you can’t then you’ll have to go somewhere else.” Ms. Crawford, the special education teacher, proposed a

logistical change to the school to help things run more smoothly. This can be seen in her statement below.

I would keep [the school] the same. I would change the location of the classroom to be closer to the clinic. But, I would keep the rest the same. The staff is pretty tolerant, they ask questions when they don't know and they accept our students in their classrooms.

Teachers interviewed at the mainstream school seemed to be very positive about the way in which their school operates. Few noted any changes that they would make to the school. Changes that were proposed included a logistical change, a staffing concern, and a plan to provide opportunities for mainstreaming earlier in a child's academic career.

Student and Teacher Qualities Perceived to Effect Integration

Teachers at both schools referenced student and teacher qualities that they felt were best suited for integration. In other words, teachers shared the type of students they thought would work best in an integrated setting. They also commented on the type of teacher that would best be able to function within an integrated setting.

Below, student qualities noted by the teachers at each school will be presented first.

The section on student qualities includes perspectives on types of disabilities and behaviors and the age/grade of SWDs that are most amenable to integrated settings.

Second, teacher qualities will be presented following the same format. Teacher qualities include perspectives on the training, attitudes and experience those interviewed feel is necessary to work in integrated settings and those attitudes of teachers that do not enhance an integrated setting.

Student qualities. Interviewed teachers at the full inclusion and mainstream school made reference to three types of student qualities that they felt most affected the quality of the experience for both SWDs and other students in the classroom. The first two categories of qualities, types of disabilities and behavior, will be presented.

Ms. Anderson and Ms. Stoll noted that students with physical disabilities can be a challenge to accommodate, though with good communication, obstacles for accommodating these students can be surmounted. Ms. Cook discussed students with disabilities who were “very bright”, saying that they “benefit behavior-wise” from full inclusion. From a physical education perspective, Ms. Anderson stated that a student with “more of an academic disability” and good “gross motor skills” does very well in a “physical education setting with other [regular education] students.”

In her discussion of children she has observed and taught in the full inclusion environment, Ms. Stoll commented on the types of disabilities best served in a full inclusion environment.

I think there's a profile of a child, and I'll throw out a few characteristics that I think I've seen more trouble with than others, and that is mild learning disabilities, maybe some emotional disabilities...the child is expected to do more than they're doing and having difficulty and running into a rock and maybe not getting as much support services delivered at the right time for that child. Sometimes those children...I wonder if they might not be more happily served if they can have break away time from the mainstream, but it hasn't been the children who have more severe disabilities [with an issue] (Ms. Stoll).

Although Ms. Stoll stated that the full inclusion environment works well for SWDs, she explained that children with emotional disabilities, a characteristic that can be a part of the profile for SWDs, do not work well in this same setting.

The theme of managing externalizing behaviors was also brought up by Ms. Tawes, Ms. Anderson, and Ms. Cook. In noting the negatives of full inclusion, Ms. Anderson generally stated that “if there’s a behavior problem” then the child could be “disruptive to the learning of other students.” Ms. Tawes stated that children with behavioral disorders “are the hardest to include.” Speaking more specifically about Emilio, Ms. Anderson stated that he is “inappropriate... and aggressive at times and the other kids might not necessarily want to play with him.” Ms. Cook also discussed the impact of Emilio’s behavior on the classroom environment. She said that she has seen “tolerance on the part of some students, but on the other hand, sometimes they don’t know how to take aggressive acts.”

Teachers at the mainstream school made few comments during the course of the interview regarding the impact of types of disabilities and behaviors students display in the mainstream environment. In fact, only three teachers made comments directly related to this topic. Ms. Crawford stated that in unstructured times, it can be difficult for teachers who don’t know the SWD very well to read some of their nonverbal cues and body language. She shared the following example.

...like if we’re at an assembly and one child has an earache, how would I know that child had an earache unless they did something, unless they showed me something physically. Just like if one of my students abnormally just

screams, another teacher might think that they were in pain...if a child pulls his ear when he wants water, it's a little different (Ms. Crawford).

Ms. Crawford's comments reflect how behaviors can impact others in the mainstream environment and highlights the importance of getting the, as she puts, "intimate chance to know the students" to enhance understanding of a SWDs needs.

Ms. Monroe and Ms. Rivera spoke more specifically about the impact of the types of disabilities SWDs have on the regular education students. In the following exchange, Ms. Monroe explains the impact of the type of disability a student may have has on regular education students.

[Regular education students] go towards the ones who are more social. The ones in wheelchairs they kind of brush away, but they eventually go up to them and grab their hand and rub it or something (Ms. Monroe).

So, a little more shy with those who have physical disabilities (Interviewer).

Yep (Ms. Monroe).

In order to help the students to interact more and understand the behaviors of the SWDs, Ms. Rivera explained a program that the school set up. The focus of the program was to help regular education students learn how to work more closely with SWDs that they encounter in their classes.

I selected six kids that I thought would be very patient and be able to handle those tasks, because [SWDs] could be a little trying or frustrating if you're not used to working with those students that need a lot of special attention...at recess they play together, they joke around together, some of the other kids have their own greetings that they use all the time and my kids know them and

it's the rapport. They kind of go back and forth and joke around with them.

Recess, everyone plays together (Ms. Rivera).

A third quality that many teachers at the full inclusion noted to impact on integration was the age and/or grade of the SWD. Three teachers mentioned the age and/or grade of the student as having an impact on the implementation of the full inclusion model. All of teachers appeared to be of the same opinion that mainstreaming SWDs in the earlier grades is more feasible and that it gets more difficult in the upper grades. Although not working at the school when Emilio was younger, Ms. Cook said:

Based on many conversations I've had with teachers who have worked with him for years, it used to work a whole lot better when he was a lot younger. It was far easier to adapt the curriculum and include him...as those students have gotten older and the academic tasks and the curriculum has gotten harder...it ends up being more isolating (Ms. Cook).

Ms. Anderson, who works directly with Emilio, said that “[the teachers] have been trying to figure out how to incorporate [Emilio] more in the class.” She continued to say that “now, as the child gets older, it has become more of a challenge.” Speaking generally about SWDs included in upper grades, Ms. Tawes stated the following:

In this setting here, I think we've had every disability so far...what often happens, as an example, is that say there's a child who's on the spectrum, it starts out when they're young and the inclusion can work very well because of the social and communication and the curriculum. It can all be adapted pretty well. However, it's always a bit of a trade off when they get older. We find

that the social gap, no matter how well they [do], they probably have some good models and gained some social skills and do well with communication, but there is a point at which, for some children, the gap begins to get very wide between what they're able to do and where they are developmentally (Ms. Tawes).

Ms. Cook offers this explanation for the difficulty in fully including SWDs in the upper grades.

I think it can be a problem as the academics become more challenging because there's less opportunity. We talk about inclusion, but there's less opportunity to really be included if the work can't be performed (Ms. Cook).

Teachers at the mainstream school seemed to give little focus to the age/grade of mainstreamed students. Other than Ms. Monroe stating that she "would try to mainstream [SWDs] in kindergarten or first grade" to promote better communication skills, the issue of age and/or grade of the integrated SWDs did not come up during the interviews done at this school.

Teacher qualities. Two teachers at each school commented on teacher attributes. At the full inclusion school Ms. Tawes spoke about the difficulties that some regular education teachers have had with the full inclusion model. She said that she "would like to believe that teachers at [Clarke Elementary School] are fully conversant with the disability, accepting of the disability because they are responsible for implementing the IEP." She believed that if a teacher was coming to Clarke Elementary School, they should be aware that "it's fully inclusive." However, she explained that "over the years [there have been] one or two [regular education]

teachers who [had] problems” with the full inclusion model. Ms. Tawes also explained later in the interview that for full inclusion to be successful there has to be a good match between the SWD, the special education teacher, the regular education teacher, and the parents.

Ms. Stoll talked about how difficult she thought it was for new teachers to teach in a full inclusion setting. Comparing her experience to that of a new teacher, she made the following observation.

...it’s fortunate for me with my experience, it’s not a problem, I know that must be overwhelming to a new teacher (Ms. Stoll).

These two teachers at the full inclusion school both highlighted the difficulties they feel a new teacher is faced with in providing instruction in a full inclusion setting.

At the mainstream school two teachers brought attention to what they felt a teacher needs in order to work with SWDs. Mr. Thomas’ comments were more related to the attitude of the teacher, while Ms. Rivera’s comments centered on teacher training. In speaking about the differences in interactions between teachers and regular education students and SWDs Mr. Thomas highlighted the lack of willingness of teachers to work with SWDs.

I see teachers who will say “well I can’t do anything with those kids.” Music is universal. Art is universal. PE is universal. But I’ve seen some teachers who don’t want kids with disabilities in their class or if they’re there they may just push them to the side and not really include them. Or they’ll say “well I can’t really do anything with them” and water down the curriculum (Mr. Thomas).

Ms. Rivera discussed the special training she believed a special education teacher has that a regular education teacher does not. She stated that she believes that there is a “different type of teacher that works for a regular ed. and special ed. [student] because there’s different things you have to do...so that you can handle any situation that comes up and understand that student more.” Ms. Rivera continued saying that “the education on the teacher’s part is different...” So, although Ms. Rivera has SWDs in her classroom at times, she clearly delineated the need for specialized training on behalf of the special educators in order to meet the specific needs of those students.

Programming Issues

In this section, issues that teachers raised regarding delivery of instruction, Individual Education Plan (IEP) adherence, caseload concerns, and staff communication regarding planning for SWDs will be discussed. Although this section seems broad, it deals with the practical issues that teachers shared in regard to the implementation of a full inclusion or mainstream program. Information from teachers at each school will be presented by the subcategories of programming issues noted just above.

Delivery of instruction. Teachers at the full inclusion and mainstream school touched on some of the issues surrounding the delivery of instruction to SWDs. They talked about some of the changes they make in the way they present information or approach the delivery of instruction for the SWDs with whom they work. The way in which the teachers talked about the delivery of instruction at both the full inclusion and mainstream schools was very similar.

Common threads included adding more structure and breaking down tasks into smaller chunks. Mr. Townsen from the full inclusion school commented that he felt that breaking down concepts for SWDs is “a matter of degree.” He noted that the teacher “break[s] down the class for kids with moderate severe disabilities much more.” Ms. Vargas, who works in Mr. Townsen’s classroom said “in my position it has to be everything structured, patiently, clearly and most of all, timing...to work with [SWDs].” Ms. Anderson noted that “accommodations and modifications are made more often” and at times the SWDs “may not be working on the same thing as the other students.”

Ms. Rivera at the mainstream school described similar strategies for instructing SWDs in the mainstream classroom. She said she differentiates the work for SWDs and regular education students and pointed out that “regular ed. students are so busy with work” that their “focus is not on” the work of the SWDs. So the classroom setting is “structured, but ...still free.” Mr. Taylor was less specific in his description of his approach to instruction simply stating that SWDs should be included as much as possible as long as neither SWDs nor regular education students’ instruction is adversely affected.

IEP adherence. While this issue did not come up as a theme in the interviews conducted at the mainstream school, it seemed to be of concern to two teachers at the full inclusion school. Both Ms. Tawes and Ms. Anderson shared their feelings regarding the feasibility of implementing an IEP within the full inclusion model and the ethical dilemmas that can arise when the classroom environment makes implementing a SWD’s IEP difficult. As Ms. Anderson put it, leaving a child in a

full inclusive setting is “a con and doing a disservice to [the] child” if their academic needs are not being met. She continued on saying that if “the [IEP] committee feels that one particular child is not having his or her needs met” in the full inclusion setting then the staff should “talk to the parents and make sure they understand that though [the SWD] has been here for X amount of years or they like the program...it would be doing a disservice keeping the child” in the school.

Ms. Tawes pointed out that for SWDs the full inclusion school is unable to provide the same kind of life skills training as other schools in the district that do not adhere to a full inclusion model. She stated that at Clarke Elementary School “the pieces provide[d] are less specialized than the life skills program [at other schools]” so one must continually question if the child’s needs as outlined by the IEP are being met. She explained the process she goes through in asking if a child’s IEP is being implemented properly.

You just have to keep asking the questions; look at the goals in the IEP and what are we doing to address his needs? Are we really able to meet them? Unlike Ms. Anderson, Ms. Tawes seemed to be of the opinion that the school should try to implement the IEP no matter how specialized it is.

If you get a student and the...IEP committee determines that inclusion is for that student, that is really intense and highly specialized in instruction, we still should be providing that here. We do, but I would like to see...a little more (Ms. Tawes).

She explained further that the full inclusion model is the right thing to do ethically as long as one can deliver all that is in an IEP.

Caseload concerns. In this section teachers' observations about who has responsibility for SWDs and how staffing is provided to support the integration models followed at each school will be presented. At the full inclusion school teachers seemed to express uncertainty and inconsistency in their opinions about who has what responsibilities for SWDs. They also seemed to use more inclusive language such as "we" as opposed to "theirs" and "my", although there were some exceptions.

Ms. Anderson exemplified this inclusive language when she stated that "teachers work very hard to make sure that everyone's needs are being met in the classroom." She continued on saying that "as long as we look at each child individually, see what they're needs are and whether we can meet those here, then it's a great place."

Uncertainty about responsibilities was detected when Mr. Townsen noted that his "only hesitation... about the way the school works is that classroom regular education teachers" don't always take or get responsibility for the SWDs. He explained that sometimes there is this sense that some teachers are saying "who's going to be the special educator?" In describing the classroom situation he gave an example of how he feels some teachers in the school react in comparison to his own feelings.

"Well that's the special educator over there. I'm the teacher." I'm comfortable and I know a lot of people who are not. I know a lot of people who say "what are you teaching" (Mr. Townsen).

Ms. Anderson, who splits her time at the full inclusion school between her position as the assistant principal and PE teacher, discussed possible changes in the upcoming year to the way in which special education staff is allocated to work with SWDs in the full inclusion model.

I think that [full inclusion] is a great model. I think that teachers work very hard to make sure that everyone's needs are being met in the classroom.

We've been looking at, for next year, how we're going to use the special education teachers, how we're going to use those resources, those physical bodies in the classroom (Ms. Anderson).

Ms. Tawes, the lead special education teacher commented that at times regular education teachers do not feel qualified to work with SWDs and they have a hard time forming relationships with the SWDs "because they are not sure what they're supposed to be doing." She felt that it was "the special education department's job to support" the regular education teachers since all teachers are "responsible for implementing an IEP."

At the mainstream school, comments regarding caseloads and responsibilities reflected more certainty about the roles of the staff, but also included less inclusive language. Like Ms. Anderson at the full inclusion school, Ms. Crawford at the mainstream school is also a half time assistant principal. Her other half time position is as a special educator. She noted that at the mainstream school the children with disabilities spend much of their time in a self-contained classroom that has a "smaller ratio, student to staff...and different instruction and curriculum." She did not express that there were any plans to change this set up.

Ms. Rivera demonstrated her sense of a clear cut delineation of responsibility for SWDs in many statements made during her interview. In this statement she is describing how SWDs are incorporated into school-wide activities.

You know they come to all the assemblies, they are out there for recess when my kids are out there...I think by having so many activities for special ed. students in the school and bringing them out to field day and all the assemblies, not leaving them out makes them feel like members and bringing them in when we do presentations and whatever...they can handle, fitting them in. I think the school does a good job with that (Ms. Rivera).

When talking about her own classroom she stated that “sometimes [SWDs] come in to observe.” She went on to say “I don’t have any of [the] cognitively disabled kids in my class, but Ms. Crawford brings some to the class when we do plays and observations and presentations.”

Although Mr. Thomas expressed that he has found some teachers in the school who do want to take any responsibility for children SWDs and are reluctant to have them in their classroom. He described his perception that there are some teachers in the school who will say “well I can’t do anything with those kids.” He noted that the most difficult thing for him in working with SWDs is trying to sort out the roles of the adults in the classroom. He described this type of situation in the following statement.

...you have to deal with the adults that come with the kids. So sometimes you almost have to educate the assistants. “Ok, this is what I want. This is where I want you. This is what you have to do.” You almost have to explain and

there are so many more adults in the classroom and each person has their own idea of how things should go and it's my classroom and I want it a certain way (Mr. Thomas).

Staff communication regarding planning for SWDs. Common to both the full inclusion school and the mainstream school, the teachers commented on how important communication and collaboration between the staff is to the overall success of integrating SWDs into the regular education setting. Ms. Anderson in the full inclusion setting said that “more people are trying to come up with a plan to meet the child’s needs, not necessarily through an IEP process, but just collaboration amongst themselves; there’s a lot of talking that goes on regarding that child’s needs.” Ms. Tawes noted that “[Clarke Elementary School] is a team setting so both the general teacher and the special educator [are] collaborating to do the adaptations and modifications.” An example of collaboration leading to planning and implementation was given by Ms. Tawes.

We devised a teaching structure here where in order to get the small groups, we have the [English as a Second Language] teacher, the special educator, the general educator, and the reading specialist all in the classrooms breaking up those groups and differentiating instruction and that helps every child no matter what (Ms. Tawes).

Ms. Stoll discussed what can happen when good communication and collaboration are not occurring.

negative side is ...when adults...involved in delivery of integrated services haven't always been on the same page and when that happens unfortunately

without leadership and without that understanding that's very important you can have disarray. Things can be unbalanced.

However, like her colleagues at the school, she noted that "if everything is good to go and everyone's working together it can be very nice."

Teachers at the mainstream school shared similar sentiments about the role of communication and collaboration in successful integration. Ms. Rivera stated that there has to be "a really good communication system." Ms. Rivera felt that "cons [of planning for mainstreaming] can be nullified if there's good communication or if you plan wisely."

Mr. Thomas explained a similar sentiment to that of Ms. Rivera's when talking about having many adults in the same classroom trying to deliver instruction.

Ms. Crawford's comments about collaboration and communication were slightly different. She spoke more about communicating with regular education teachers in order to give them a better understanding about the functioning of SWDs. Ms Crawford stated that "the staff is pretty tolerant" of having SWDs come into their classrooms. She went on to say that the staff "ask questions when they don't know and they accept our students in their classrooms."

Interactions and outcomes

In this section, teacher perceptions about the interactions between teachers and regular education students and SWDs and the perceived outcomes for teachers, regular education students and SWDs who have participated in integrated settings will be described. Teacher perceptions regarding interactions will be explained first

by each school. This will be followed by a description of perceived outcomes for each school.

Teachers at the full inclusion school reflected on two main topics in relation to interactions or the lack of interactions between teachers and regular education students and SWDs. They spoke about the experience of Emilio as the only SWD in his classroom and about how other students in the school interact with him. Although teachers did not necessarily identify Emilio by name, it was clear through the dialogue that they were referencing him and his experience in the school. There were a few general comments made, as well.

In speaking about interactions between SWDs and regular education students in the regular education classroom, Ms. Tawes explained that “for children who may be at a higher level of the [cognitive disability] spectrum, the social gaps get quite significant and they tend to get isolated in the classroom.” She noted that “there are advantages to being in the general ed. classroom”, but there may be “other piece[s]...missing in some classes.” Ms. Cook also echoed this reality saying that full inclusion can “end up being more isolating.” She explained this point further in the following statement.

I’ve seen both positive and negative interactions. I have seen tolerance on the part of some students, but on the other hand, sometimes they don’t know how to take aggressive acts. They don’t, sometimes know how to respond when they don’t understand the student and what happens sometimes is that there can be some ignoring because the communication can be that difficult (Ms. Cook).

Lending further weight to this point, Mr. Townsen stated that in the 4th and 5th grades children:

...become aware of differences among themselves as a result of interaction and also they learn how to interact with someone who isn't just like their friends or anyone else. It becomes sometimes difficult to manage and then you just have to problem solve (Mr. Townsen).

In this statement, Mr. Townsen's belief system about child development and the reality of interactions between SWDs and regular education students was revealed.

The isolation described above can carry over to the playground as well. Ms. Vargas pointed out that even on the playground SWDs aren't necessarily included in games. She explained this further saying:

...on the playground whenever the ball comes to the child with disabilities it came out of luck. [Regular education students] don't really play and say "it's time for you to kick or it's time for you to make a goal (Ms. Vargas).

Ms. Anderson also observed the same phenomenon on the playground saying that "depending on the severity of the disability [they] might not be asked to play with [the regular education students]."

Despite comments about the perception that full inclusion can be more isolating for SWDs, teachers at the full inclusion school also noted that with supervision by a teacher, SWDs and regular education students can be prompted to interact. Ms. Vargas said that "in the classroom it's different because there's a teacher or they're supervised by someone who is saying what to do; they can say 'now give him a chance to do something' or 'it's his turn.'" Ms. Anderson also noted

that in her PE class she mixes “them all in and everyone has an opportunity to work with everybody.”

At the mainstream school comments regarding interactions focused on both the spontaneous and facilitated interactions between regular education students and SWDs. Ms. Rivera commented that interactions between regular education students and SWDs are not always extensive, but “they acknowledge the [SWDs] like they would acknowledge anyone else, they’re a little more curious, like if someone got up and started walking around or if they needed special attention or if they’re speaking out in the classroom.” Ms. Monroe talked about a SWD who enjoys interacting with the regular education students in the following example:

One of my students loves to play with the [regular education] children, but they don’t understand that he can’t run, that he’s paralyzed on one side. But he loves to play with all the kids, he loves all of them (Ms. Monroe).

Ms. Crawford also talked about the interactions the SWDs have with other students in the school and the benefit to their self-esteem. She stated that the SWDs “can identify with people knowing their name and calling their names or some of the relationships they develop.” She felt that these relationships “increase their level of independence so they...may go outside their self-contained class [and]...go further down the hallway” because they feel they have “friends.”

Two teachers in particular commented on the work they do to help the regular education students have more appropriate and meaningful interactions with SWDs. Ms. Monroe said that on the playground “we try to spread out the kids.” Ms. Rivera

described a special program that was set up for regular education students to learn more about interacting with SWDs. She stated:

They got this training...and learned a lot about why some of the students are the way that they are. How does it feel if you're different? What are our needs as humans? Kind of knowing what's important in situations where you're caring for someone else...[Regular education students] show them colors and flashcards and go through things like that with them (Ms. Rivera).

Although the majority of the comments by the teachers at the mainstream school described positive interactions, Ms. Monroe did mention a negative situation that sometimes occurs.

Now the bad thing is when [SWDs] go in the class other students look at them or make fun of them. We try to talk to the students and let them know that [the SWDs] can't do the same things that they can do (Ms. Monroe).

Interestingly this comment stands in contrast to Ms. Rivera's perception that she has never "noticed any teasing." However, Ms. Rivera later stated that she saw "a student laugh at a child that was doing something and two students right away reprimanded that student."

In addition to describing the nuances of interactions between SWDs and others in the school, teachers shared what they felt were the integration outcomes for teachers, regular education students, and SWD. Three teachers, two at the full inclusion school and one at the mainstream school, acknowledged the difficulty of integration while noting the professional and personal rewards. Ms. Tawes said that "for teachers...it's important for them professionally, but sometimes a great

challenge.” Ms. Stoll said that being in the full inclusion setting has “been delightful and rendering” and that it is the “most meaningful part of teaching.” Ms. Rivera at the mainstream school said that it can be “challenging to the teacher because they [have to be] more creative”, but they “feel a sense of accomplishment that they are helping a different type of student and needs and it just brings diversity into the classroom.”

Numerous references to outcomes for SWDs were found in the teacher interviews. Almost all references were to social and behavioral outcomes for SWDs with only a couple vague references made about academic outcomes. Along with noting the social and behavioral outcomes, a few teachers also talked about the challenges of dealing with the behaviors of children with SWDs. At the full inclusion school, Ms. Tawes and Ms. Cook both mentioned aggressive acts and self-injurious behaviors committed by SWDs as difficult to handle in the regular education classroom. Ms. Tawes explained this in the following statement.

...there are behavior pieces, say for a child with autism, he’s got those self-injurious behaviors. Then that could be a challenge. It’s hard for the other children to see and it’s hard to pull them in socially. And with those with cognitive disabilities their behavior can be sometimes violent and you’ve got to look at whether it affects the class (Ms. Tawes).

However, they both also stated, along with several other teachers at the full inclusion school that behaviors can improve for SWDs. Ms. Cook said “I can definitely say that behavior-wise, behaviors improved when students were included.” Ms. Vargas said that SWDs “are copying the way that [regular education students]

behave, the way they respond...because they have the opportunity to follow the structure or types of behavior or rules that teachers try to impose on typical kids.”

References to social benefits were made by many of the teachers. These social benefits included social skills and communication skills. Ms. Anderson shared her belief that “if a [SWD’s] needs can be met in [the] setting [they] can get a lot out of that setting both academically and socially.” Ms. Cook highlighted an outcome more intrinsic to the SWD explaining that “from the student’s point of view, it’s nice to be accepted; positive feelings, self-worth.”

Similar to her colleagues at the full inclusion school, Ms. Tawes stated that “communication is the first thing that comes; I think that’s where they grow the most.” She continued on saying that SWDs “have some good models and gained some social skills and do well with communication.” However, she also highlighted the belief that “there’s a point at which for some children the gap begins to get very wide between what they are able to do and where they are developmentally.”

Although the outcomes mentioned by teachers at the full inclusion school focused primarily on social rather than behavior outcomes, the quality of the statements did not vary greatly from those mentioned by teachers at the mainstream school. Ms. Crawford stated that one outcome of mainstreaming is that SWDs “get out of their daily routine, same four walls...[and] can identify with people knowing their name.” She went on to say that “they feel that they’re part of the building not just seeing the one class with that one friend”. The SWD can say “I’m part of the whole school so I’m a member of the whole school community.” Ms. Monroe noted

the independence that mainstreaming gives SWDs. This can be seen in the following statement.

We try to make them independent, you know like going to the water fountain alone, going to the bathroom alone (Ms. Monroe).

Ms. Rivera, explained the many ways in which she feels SWDs benefit from mainstreaming.

I think that it's great to give [SWDs] the assimilation in the classroom because it teaches them social skills. It gives them experience working with other students and it also, if you differentiate, which you should do, gives them confidence that they can be part of the norm setting doing tasks that have been adjusted to fit their needs. So I think it helps their self-esteem, their social interaction, it helps them socially. In the long run I think it could improve any sort of academic, or whatever goals they have academically with that improved confidence and support (Ms. Rivera).

In addition to describing the outcomes for SWDs, teachers at both schools also discussed the outcomes that regular education students get by being in classrooms with SWDs. The outcomes that were described for regular education students centered on increased tolerance, experiences with people with disabilities, and understanding of people with disabilities. Also, noted was the idea that the regular education students learn how to be role models for others.

At the full inclusion school, three teachers discussed the importance of increased experiences as a way to increase regular education students understanding of people with disabilities. Ms. Stoll said that “typically developing children learn

when they acquaint themselves and become friends with a person with disabilities.” Ms. Cook expressed this same sentiment and explained further that it helps [regular education students] learn at an early age there are some difficulties that people begin to experience...and it’s going to be better for everyone if these people can be accepted to a high degree.” Mr. Townsend shared that regular education students “learn how to interact with someone who isn’t just like their friends.”

Teachers at the mainstream school also noted increased experience and understanding as an outcome for regular education students. This is best illustrated in the following statement made by Ms. Crawford.

General education students get to know and get an idea of what it’s like to be in their shoes, the special ed. children, and they’re not fearful so when they go out and become members in society they won’t have that ignorance attached to them. They’ll have had relationships with someone who’s had some kind of severe or profound disability (Ms. Crawford).

Increased tolerance and patience was a theme that emerged in the interviews at the full inclusion school. Ms. Cook stated that “from the regular students’ point of view it helps them to be [a] more accepting individual.” She said that she has seen “tolerance on the part of some students.” Ms. Anderson also discussed patience and tolerance in the following passage.

Kids are very impatient with one another and I think if you start them out early to be accepting of other people’s differences then when they get older, in high school and even later on in life, they’ll know that just because someone

doesn't talk the way you talk or act the way you act or can't add as well as you can add, that there's really no difference (Ms. Anderson).

This theme was not identified in the interviews completed at the mainstream school.

The idea of being a role model, though noted as one of the beneficial outcomes of integration for SWDs, was only mentioned by two teachers as a beneficial outcome for the regular education students as well. Ms. Stoll stated that "children are very aware quickly of the ways that they can be helpful." Mr. Townsen stated that a "pro is that it offers the time to be a role model that expands [regular education students'] world." Here Mr. Townsen and Ms. Stoll described the benefit of learning how to guide others.

Observations

Through the observations of the interactions between SWDs and teachers and students without disabilities the following research questions were addressed:

- 3) Is there a difference in the amount of interactions between regular education students and SWDs in the full inclusion and the mainstream school?
- 4) What are the proportions of the attempted interactions between SWDs and regular education students, other SWDs, general education teachers and special education teacher?
- 5) To what degree is there cooperation or reciprocity in the interactions that occur between SWDs and regular education students, regular education teachers, and special education teachers?

A description of the settings in which each observation took place will be provided for the reader in order to add context to the reported data. Next, the observation data will be presented by the research question to which it pertains. The use of the term setting in this section will refer to either the classroom or recess.

As stated in Chapter 3, a total of six observations were done for each SWD (three in the classroom and three during recess). Frequency counts were completed to tally the number of interactions and who initiated and reciprocated during the interaction. Both verbal and nonverbal responses were taken into consideration. Possible initiators and responders included regular education teacher, special education teacher, nondisabled student, or student with a disability. It is important to keep in mind that the number of students observed is quite small, including only one SWD at the full inclusion school and three SWDs at the mainstream school. Because of the small number of participants, it will also be important for the reader to refer back to the descriptions of the SWDs in Chapter 3 to review the characteristics of each child.

Averages and/or percentages were calculated for the data collected. Therefore, comparisons between the two schools, while interesting, are not statistically meaningful. In addition, generalizability is extremely limited given the small N and the imbalance between the numbers of participants at each school. Despite these issues, the data does have value in that it will help add more context to the interview data presented above. It will help the reader better understand the perspectives of the interviewed students and teachers and how they may have come to the attitudes and belief systems they expressed.

Description of the Setting and Activities Taking Place During Observations

A description of the setting and activities that took place during each observation for each child is integral to understanding the data collected (Bogdan & Biklen, 1992). Field notes were completed for each observation and included a description of the people, objects, places, events, activities, and conversations (see Chapter 3 for further description of each of these components). Appendix E contains the field notes for each observation completed. Each observation was given a number and those numbers correspond to the observation numbers in each table below. Numbers 1-3 refer to observations done in the classroom setting and numbers 4-6 refer to observations completed at recess. Readers are encouraged to refer to these field notes as they read through the observation data to help keep the context of the observation in mind.

In general, classroom observations are more structured and teacher directed, which leaves little time for interactions. Attempts for interaction by any student is more likely to go unreciprocated unless a teacher specifically instructed students to work together. Observations of interactions at recess time tend to be less structured and student directed as teachers tend to let the students play freely with little or no teacher direction. These generalizations held true for both schools. For more specific occurrences during specific observations refer to Appendix E. All observations took place during a 20-minute observation period.

Research Question Three

Research question three asked: Is there a difference in the amount of interactions between nondisabled students and SWDs in the full inclusion and the

mainstream school? In order to address this question, the number of interactions during each observation was tallied and averaged across the three observations in each setting for each child. The data in Table 2 and 3 illustrate the number of interactions that occurred during a 20-minute classroom and recess observation period, respectively.

This data reveals that students who were more verbal and were described as the most outgoing had higher numbers of interactions per observation. The file reviews indicated that Emilio, JB, and Blake were very outgoing and sought attention and interaction with others. Walt was described as being generally nonverbal and reluctant to engage with others. The number of interactions that SWDs engaged in seems to reflect this. Although Walt did not speak, he did make gestures to communicate nonverbally with others. While this did result in fewer interactions than his peers, he did attempt to communicate and often reciprocated when interactions were initiated with him.

Table 2

Total Number of Interactions During a 20-Minute Classroom Observation Period

Classroom Observation	Full Inclusion School		Mainstream School	
	Emilio	JB	Walt	Blake
1	13	15	8	6
2	7	10	1	15
3	38	17	4	16
Average	19.33	14	4.33	12.33

Table 3

Total Number of Interactions During a 20-Minute Recess Observation Period

Recess Observation	<u>Full Inclusion School</u>		<u>Mainstream School</u>		
	Emilio	JB	Walt	Blake	
4	4	6	2	10	
5	4	4	4	5	
6	17	8	3	2	
<u>Average</u>	8.33	10.11	3	5.67	

In addition to being affected by the characteristics of the SWD, the amount of interactions also seemed to be affected by the particular situation that was occurring when the observation took place. For example, during Observation 1, Emilio was in a general education classroom with no special educator present. During Observation 2, Emilio sat with his special education assistant and worked on a letter identification assignment that appeared to be familiar to him. During Observation 3, Emilio worked one-on-one with the special education assistant, Ms. Vargas, at his desk that was set up in the corner of the classroom and faced away from the regular education teacher and the nondisabled students. During Observation 3, the regular education teacher was heard discussing Emilio's disruptive behavior with the special education assistant. This may have prompted the special education assistant to be even more attentive to Emilio than usual.

At the mainstream school, JB, Walt, and Blake were always together whenever they attend a class in the mainstream. Therefore, they tended to interact with each other when they were not getting attention from the nondisabled students or

Table 4

Number of Interactions by Initiator in the Classroom Setting				
Observation	Full Inclusion			
	RT	ST	SWD	NS
Emilio				
1	10	0	3	0
2	0	3	4	0
3	0	29	7	0
Average	3.33	10.67	4.67	0
Mainstream School				
JB				
1	5	1	8	1
2	5	5	0	0
3	3	8	5	1
Average	4.33	4.67	4.33	.67
Walt				
1	0	0	1	7
2	1	0	0	0
3	2	2	0	0
Average	1	.67	.33	2.33
Blake				
1	4	1	1	0
2	7	6	2	0
3	3	10	3	0
Average	4.67	5.67	2	0
Average for Mainstream School	3.33	3.67	2.22	1

Note. RT – Regular Education Teacher, ST – Special Education Teacher, SD – Student with Moderate or Severe Disability, NS – Nondisabled student

other teachers. The three boys seemed to have a good rapport and played together when unattended by an adult.

Research Question Four

Research question four asked: What are the proportions of the initiated interactions between students with moderate and severe disabilities and students without disabilities, other SWDs, general education teachers or the special education teacher? The number of interactions initiated by SWDs, students without disabilities, and general and special education teachers with the target SWDs were counted for each observation. Presented in Table 4 is the number of interactions by each type of initiator and the average across the three observations in the classroom setting for each SWD.

In the classroom setting at both schools nondisabled students initiated the fewest interactions with the SWDs. One exception that stood out was during the first observation of Walt. In this observation, a nondisabled student was assigned to work with him on a letter identification project. It can be seen that in this instance the nondisabled student initiated seven interactions with Walt.

The SWDs at both schools initiated similar amounts of interactions, with the exception of Walt who tends to shy from interactions in general. Emilio had the most interactions initiated by the special education assistant who often is paired one-on-one with Emilio in the classroom. The one occasion (Observation #1) in which the regular education teacher initiated the most interactions with Emilio was in his PE class where there were two regular educators in the room and no special education teacher present.

Table 5

Number of Interactions by Initiator in the Recess Setting				
Observation	Full Inclusion			
	RT	ST	SWD	NS
Emilio				
4	0	1	2	1
5	1	0	2	1
6	1	1	9	6
Average	.67	.67	4.33	2.67
Mainstream School				
JB				
4	0	0	5	1
5	1	2	1	0
6	0	1	5	2
Average	.33	1	3.67	1
Walt				
4	0	2	0	0
5	0	2	1	1
6	0	1	1	1
Average	0	1.67	.67	.67
Blake				
4	5	1	2	2
5	1	1	1	2
6	0	1	0	1
Average	2	1	1	1.67
Average for Mainstream School	.78	1.22	1.78	1.11

Note. RT – Regular Education Teacher, ST – Special Education Teacher, SD – Student with Moderate or Severe Disability, NS – Nondisabled student

For the students at the mainstream school, there was very little disparity between the amount of interactions initiated by the regular and special education teachers. When looking at the average number of interactions by initiator in the classroom setting for Emilio at the full inclusion school, it can be seen that the special education teacher initiates the bulk of the interactions with Emilio. There were more equal numbers of initiated interactions between the regular and special education teacher at the mainstream school.

Presented in Table 5 is the number of interactions by each type of initiator and the average across the three observations in the recess setting for each SWD. In this table it is important to remember that the initiation of interaction by the target student is counted within the SWD column.

At recess, the SWDs at both schools interacted minimally with others regardless of the initiator as compared to the classroom setting. Emilio and JB both initiated more interactions than were initiated with them. From the field notes, it appears that Blake tried to evade recess time by engaging in some avoidance behaviors, such as not wanting to put on his coat to go outside and leaving the recess area to get a drink of water and not returning to the playground until another teacher escorted him back. These behaviors accounted for the majority of interactions he had at recess. In this setting Walt generally sat on the playground in one spot and watched the other children play. Therefore, he interacted minimally with others during recess. Emilio generally initiated more interactions with peers at recess.

Research Question Five

Research question five asked: To what degree is there cooperation or

Table 6

Number of Interactions by Reciprocator in the Classroom Setting							
Observation	Full Inclusion				TR	TI	TR/TI %
	Reciprocator						
	RT	ST	SWD	NS			
	Emilio						
1	1	0	7	2	10	13	76.9
2	0	4	3	0	7	7	100
3	0	9	25	0	34	38	89.5
Average	.33	4.33	11.67	.67	17	19.33	87.9
	Mainstream						
	JB						
1	0	0	9	0	9	15	60
2	0	0	4	0	4	10	40
3	2	1	8	0	11	17	64.7
Average	.67	.33	7	0	8	14	57.1
	Walt						
1	0	0	5	1	6	8	75
2	0	0	0	0	0	1	0
3	0	0	3	0	3	4	75
Average	0	0	2.67	.33	3	4.33	69.3
	Blake						
1	1	0	4	0	5	6	83.3
2	0	2	8	2	12	15	80
3	0	1	12	0	13	16	81.3
Average	.33	1	8	.67	10	12.33	81.1

Note. RT – Regular Education Teacher, ST – Special Education Teacher, SD – Student with Moderate or Severe Disability, NS – Nondisabled students, TR – Total Reciprocity, TI – Total Interactions

reciprocity in the interactions that occur between SWDs and students without disabilities, regular education teachers, and special education teachers? Presented in Table 6 is data regarding whether or not there was an exchange between the SWD and students without disabilities, regular education teachers and special education teachers. Reciprocity occurred only if the initiator got a response from the intended recipient of the communication. The total number of interactions will be presented for comparison since not all initiated interactions were reciprocated. In the following two tables it is important to remember that reciprocation by the target SWD is reflected in the SWD column.

The SWDs at both schools were most often the recipients of initiated interactions in the classroom setting. This makes sense given that in the classroom, students are generally expected to listen to the teacher and receive instruction. Emilio had the highest number of reciprocated interactions. Given that he spent two out of three classroom interactions in a one-to-one situation, it makes sense that the majority of the interactions would be reciprocated. For Walt, the trend that has emerged in the previous tables continued in that reciprocation is low due to his reluctance to engage with others.

When looking at JB, he tended to be the reciprocator of interactions in the classroom setting, but others did not seem to reciprocate his initiated interactions as readily. This phenomenon contributed to the relatively low percentage of reciprocated interactions for him. The file review indicated that JB is a social child who often seeks out interactions with others. One explanation could be that in this setting, JB was expected to do his work and therefore off topic interactions initiated

Table 7

Number of Interactions by Reciprocator in the Recess Setting							
Observation	Full Inclusion				TR	TI	TR/TI %
	Reciprocator						
	RT	ST	SWD	NS			
	Emilio						
4	1	0	2	0	3	4	75
5	1	0	2	1	4	4	100
6	0	0	7	9	16	17	94.1
Average	.67	0	3.67	3.33	7.67	8.33	92
	Mainstream						
	JB						
4	2	0	2	2	6	6	100
5	1	0	1	0	2	4	50
6	2	0	2	3	7	8	87.5
Average	1.67	0	1.67	1.67	5	6	83.3
	Walt						
4	0	0	1	0	1	2	50
5	0	0	2	0	2	4	50
6	0	0	0	1	1	3	33.3
Average	0	0	1	.33	1.67	3	55.7
	Blake						
4	1	0	7	1	9	10	90
5	1	0	3	0	4	5	80
6	0	0	1	0	1	2	50
Average	1.67	0	3.67	.33	4.67	5.67	82.4

Note. RT – Regular Education Teacher, ST – Special Education Teacher, SD – Student with Moderate or Severe Disability, NS – Nondisabled students, TR – Total Reciprocity, TI – Total Interactions

by JB were not reciprocated by the teachers.

As with initiated interactions, the number of recipients went down considerable at recess. However, the percentage of reciprocated interactions went up for all the students except Walt in the recess setting. In other words, although there were fewer interactions, they were reciprocated at a higher rate than in the classroom setting for Emilio, JB, and Blake. Also like the classroom setting, Emilio had the highest percentage of reciprocated interactions of all the SWDs.

JB had the biggest difference in reciprocated interactions from the classroom to recess. In the classroom reciprocity occurred at an average rate of 57.1%. At recess, reciprocity occurred at an average rate of 83.3%. Possibly, people responded to JB more often at recess since there was no set curriculum that had to be followed, thus eliminating the need to keep him focused on a particular task.

Interestingly, at recess the special education teachers at both schools were not recipients of interactions. This could mean that either they did not respond to the SWDs when they initiated an interaction with them or they were never the intended target of an interaction during recess.

CHAPTER 5

Discussion

The goal of the current study was to investigate the perspectives of regular and special education teachers and nondisabled students regarding the integration of SWDs into the regular education setting, understand the impact of a school's philosophy regarding the education of SWDs and a SWD's personal characteristics on the implementation of integration practices, and observe the interactions that take place between SWDs and teachers and nondisabled students. A review of files, interviews, and observations were conducted to address the aforementioned goals. An analysis of the collected data was performed which yielded several interesting findings pertaining to the following research questions.

- 1) What are the attitudes and beliefs expressed by the students at each school setting regarding SWDs? Are there differences in attitudes among these two groups of students?
- 2) What are the attitudes and beliefs expressed by the teachers at each school setting toward the integration model that their school follows? Are there differences in attitudes among these two groups of teachers?
- 3) Is there a difference in the amount of interactions between regular education students and SWDs in the full inclusion and the mainstream school?
- 4) What are the proportions of the attempted interactions between SWDs and regular education students, other SWDs, general education teachers and special education teacher?

- 5) To what degree is there cooperation or reciprocity in the interactions that occur between SWDs and regular education students, regular education teachers, and special education teachers?

The first two research questions were addressed through the interviews with the students and teachers, respectively, and will be presented that way. The final three were addressed through the observation data and will be discussed together in a section on the observation data. This will be followed by a discussion of general implications of the findings, the limitations of the study, and future directions for research on this topic.

Research Question One

The first research question asked:

What are the attitudes and beliefs expressed by the students at each school setting regarding SWDs? Are there differences in attitudes among these two groups of students?

There were four themes that emerged across both school settings in the student interviews that were pertinent to understanding the students' attitudes and beliefs about the SWDs in their classes. These four themes were: (1) perceived responsibility for students with disabilities, (2) defining and understanding students with moderate and severe disabilities, (3) interactions between students with and without disabilities, and (4) impact on and outcomes for students with and without disabilities. The mainstream and full inclusion students' attitudes and beliefs regarding these four main themes both converged and diverged at times.

Perceived Responsibility for Students with Disabilities

Despite the school setting, full inclusion or mainstream, the regular education students viewed the SWDs as part of a separate cohort from themselves. In both schools, this was evidenced by their use of pronouns such as “ours” and “theirs” and references to the teachers responsible for each group of students. While the regular education students at each school were similar in their views of the SWDs, this did not seem to logically follow the stated philosophy of the full inclusion school. The regular education students at the full inclusion school responded to the SWD, Emilio, in their class as if he was part of a separate cohort, even though he was within the same classroom as the regular education students and described by the staff as being part of that classroom.

The reality, however, was that Emilio did not participate in many of the classroom activities with the other students and the regular education teacher, Mr. Townsen. “Shared responsibility,” an important part of inclusive education (Van Dyke, 1995) for Emilio by the teachers was not conveyed to the students. Rather, Emilio sat at a desk in the corner of the room facing the wall and worked with the special education assistant, Ms. Vargas, on a separate curriculum. The most classroom interaction with regular education students occurred during PE with Ms. Anderson when Ms. Vargas was not present.

This difficulty in maintaining an inclusive environment over time is highlighted in a longitudinal case study conducted by Kugelmass (2006). She remarked that collective activities by the staff are necessary in developing and

maintaining practices that support inclusive programming. In this school, the special education assistant had assumed primary responsibility for Emilio.

At the mainstream school, given the philosophy of the school, the SWDs did have other teachers in a separate classroom who were responsible for them and their education during part of their day. Therefore, it seemed more in keeping with the school philosophy that the regular education students would view the SWDs as a separate cohort.

Although Gerson's (1995) study took place in a middle school, she also found that regular education students in the mainstream school often perceived SWDs as visitors to the regular education classroom. In contrast, she did not find this to be the case at the full inclusion school she studied. One explanation may be that the staff at the full inclusion school in the present study passed on a different message about the responsibility of Emilio through the way in which he was educated day to day than the message sent by the staff at the full inclusion school in Gerson's study about the responsibility of SWDs. This topic will be further discussed in the section pertaining to research question two.

Defining and Understanding Students with Moderate and Severe Disabilities

This theme was broken down into three key components: (1) definition, (2) concerns regarding schooling for SWDs, and (3) perceptions of behavior. The following is a discussion of the findings for each of the key components that emerged during the analysis of this theme.

Definition. Students at both schools generally defined "mental retardation" in a similar fashion. The definitions given by the students contained two parts, a

reference to sub-average cognitive abilities and a reference to difficulties performing tasks. Other than these two qualities many of the interviewed students stated that the SWDs were just like “regular” or “normal” people. This was very consistent across both school settings and in line with the findings of Conant and Budoff (1983) and Magiati et al. (2002) who stated that primary school students do have an awareness of mental retardation even if encounters with people with mental retardation are by chance and/or unstructured.

Concerns Regarding Schooling for SWDs. The regular education students at the full inclusion and mainstream schools differed in their attitudes and beliefs on this component. Students at the full inclusion school shared concerns that SWDs would not be able to attend another school if they were not able to stay at Clarke Elementary School. The students did not realize that all students are entitled to an education, even those with moderate and severe disabilities. Research indicates that teachers are the best models for shaping the beliefs and attitudes of regular education students in regard to their peers with disabilities (Salisbury, Gallucci, Palombaro, & Peck, 1995). Therefore, students may not have been given guidance or factual information regarding the education of students with disabilities. Concern regarding the education of SWDs was not voiced by the interviewed students at the mainstream school. While it would be far-reaching to assume that the students at the mainstream school understood that SWDs were entitled to an education, the regular education students at the full inclusion school clearly had a limited understanding of the education of SWDs, something not revealed in the comments made by the students at the mainstream school.

At the mainstream school three students commented that having the SWDs in their school taught them how to help and learn from people with moderate and severe disabilities. Van Dyke et al. (1995) commented that “peer assistance and support can help nondisabled students build and maintain relationships with their disabled peers” (p. 478). This attitude was not expressed as predominantly by the students interviewed at the full inclusion school.

Perceptions of Behaviors. Students at both school settings drew from personal experiences with the SWDs in their classes when discussing their perceptions about their behaviors. The comments made by the regular education students at both schools were characterized by a notion that the SWDs did not engage in goal-directed behavior and that they generally needed a teacher to help them comply with school rules and classroom norms. These statements are juxtaposed with the definitions that students gave in which they stated that aside from low cognitive abilities and difficulties with certain tasks people with moderate and severe disabilities are just like “normal” people. Regardless of their experiences with the SWDs, the regular education students may not have truly understood the thoughts and feelings of the SWDs and were just reluctant to label SWDs as different from themselves. It is known that typically developing children can provide many details regarding the state of mental retardation by age 10 or 11-years-old (Magiati et al., 2002). However, teachers should aid children in extending their understanding and knowledge of disabilities to form more accurate representations (Magiati et al., 2002; Van Dyke et al. 1995).

Interactions Between Students With and Without Disabilities

This theme emerged from the descriptions the students shared regarding their interactions with the SWDs in their school. At the full inclusion school students described very little interaction with Emilio. From their comments, it seemed as though there was little encouragement from the teachers to interact with him. The students referred to Ms. Vargas, stating that she worked with Emilio while they worked with Mr. Townsen. This was also supported by the observation data collected. That data revealed that the majority of interactions that Emilio had in the classroom were with Ms. Vargas. This point will be discussed more in depth later in this chapter. One student did note that she worked with Emilio sometimes when paired with him during PE.

At the mainstream school, the regular education students described relatively more in depth interactions with the SWDs. The interactions mentioned by the students tended to take place during unstructured times, though not exclusively, and interactions were described as being both self-directed and teacher directed. Some students also described empathy for the SWDs when no one played with them, noting the SWDs are “lonely” and just want to play like everyone else. Van Dyke, Stallings, and Colley (1995) emphasized the importance of modeling by teachers and teacher-directed interactions for promoting interactions between regular education students and SWDs as this can help regular education students improve their ability to work with and develop an understanding of people with disabilities. These findings help to support the findings of other researchers that assert that integration is most

successful when actively promoted by those working with students in the integrated setting (Jordan et al., 1997; Van Dyke et al., 1995).

Impact On and Outcomes for Students With and Without Disabilities.

Three distinct areas of impact and outcomes emerged during the student interviews at both the full inclusion and mainstream school. The students indicated that (1) exposure to SWDs helps to give regular education students a clearer picture of what having a moderate or severe disability looks like; (2) integrating SWDs into the regular education setting helps to increase the self-esteem of the regular education students and the feeling that they helped out a SWD; and (3) SWDs in integrated settings learn valuable social and academic skills. An interesting finding in this theme was that the interviewed students at both schools made more references to outcomes for regular education students than for SWDs. The increased focus on outcomes for regular education students by these students was unexpected and was not found to be a point highlighted by previous researchers. However, the types of outcomes for regular education students and SWDs described during the interviews are generally consistent with those described by regular education students in the study conducted by Staub et al. (1996).

Research Question 2

The second research question asked:

What are the attitudes and beliefs expressed by the teachers at each school setting toward the integration model that their school follows? Are there differences in attitudes among these two groups of teachers?

Five themes surfaced across both school settings in the teacher interviews. These five themes were: (1) terminology used to describe regular education students and SWDs, (2) personal and perceived school philosophy, (3) student and teacher qualities perceived to effect integration, (4) programming, and (5) interactions and outcomes. Within these five overarching themes the teachers at the full inclusion school and the mainstream school differed in their views and opinions on more points than they were similar. As it will become clear through the following discussion, these differences were not simply based on the differing publicly articulated philosophies that the schools held regarding the education of SWDs, rather the impetus for the differences seemed to be more related to the communication and collaboration style and the leadership structure of each school and how consistent the staff were regarding their belief systems and understanding of the school philosophy. The discussion of findings from the teacher interviews is organized by the five aforementioned themes.

Terminology Used to Describe Regular Education Students and SWDs

While most of the teachers interviewed did not display any difficulties in finding precise language to describe the regular education students and the SWDs, three teachers (one at the full inclusion school and two at the mainstream school) did find themselves searching for the right descriptive language. The teacher at the full inclusion school had the most difficulty finding the words to describe Emilio. At the mainstream school the two teachers had difficulty finding the words to describe the regular education students. While this was a minor theme that emerged in the interview data, it helps to illustrate the need for all staff in a school, particularly in a

full inclusion setting, to communicate and find consensus in their approach to the students in the school. Improved communication and collaboration is continually sighted as a major element in the successful implementation of integration (Hammond & Ingalls, 2003; Van Dyke, et al., 1995)

Personal and Perceived School Philosophy

Teachers at both schools were asked about their level of agreement with the philosophy of the school in which they taught. Teachers generally talked about the implementation of integration at their school and the changes that they would make to the way in which the school's philosophy was implemented. Discussing the schools philosophy and the changes they would make helped give insight into the beliefs of the teachers regarding the education of SWDs.

The most interesting finding within this theme was that teachers at the full inclusion school, though reporting that they agreed with the philosophy of the school, tended to discuss changes they would make that would alter the philosophy of the school (i.e. better vet the SWDs coming into the school to make sure they would "fit into" full inclusion). Many of the teachers at the full inclusion school talked about full inclusion being great if the child's needs could be met. In other words, teachers suggested ideas that would screen certain child out (e.g. to another classroom or setting), but not change what they were doing in the full inclusions settings to meet the needs of all children.

At the mainstream school teachers also agreed with the philosophy of the school and suggested some changes, but these changes had more to do with changing the program, logistics of the classroom, and the staffing rather than the type of child

who comes into the program. Suggestions made were to change the location of the self-contained classroom, start students' participation in the general education setting at an earlier age, and transfer staff out who did not want to accommodate SWD in regular education classrooms.

The difference in the sentiments of the teachers at each school was very pronounced in the interview data. However, the reason for this difference is unclear. Research does support the idea that the more efficacious a teacher feels about inclusion and the more training they have had, the more willing they are to include students with disabilities (Hammond & Ingalls, 2003; Jobe, Rust, & Brissie, 1996; Stoler, 1992). At the full inclusion school, anecdotal information suggests that they have had little to no all-staff training over the years specifically in implementing full inclusion. While the burden to plan for the SWDs' time in the regular education classroom falls to the special education teacher, the philosophy of the school suggests that the regular educators are also responsible for the students. At the mainstream school special educators in the school carry the weight of the responsibility for the SWDs and do all of the planning for the short time the SWDs spend in the regular education setting.

Student and Teacher Qualities Perceived to Effect Integration

Teachers at both the full inclusion school and mainstream school talked about three main categories of student qualities that they felt most affected students in their respective setting. The three categories that emerged were: types of disabilities, behavior, and the age/grade of the student. Although teachers at both school made comments that fit into these categories, the quality of those comments were different.

At the full inclusion school four teachers spoke about types of disabilities that fit best in an inclusion model. However, there was little agreement about exactly which types of disabilities work best. Two teachers noted that physical disabilities were the easiest to accommodate in full inclusion settings. One teacher felt that students who were “very bright”, but have behavior problems were best suited. Not surprising, the PE teacher felt that students with “academic disabilities” were fine as long as they had good gross motor skills. Another teacher commented that SWDs were best suited for full inclusion as long as they did not have significant emotional concerns. Although this study did not specifically address teacher perspectives on the education of SWDs and how that relates to the delivery of services to this population, the comments of these teachers relate to the findings of Jordan et al. (1997) in their study of teacher beliefs and their influence on teaching practices. They found that teachers with a pathognomonic perspective believe that disabilities are inherent in the child and therefore these teachers feel less efficacious in teaching children with disabilities. In contrast teachers with an interventionist perspective attributed difficulties in learning to a mismatch between the child and the environment and was more persistent in helping the children learn. Jordan et al. concluded that teacher beliefs can influence the educational effectiveness of an integrated setting.

Three teachers commented on the effects of the age/grade of the SWD and behavioral issues. All three teachers agreed that disruptive behaviors are hard to manage in the regular education setting, impact the learning of other students, and can make regular education students not want to interact with the SWDs. In regard to the age/grade of the student they all noted that as SWDs move toward 4th and 5th grade

including them into the daily activities of the classroom becomes particularly challenging due to the increased academic demands of the classroom. All the teachers all cited the difficulty in adapting the curriculum for SWDs as they get older.

At the mainstream school teachers talked less about the types of disabilities best served in a mainstream setting and spoke more about getting to know SWDs better so that the teachers could be more responsive to the students. One teacher discussed a special program set up for a selected group of regular education students. This special program trained a few teacher-selected regular education students to work with SWDs more closely in the regular education setting. Only one teacher discussed the impact of the age/grade of SWDs. She stated that it would be better to begin mainstreaming SWDs as soon as possible to help them gain more skills that they can use in the regular education setting.

Teachers at the full inclusion school had differing ideas about the type of student that fits best in the full inclusion setting. However, those who discussed behavioral issues all agreed that students with behavioral issues are the hardest to include in the regular education setting. Three teachers also agreed that including SWDs in the upper elementary school grades gets very challenging. None of the six teachers interviewed at the school brought up the idea that a full inclusion setting should be flexible enough to accommodate any student's needs. At the mainstream school the teachers discussed the types of disabilities of SWDs in the context of getting to know the students better to provide more responsive services.

While many definitions for inclusion can be found in the literature (McLaughlin, et al., 1996), the full inclusion schools own stated philosophy and

stated current practice is to include SWDs in the regular education setting for all of their day. However, the comments by the teachers seemed to be in conflict with this philosophy. From the comments made by the teachers at the full inclusion school, it seems that their beliefs about full inclusion may not be inline with the original mission of the school. Teachers at the mainstream school made few comments regarding what type of students they feel fit into the mainstream setting and, as evidenced by the special program set up for the regular education students, seem to be proactive in helping the SWDs fit into the regular education classrooms regardless of their disability. As stated by Hornby (1996), “teachers’ beliefs and attitudes are critical in ensuring the success of inclusive practices” since their commitment to the practice of inclusion is essential to it being implemented with integrity (p. 155).

Teacher qualities that foster integration were discussed by two teachers at both the full inclusion and the mainstream school. At the full inclusion school, the two teachers commented that sometimes new teachers have difficulty walking into a full inclusion model and teaching. They noted that when new teachers accept a job to work at Clarke Elementary School they should know what they are getting into. Neither teacher discussed the provision of training for new teachers coming into the full inclusion model at Clarke Elementary School. Even if new teachers stay at Clarke Elementary School they may be confused about the philosophy of the school and how to implement IEPs for SWDs. This could be seen in some of Ms. Cole’s comments regarding her experiences at the school. Research shows that in order to effectively implement an inclusion model, training and inservice support must be

ongoing for teachers (Bilken & Taylor, 1985; Forlin, 2001; Villa, Thousand & Chapple, 1996). Training may also help with retention of new teachers at the school.

At the mainstream school, Mr. Thomas talked about the attitude of teachers in fostering an inclusive environment, while Ms. Rivera talked about the special training that she perceived special educators needed to work with SWDs, despite having SWDs in her classroom at times. Mr. Thomas was very clear in stating that teachers who are not willing or who feel they “can’t do anything” with SWDs should not be in a mainstream environment. This finding relates back to the Jordan et al (1996) study that concluded that teacher beliefs impact the effectiveness of integrated education. However, there is also research that states that although a teacher’s view of integration may be negative, it does not necessarily mean that they will not be able to provide an adequate education to children in integrated settings (Jamieson, 1984).

In Ms. Rivera’s statements, it can be seen that she has delineated specific training a special education teacher has that regular education teachers do not possess. While this may be factually true in terms of the type of inservice training and teacher preparation each type of teacher gets, in a mainstream setting any teacher may find themselves in a position where they have to work with a SWD, even if briefly. In fact, Ms. Rivera does have SWDs in her classroom at times and facilitates her own students working with SWDs through the special training program for regular education students that she highlighted. Her comments regarding training speak both to efficacy of working with SWDs and the responsibility for SWDs in the school, two issues that are significant in the implementation of integrated programming for SWDs (Van Dyke, et al., 1995).

Programming Issues

Programming issues refers to the practical issues that the interviewed teachers talked about in regard to the implementation of a full inclusion and mainstream program. The issues they discussed fell into four subcategories: delivery of instruction, IEP adherence, caseload concerns, and staff communication regarding planning for SWDs.

Teachers at the full inclusion school and mainstream school did not differ in their discussion of delivery of instruction. Teachers at both schools discussed the need to modify instruction for SWDs. It was noted that at times SWDs and regular education students may be working on very different assignments. Having a well-structured plan for implementation of the lesson was also highlighted. Organization and differentiation of instruction are key elements of a successfully integrated setting (Scheffel, Kallam, Smith, & Hoernicke 1996).

IEP adherence was not a theme that emerged in the interviews conducted at the mainstream school. It was, however, a theme cited in the interviews done at the full inclusion school. Two teachers at the full inclusion school discussed their concerns regarding the ethical dilemma of trying to meet the requirements of an IEP in a setting that may not easily allow for the provision of certain services. For example, one teacher noted the difficulty in providing life-skills training to SWDs in a regular education setting. The issue of meeting all the needs of SWDs in full inclusion settings is one that is receiving some attention in the research. Hornby (1999), in a critical article regarding the full inclusion of all students with disabilities, highlights his concern regarding a “one size fits all” approach to special education.

He lamented the wholesale implementation of full inclusion arguing that it does not take into consideration the individual needs of a student. Other writers have also made this same argument regarding the full inclusion model and suggest that students be included as fully as possible, but not at the expense of meeting their individual needs (Fuchs & Fuchs, 1995; Shanker, 1995).

Teachers at the full inclusion and mainstream schools commented on whose caseload special education students fell. In other words, the teachers discussed issues about educational responsibility for SWDs. At the full inclusion school there tended to be some uncertainty about who had responsibility for the special education students. One regular education teacher talked about wanting more responsibility for the SWD in his class, while a special educator talked about being there to support regular education teachers who are also responsible for implementing IEPs. Another teacher talked about the shared responsibility for all students in the school. At the mainstream school, the regular and special education teachers were all very clear that the SWDs were the responsibility of the special education teacher. The special education and regular education teacher each have their own classrooms with their own students. Each does the planning for their students. The two regular education teachers at the mainstream school also talked about the SWDs coming into *their* classroom to participate in activities.

The contrast between the two schools regarding the responsibility for the SWDs may be due in part to differing educational philosophies regarding the education of SWDs. At the full inclusion school, the lines are more blurred with regard to who is educating the SWDs and who actually has responsibility for the

students. While each teacher described how they saw the role of the special education and regular education teachers, no two teachers described the roles and responsibilities in the same way. According to Van Dyke et al. (1996), shared responsibility for the SWDs and shared responsibility for IEPs are key factors in implementing a successful full inclusion program. Conversely, the teachers at the mainstream school were very clear on who has responsibility for the SWDs. This may also be dictated by the school philosophy which implies that the SWDs “push in” to the mainstream for part of their day, but return to their own classroom for content area lessons.

At both schools the teachers commented on the importance of communication and collaboration between staff members in implementing a successful integration program. All stated that this was integral to in meeting the needs of the SWDs. This key factor is also cited in the research as imperative to a successful integration plan (Bauwens & Houreade, 1996; Van Dyke, et al., 1996).

Interactions and Outcomes

Interviewed teachers at both schools described their perceptions of the interactions and outcomes for staff, regular education students and SWDs in integrated settings. It was found that at the full inclusion school, teachers felt that full inclusion can be potentially more isolating for SWDs, especially in the upper elementary grades, due to the widening gap in academics and social skills between SWDs and regular education students. This gap is magnified if there is only one SWD in the classroom. Many of the teachers referenced Emilio by name or inferred that he was who they were speaking of. This type of negative outcome for SWDs is

one concern that researchers like Fuchs and Fuchs (1995) and Hornby (1999) echo in their criticism of blanket implementation of full inclusion programming. Despite noting the isolation that can happen for SWDs in full inclusion settings, the teachers at Clarke Elementary School pointed out that it can be ameliorated through teacher intervention and supervision of interactions with the regular education students. The belief that supervising the interactions between regular and special education students can lead to improved relations between the students is supported in the research (Conant & Budoff, 1983; Van Dyke et al., 1996).

At the mainstream school, a major finding was that teachers perceived that SWDs like to interact with regular education students, leading to an increase in their confidence and their self-esteem. Another finding that the teachers expressed was that they actively encourage and supervise the interactions between regular education students and SWDs. Teachers gave examples of formal ways they encourage positive interactions (e.g. special training program of regular education students to work with SWDs) and informal ways of encouraging positive interactions (e.g. asking regular education students to play with SWDs and recess and intervening when regular education students tease or make fun of SWDs). Again, supervised interactions are essential to teaching regular education students and SWDs how to interact positively (Van Dyke, et al., 1996).

Teacher outcomes were described similarly at the full inclusion and mainstream school and were positive. A general theme included the perception that implementing integration programs was challenging, but meaningful. There was also a theme of professional growth and an opportunity to use different skills. These

interviewed teachers were positive regarding their work in an integrated setting. Other research on teacher perceptions of integrated settings noted that despite having the resources to implement inclusion programs teachers still reported negative feelings about the idea (Hammond & Ingalls, 2003) and those teachers with more inservice training were more likely to feel positive about inclusion (Jobe, et al., 1996; Stoler, 1992). Although the amount of experience in the field of education was assessed for each of the interviewed teachers, the exact amount of training regarding integration was not. Therefore, it is difficult to interpret why the interviewed teachers reported positive feelings toward integration. One explanation could be that they gave answers to the interviewer that they felt were most socially acceptable.

The last finding in the interactions and outcomes theme centered on the social and behavioral outcomes that teachers felt the SWDs exhibited due to being educated in an integrated settings. The outcomes noted by the teachers at both schools were similar in nature. Outcomes included better behavior, social skills, communication skills, and independence. The positive outcomes perceived by the interviewed teachers are consistent with the research on social and behavioral outcomes of SWDs in integrated settings (Fisher & Meyer, 2002; Freeman & Alkin, 2000).

Observations of Interactions

In this section the observation data, which addressed the final three research questions, will be discussed. The final three research questions essentially addressed the amount of interactions between SWDs and regular education students, compared the amount of interactions between SWDs and regular education students and teachers and assessed the amount of reciprocity in the interactions between SWDs

and students and teachers, respectively. The discussion below is organized by the aforementioned three areas.

Interactions Between SWDs and Regular Education Students

Because of the difference in the number of SWDs compared at each of the two school settings and the relatively small number of observations completed (three in the classroom and three at recess per student) a direct comparison of the amount of interactions between SWDs and regular education students at the two school settings can't be made. However, several interesting findings did emerge when looking informally at the number of interactions in conjunction with the descriptions of what was happening during the observations. Two factors in particular appeared to impact the amount of interactions that took place during the observation period. These two factors were the verbal skills and other personal characteristics of the SWDs and the circumstances occurring in the setting during the observation.

The personal characteristics of the SWDs being observed appeared to have an impact on the number of interactions that occurred within an observation period. For example the SWD with the lowest amount of interactions was Walt who, according to the file review, is nonverbal and shies from interacting with others. This is not a finding that seems to be widely discussed in the literature, as there is a paucity of data discussing the impact of the personalities of SWDs on their social interactions. On a related topic, Gresham (1983) discussed the importance of social skills on the success of a mainstream placement for children with disabilities. In an article about inclusive policies authored by Roach, Salisbury, and McGregor (2002), six content areas were delineated in their policy framework to guide policy implementation and the "actual

practices of teachers, administrators, and policymakers” (p. 452). These six areas were curriculum, assessment, accountability, personnel training and development, funding, and governance. While all of these factors are very important to the implementation of inclusive practices for children with disabilities, they did not make mention of the impact of the characteristics of the child with disabilities being educated in the regular education setting on the success of that placement.

Another factor impacting the amount of interaction was the particular circumstances happening during the observation period. This was an important factor for all the SWDs observed. In the case of Emilio this was important because the circumstances significantly varied in all three classroom observation. Emilio engaged in the highest number of interactions when he was sitting with his special education assistant in a one-to-one situation learning a new lesson. The implication of this is that despite being in a regular education setting, the variability in the amount of interactions Emilio engaged in was most impacted by his contact with the special education assistant. As pointed out by Van Dyke, et al. (1995) “inclusion does not mean that a child never receives separate instruction in skills or functional routines”. However, for Emilio, *his* desk in the regular education classroom was set up in the corner of the room facing the wall where he received the majority of his instruction. So, although he was physically in the regular education classroom for the majority of his instructional time, he was essentially receiving “pull out” instruction. This seems to be in contradiction to recommendations within the literature for shared responsibility and the co-teaching of SWDs (Bouwens & Houreade, 1996; Van Dyke,

et al., 1995). This also seems to be in contrast with the stated philosophy of the full inclusion school, something that will be further discussed later in this chapter.

In the mainstream school the three SWDs sat together during their time in the regular education classroom and, thus, interacted together when they were not receiving attention from the teachers and other students. These students interacted with each other when they were not being engaged by the other people in the classroom or when their attempts to engage others were not reciprocated. This was in contrast to the experience of Emilio who was not in classes with peers with moderate and severe disabilities. Although it has been shown that SWDs do experience isolation from their regular education peers in free play settings, such as lunch and recess (Kemp & Carter, 2002), this effect was not directly measured in the present study and therefore impossible to determine the effect of having moderate and severely disabled peers to interact with in the regular education setting on the experience of all SWDs in the present study.

Amount of Interaction Between SWDs and Regular Education Students and Teachers

Interactions in the classroom and at recess will be discussed separately as the expectations of students are different in each setting. Intuitively it makes sense that in the classroom setting the majority of the interactions that the SWDs were engaged in were with the teachers (regular and/or special education) and at recess with other students (regular education or SWDs). One exception to this was when a regular education student was assigned to work with Walt during class time. This, of course, increased the number of interactions that Walt had with a regular education student during this particular observation.

The average number of interactions per initiator that Emilio had during the three classroom observations and the average number of interactions for all three students combined per initiator at the mainstream school were analyzed. In general, Emilio had the most interactions initiated by the special education teacher. At the mainstream school the average number of interactions the three students combined had with the regular education teacher and special education teacher was roughly equal.

Based on these limited observations, the students in the mainstream setting seem to have more interactions with regular education teachers than Emilio did in the full inclusion program. It could be surmised that at the mainstream school there is possibly more of a shared responsibility for the special education students when they are present in the mainstream classrooms. This would be in keeping with the recommendations for working with SWDs in integrated classrooms that both the regular education and special education teachers share the responsibility for instruction (Bouwens & Houreade, 1996; Van Dyke, et al., 1995). However, this assertion of shared responsibility, though promising, is difficult to make definitively given that the quality of those interactions with the regular and special education teachers was not assessed in the present study. In thinking about this finding it is important to remember that the definition for inclusion can vary widely given that there is no national standard for the practical implementation of such programming (Cook, 2002; McLaughlin, Warren, & Schofield, 1996; Salisbury, 2006).

At recess there were fewer interactions that occurred in comparison to the number of interactions that occurred in the classroom. When interactions did occur at

recess SWDs tended to be the initiator. This difference may be related to the fact that recess time is more unstructured (Kemp & Carter, 2002). Gerson (1995) also found that the number of interactions that SWDs engage in during unstructured periods (i.e. lunch and recess) is lower than that of structured periods (i.e. class time).

Of interest is that the data revealed that Emilio initiated more interactions on average than the average number of interactions initiated by the SWDs at the mainstream school. Although studies on the interactions between regular education students and students with disabilities have been conducted during both unstructured times (Gerson, 1995; Kemp & Carter, 2002) and structured times (Butler & Hodge, 2004; Gerson, 1995), no studies could be identified that specifically considered the initiator of the interaction. One possible explanation for the greater number of interactions initiated by Emilio during recess is that being the only SWD at the school he learned to initiate interactions in order to be included in activities that he enjoyed on the playground.

Interaction Reciprocity Between SWDs and Regular Education Students and Teachers

Like the previous section the data for reciprocity during class time will be discussed first followed by a discussion of the data on reciprocity during recess. In general, SWDs at both schools were more often the recipients than initiators of interactions in the classroom setting and tended to respond to the initiations more often than others responded to their initiations for interactions. Again, it is difficult to put into context the impact of these finding given that the research on interactions

between regular education students and SWDs lacks specificity regarding initiators and recipients (Butler & Hodge, 2004; Gerson, 1995).

At recess there were fewer interactions overall, but the rate of reciprocity increased for all the SWDs, with the exception of Walt, as compared to the classroom setting. This may be because all students are freer to respond to each other outside of the classroom setting where students typically follow rules for interacting with one another. Possibly others did not respond to initiated interactions by the SWDs in the classroom setting because they may have been trying to interact at inappropriate times. At recess Kemp and Carter (2002) found that SWDs tended to spend more time interacting with their teachers than did their regular education peers. However, from their data it could also be surmised that the SWDs in their study spent more time interacting with their regular education peers than the teachers during recess. In this study, due the small number of interactions recorded during the recess period, meaningful data could not be found regarding a comparison between the numbers of interactions with teachers versus regular education students.

Based on the field notes collected during the present study, the regular education students generally played together, while the SWDs individually approached different groups of students wanting to interact. Although a direct comparison was not made between the amount of interactions and reciprocations of interactions between regular education students and SWDs, other studies have documented that SWDs tend to interact less with others than do regular education students (Butler & Hodge, 2004; Kemp & Carter, 2002). Simply being included into regular education classrooms does not guarantee that SWDs will not feel isolated or

lonely. In fact, it has been found that SWDs tend to report more feelings of loneliness than their regular education peers (Luftig, R., 1988). Authors have articulated the importance of implementing specific strategies aimed at increasing the interactions between regular education students and SWDs in classrooms (Cole, Vandercook, & Rynders, 1988; Salisbury et al., 1995) and free play situations (McEvoy, Shores, Wehby, & Johnson, 1990).

Concluding Remarks Regarding Interactions

Although the observations in the present study were limited, some interesting findings did emerge. Overall, the verbal abilities and personal characteristics of the SWDs did seem to impact the interactions these students had with others. In addition, the interactions were also dependent on the circumstances happening at the time the observation was made. This was particularly important for Emilio in that he was essentially isolated from everyone in the classroom except his special education assistant when doing work in the regular education classroom. His interactions with others aside from the special education assistant did increase when he was in PE class or at recess. Also important was that the SWDs at the mainstream school were always together when in the regular education setting, thus these students interacted with each other when not receiving attention from their teachers or regular education students. At recess, the overall number of interactions went down in each setting; however, the reciprocity of interactions generally went up. This shows that during unstructured times SWDs were more involved in exchanges with others. These observations help to demonstrate the vastly different experiences that the SWDs had within each school setting. Assumptions about the type and amount of interactions

cannot be made from the schools' descriptive titles of "full inclusion" and "mainstream" alone.

A View of Two Schools

The information gathered from the interviews with the students and teachers and the observations help form a picture, albeit somewhat limited, of the full inclusion and mainstream schools. The picture of each school gained from the collected data can be compared to each school's publicly articulated philosophy for educating students with disabilities. This section will include a discussion of each school's implicit philosophy inferred through the data collection and analysis process, and the school's articulated, explicit philosophy.

Full Inclusion School

The full inclusion school's publicly articulated philosophy regarding the education of students with disabilities is that these students are included fully into the regular education setting with modifications and scaffolding put in place to help those students succeed in the regular education environment. Through an interview with a Clarke Elementary school staff person that has been with the school since its inception it was learned that the original mission of the school was to group all students developmentally and that those groups should be representative of the larger society (people with disabilities compared to those without disabilities). Although this is still the articulated philosophy of the school, over time the groupings changed to two grades per classroom reflecting the reality that developmental groupings are no longer feasible in a school that serves children in upper elementary school grades.

Teacher comments, the observations, and the absence of more SWDs aside from Emilio in the school paints a picture of a school where full inclusion may not be working in the way it was intended to work by the school's founders. Although it was the intention that the school's classes be representative of the larger society, teachers interviewed as part of the present study made comments about finding a match between the personal characteristics of the SWDs and the full inclusion program. This seems to be in contradiction to the school's articulated philosophy. As stated by Van Dyke et al. (1995) the day may never come to move a child into an inclusive setting if one is "wait[ing] for a child to be 'ready' ... by expecting his or her behaviors to improve in a segregated environment" (p. 476). They state further that the "'readiness theory' is a myth."

The observations and the researcher's personal knowledge of the school revealed that although Emilio was physically in the same room as the other regular education students he was most often working directly with the special education assistant at his desk in the corner of the classroom and isolated from the rest of the class. This was further evidenced by the comments from the regular education students when they expressed that they do not interact with Emilio often. Natalie exemplified this when she said Emilio "doesn't work with us very much, but he has a special teacher, Ms Vargas, and she helps him a lot." The school that purports to be fully inclusive, in fact, has isolated the SWD in order to educate him in content areas.

Speculatively, this isolation may actually be furthered because of the absence of other peer SWDs in the school. During the data collection phase, Emilio was the only student with a moderate or severe disability as defined by this study in the

school. Although there had been three SWDs in the school when the school year began, the other two students left the school midway through the year. The staff member who was interviewed regarding the history of Clarke elementary school also recalled that the school was almost 50% special education students at one point in time, but that the numbers dwindled more recently with special education students representing less than 10% of the school. While the decrease in the number of special education students at Clarke may be representative of a district wide effort to reduce over identification of special education students in general, the explanation likely does not account for the absence of SWDs specifically in the school. During the year in which data collection occurred, the parents of one SWD transferred their child to another school in the district. This transfer could have been due to numerous factors. Although there is no direct evidence, it is possible that the parents no longer believed that the full inclusion school was meeting the needs of their child since they transferred into the school at the beginning of the school year and pulled him out after only a few months.

Mainstream School

Garrison Elementary School hosts the district wide elementary life skills program that parents and educators together can choose as a placement option for students with significant cognitive disabilities and significant deficits in adaptive behavior skills. While the life skills program is multi-age due to the relatively small number of students in this program. The school follows a more traditional grouping placing children in grades by their age. Each classroom is made up of only one grade level.

From a conversation with the special education teacher who also serves as the part time assistant principal of the school, it was learned that the school's goal is to mainstream SWDs when possible to give them experiences with their regular education peers and help them to feel part of the school. The teachers interviewed at the mainstream school seemed to be inline with this stated philosophy. Ms. Rivera's comments below are representative of the tone of the teachers interviewed:

I think that we do a really great job and I think that the system they have here is awesome. I think by having so many activities for special ed. students in the school and bringing them out to field day and all the assemblies, not leaving them out makes them feel like members and bringing them in when we do presentations and whatever, whatever they can handle, fitting them in, I think the school does a good job with that (Ms. Rivera).

This alignment between the stated philosophy of the school and the teachers' articulated views of the mainstreaming program is further exemplified by the implementation of a program to train a few teacher-chosen regular education students to develop a deeper understanding of, and learn techniques for, working with SWDs. Involving students as peer helpers in integrated setting can be an effective strategy for working with SWDs in the regular education setting (Van Dyke et al., 1995).

Authors have commented that teachers model attitudes and behaviors regarding SWDs that are internalized and acted on by regular education students (Gerson, 1995: Van Dyke et al., 1995). At Garrison, students shared how they interact with SWDs in their school. In comparison to interviewed students at the full inclusion school, these students described far more encounters and interactions with

SWDs. This is best shown in the following statement made by Alisha from the mainstream school:

I try to help them. I try to talk to them and make them happy; to play with them...Sometimes at recess I go to them and talk to them and say hi and stuff

The observation data did not indicate that regular education students interact more with SWDs in the mainstream setting than in the full inclusion setting. However, the quality of the interactions between regular education students and SWDs was not measured. There may be a difference in the quality of the interactions between regular education students and SWDs at the mainstream school in comparison to the full inclusion school as suggested by the comments made by the students at each school setting.

When looking at the two schools in the present study, the implicit philosophies of the staff and students regarding the education of SWDs at the mainstream school appeared to be more in line with the stated school philosophy than did the implicit philosophies of the staff and students at the full inclusion school. Despite spending less time in the regular education setting at the mainstream school, the SWDs there seemed to be better integrated into the school as a whole. Emilio, at the full inclusion school, appeared to be more isolated than the students at the mainstream school. This was not an expected finding.

Concluding remarks

The sustainability of full inclusion programs takes continued effort on the part of those charged with the implementation of such a program (Kugelmass, 2006; Van Dyke, 1995). Full inclusion programming can be challenging to implement under the

best case of circumstances. In this study two schools with very different philosophies regarding the education of SWDs were investigated and these challenges to inclusion could be seen through the observations of the SWDs in the classrooms and through the themes that emerged in the student and teacher interviews. Although each school has some positive outcomes for the SWDs, difficulties were also noted in other areas.

There are multiple dimensions of integrated programs that must receive focus in order to have success. Kugelmass (2006) asserted that in addition to political, technical and structural factors, cultural factors such as collaboration, collegiality, and compassionate care must be actively addressed in order to sustain an inclusive setting. Villa and Thousand (2003) shared their vision of a successfully integrated classroom stating that cooperative learning is an important technique. They also noted that a systems approach to education works best. The systems approach includes redefining the roles of staff to give them more flexibility to work with all students, encouraging collaboration among staff members, providing adult support to students through consultation, parallel teaching, supportive teaching, complementary teaching, and coteaching, and providing differentiated instruction to all students in the integrated classroom as needed. A shared vision and leadership from the principal is often key to the success of integration (Salisbury, 2006; Van Dyke, 1995). A well integrated classroom is one in which all students are engaged with the staff, other students and the lesson being presented.

With both schools in this study, several of the best practices noted above could help in improving the effectiveness of the programming that each school's

stated philosophy implies that they implement. On-going training, continuous collaboration by staff, and effective adult support strategies were all areas that could be improved upon at these schools. In addition, differentiating instruction to a greater degree so that the SWDs could be included or better included in classwide lessons would help improve the quality of the time the SWDs spent in the regular education setting. The bottom line is that inclusive programming is difficult to implement and constant and careful attention needs to be paid at all times to how programming is being carried out. Staff needs to be diligent in continually checking and rechecking the effectiveness of the programming for each individual student so that every student gets an individualized and meaningful education.

Limitations of the Study

While this study contributes meaningfully to the research on inclusion and mainstreaming, there are limitations to the study that should be taken into consideration. There were eight main limitations of concern in this study. The first limitation involved the number of SWDs available for study at the full inclusion school. The second limitation involved the lack of information known regarding the SWDs who left the full inclusion and mainstream schools. Another limitation was the observation data collection process. Although teachers and regular education students were included in the interview process, not including the school principal's perspectives in this study presented a limitation. The interview questions that were asked followed a semi-structured format to allow the interviewer flexibility in gathering data, but yielded some inconsistent and incomplete information. The sample of students chosen for the interviews and observations were not matched nor

were they balanced based on gender. Two of the four SWDs observed in this study were bilingual, the impact of which on their interactions with others is unknown. Finally, the generalizability of the present study was limited due to the small sample size.

The most major limitation to this study was the number of SWDs observed at the full inclusion school. The original design of the study included a sample of three SWDs at both the full inclusion school and the mainstream school. Due to a lengthy approval process in the school district where the data was to be collected, students targeted for the study moved out of the school. Of the two students with moderate and severe disabilities at the full inclusions school, one moved out of the district and no further information was known. The other student's parents chose to send the child to another school in the district that houses a program specifically designed for students with autism. Other information about these two students is not known and permission was not sought to further speak to these families or review the files of the students. Since no other students with moderate or severe disabilities entered the school, only one student who fit the criteria of students to be observed for the present study remained. This, of course, left the study unbalanced in that there was only one observation participant at the full inclusion school and three at the mainstream school. In addition, direct comparisons of the observation data could not be made reliably, thus limiting the conclusion that could be made from the data. Also, having a sample of one makes it difficult to understand if the experiences observed for that student are particular to him, representative of the way the school operates, and/or influenced by the personal characteristics of the student.

Another limitation to this study was that it was unclear why SWDs who did not stay at the inclusion school left. Over time, SWDs presumably entered and left each school prior to aging out to middle school. It would have been valuable to understand why parents made the decisions they made to pull their child from the school. Without permission to identify and talk with these families a piece of the picture of each school was missing.

Two observers completed the observations of the SWDs. Although the two observers practiced data collection using a video of a classroom setting and completed an observation in tandem during the data collection period to address observer drift, drift may have still occurred during the data collection process. Given the total number of observations completed at both schools, more observations done in tandem would have increased the reliability of the data.

In an attempt to add to the research base on integrated studies, the present study interviewed special and regular education teachers in addition to regular education students as part of the methodology. While this did add more depth to the understanding of the culture of the two schools included in this study, more depth could have been added by including interviews with the principals of the schools. Since principals have the most knowledge regarding staffing, allocation of resources and they presumably set the tone for the culture and philosophy of each school, valuable information could have been gleaned to set a backdrop for all the other data collected.

With so few people interviewed in the present study, it presented difficulty in the analysis when some teachers expressed ideas that few others discussed. Often the

information was noteworthy, but difficult to draw conclusions from given that sometimes participants commented on topics that no other participants addressed. For example, the amount of time each teacher spent working with SWDs was unknown in many cases. Some teachers commented on this, but other did not, thus making comparisons between the backgrounds of teachers and evaluating their effectiveness with this population impossible. While rigidly sticking to a prescribed set of questions yielded more systematic data, the depth and richness of the data collected may have been lost. After the initial analysis of the interview data, follow-up interviews may have helped to fill in the gaps in the data collected.

The SWD chosen for observation at the full inclusion school was based on the availability of that population in the school. At the mainstream school, the three SWD boys chosen for observation was done so randomly, however, there was only one female student in the school who fit the criteria of this study for SWDs. Of the regular education students randomly chosen for interview at the full inclusion school, three were male and one was female. At the mainstream school, all interviewed students were female. This dynamic may have influenced the findings in that there may have been gender differences in the behaviors of the SWDs and the interactions between regular education male and female students and SWDs. This effect was not measured in this study and therefore presents a limitation when interpreting the findings.

Two of the four SWDs (one at the full inclusion school and one at the mainstream school) observed in study were bilingual. Although not the focus of this study, it is important to consider how this impacted their interactions with their peers

and teachers. Being bilingual added to the uniqueness of these students. The full impact of this on the results of this study is unknown.

Finally, due to the small sample of SWDs observed and the small number of students and teachers interviewed generalization to other programs is limited. While a case study can provide insightful and valuable information about a particular phenomenon, broad generalizations are cautioned (Best & Kahan, 1998). In addition, the full inclusion school included in this study is a “choice” school meaning that parents have the choice to send their children to the school or their neighborhood school. Therefore, the results of the present study may not be applicable to schools in which students attend because it is their neighborhood school rather than a choice.

Future Directions for Research

The findings of the present study added to the body of literature on inclusion and mainstreaming and also led to other directions for future research to enhance what is already known on this topic. First, further research could compare the number of interactions that regular education students have in class and at recess to the number of interactions SWDs have in those same settings. Second, more research could be done around the initiation and reciprocity of interactions between SWDs and regular education students and regular and special education teachers. Next, research could be done regarding the impact of SWDs’ personal characteristics and their identity formation on their inclusion experience and the interactions they have with staff and peers. Finally, a survey of parents of SWDs who currently participate in, or who have chosen to leave, mainstream and full inclusion programs could be

completed to better understand their perspective on the implementation of integrated programs. The following is a discussion of these suggestions for future research.

While it was fruitful to analyze the interactions that SWDs had with others, it would be helpful to also analyze the number of interaction regular education students had during the same period. This type of study would help shed light on the pattern of interactions that SWDs and regular education students have in the same class or recess setting and set a baseline for which to interpret data regarding the interactions of SWDs in mainstream and full inclusion settings. This type of comparison will help those implementing integration programs set goals for the social development of students and help teachers develop targets for encouraging interactions among SWDs and others in the school.

A second suggestion for future study is the investigation of the initiation and reciprocity of interactions between SWDs and regular education students and regular and special education teachers. Although there is a moderate pool of research on the amount and rate of interactions between SWDs and others (Butler & Hodge, 2004; Gerson, 1995; Kemp & Carter, 2002) there is a paucity of research on the analysis of the quality of those interactions. Research on the quality of the interactions of SWDs and regular education students and teachers would help to further an understanding of the experience of SWDs in integrated settings and would compliment the research on the feelings of SWDs in integrated settings (Luftig, R., 1988).

A third area for further research is examining the impact of the personal qualities of SWDs and their identity formation on their inclusion experience and their interactions with peers and staff. This is an area of research that has not been widely

studied despite there being myriad research on the culture of schools and the personal qualities of staff and students that seem to make inclusion work better (Avramidis & Norwich, 2002; Jamieson, 1984; Jobe et al., 1996; Jordan et al., 1997). In the current study, the personal qualities of the SWDs did seem to impact the interactions that occurred though this was not directly assessed. Additionally, an area not widely studied is how SWDs view themselves (Fitch, 2003). This is important in that a strong sense of identity may lead to better self-esteem, less acting out behaviors and more positive interactions with others. Also, it is important to understand the impact of the classroom the SWD is in on helping them build a positive self view (Fitch, 2003). SWDs are as unique in their personalities as anyone else and understanding the impact of this on their education is important to providing effective services.

Lastly, prior to starting data collection in the present study two SWDs left the full inclusion school in the middle of the school year. Future research may target the perceptions of the parents of SWDs who are either being educated in an integrated setting or who left the setting for another type of educational program. Although parent perspectives were not the focus of this study, the results were affected by the loss of these two children at that full inclusion school and thus demonstrates that parent perspective is an area worthy of future attention.

Appendix B

Interview Questions

Student Interviews

All student interviews will begin by reading *Way to Go, Alex!* By Robin Pulver, a story about a child with a disability. The read of the story will be followed with the this statement:

Have you ever heard the words Mental Retardation? (If yes – Tell me what you think it means? Then read statement. If no – read statement.)
I am going to tell you what it means when a kid has mental retardation. Some kids can't do things like other kids. They want to, but their brains work differently. It can take them longer to learn things or work out problems. They just have to work more slowly, get special help, and take their time. Sometimes you might be able to tell right away that a kid learns more slowly than you and sometimes you would just have to get to know them to figure that out. Sometimes these kids look different from you and something they look just like you.

Mainstream/Inclusion interview questions:

1. Do you know other children like Alex? Tell me about him/her.
2. Tell me about things you do with him/her?
3. Tell me what you think is good about having a child like Alex in your school?
4. There are schools that have no children like Alex in them. Would you change your school to not have children like Alex? Why? Why not?

Teacher Interviews

A description of children with severe or moderate disabilities will be given to all teachers.

Mainstream/Inclusion interview questions:

1. Some children with severe or moderate disabilities are included in regular education classrooms for either all or part of their day. What do you think about this?
2. Tell me about the pros and cons of having people with moderate or severe disabilities in regular education classrooms.
3. Tell me about the interactions that you have observed between children with and without moderate and severe disabilities and children with moderate and severe disabilities and teachers. How do these interactions vary between structured environments (classrooms) and unstructured environments (recess, lunch)?
4. What things do you observe that are done differently for a child with a moderate or severe disability as compared to those without disabilities?
5. Tell me about your experiences outside of this school with people with moderate and severe disabilities.
6. If you could make the decision, would you keep the school the same? Why or Why not?

Appendix C

Observation Schedule

Inclusion

		Participant 1					
		Classroom			Recess		
JB	Observation #	1	2	3	1	2	3
	Date	5/5	5/15	5/23	5/23	5/26	6/16
	Time	10:55	10:40	2:30	12:40	1:00	2:13

		Participant 2					
		Classroom			Recess		
Blake	Observation #	1	2	3	1	2	3
	Date	4/26	5/5	5/15	5/23	6/19	6/20
	Time	10:40	10:33	11:00	1:00	12:50	12:37

		Participant 3					
		Classroom			Recess		
Walt	Observation #	1	2	3	1	2	3
	Date	4/26	5/23	5/26	4/21	5/16	5/23
	Time	10:15	2:10	2:30	12:55	12:50	1:00

Mainstream

		Participant 1					
		Classroom			Recess		
Emilio	Observation #	1	2	3	1	2	3
	Date	3/2	4/25	5/31	4/28	6/6	6/13
	Time	1:30	12:45	8:45	9:47	9:46	10:55

Appendix D

Field Notes Data Collection Sheet

1. Description of the participants.
2. Reconstruction of conversations.
3. Description of physical setting
4. Description of activities.
5. Description of particular events.
6. Description of observer's behavior.

Number	Field Notes

Appendix E

Field Notes

Descriptors		Field Notes
Emilio		
Classroom 1	Description of the participants	Classroom of 31 regular education students and two regular education teachers.
	Reconstruction of conversations	Teacher explained how to calculate heart rate and then explained PE activity to students.
	Description of physical setting	Students sat in a small group at one end of the multi-purpose room.
	Description of activities	Lecture on heart rate and then students were asked to complete a short worksheet. Teacher did ask students questions during lecture.
	Description of particular events	Students were asked to work together on the worksheet to figure out their heart rate. Target student was not included in a group and was only given minimal assistance to do the activity. He did not finish the activity. The student interactions with teachers were in the form of directives about his behavior. He was well behaved, but needed cues to pay attention or sit on his “bottom.” Target student did reach out to the teacher and other students for help on the assignment, but conversation was minimal and did not lead him to complete the assignment.
	Description of observer’s behavior	The observer sat at the back of the room to do the observation and was not included in the activities.
Classroom 2	Description of the participants	There were 12 nondisabled students, one SWD, one regular education teacher, and one special education teacher in the room.
	Reconstruction of conversations	The regular education teacher was talking about capitalism and taxes. The special education teacher worked with the SWD on letter identification separate from the class.
	Description of physical setting	The lesson took place in a classroom. The tables were pushed together with nondisabled students sitting around them in a group with the regular education teacher. The SWD and special education teacher sat at a desk facing the wall in the corner.

	Description of activities	The nondisabled students and regular education teacher were having a group discussion. The SWD and special education teacher worked separately from the group.
	Description of particular events	The SWD did not work alone. The special education teacher worked with him continuously.
	Description of observer's behavior	The observer sat at the side of the room behind the SWD and the special education teacher.
Classroom 3	Description of the participants	Fifteen regular education students, one SWD, two regular education teachers, and one special education teacher were present.
	Reconstruction of conversations	The regular education teacher talked to the special education teacher regarding the SWD's unpredictable behavior toward peers.
	Description of physical setting	Typical classroom setting with student tables. Low noise level in room.
	Description of activities	The nondisabled students were working on writing and then reading. The SWD worked individually with the special education teacher on a separate assignment (calendar work).
	Description of particular events	No particular events occurred.
	Description of observer's behavior	The observer sat close to and behind the SWD and special education teacher.
Recess 4	Description of the participants	Approximately 40 nondisabled students, two playground monitors, one regular education teacher, one special education teacher, and one SWD were present.
	Reconstruction of conversations	One nondisabled student told the SWD to move during a soccer game. He complied, but did not answer verbally. The SWD asked a teacher to follow him to the playground equipment. She said okay, but did not talk further.
	Description of physical setting	The day was sunny and warm. It was an open field with playground equipment in one corner.
	Description of activities	The SWD played in the soccer game with nondisabled students for about ten minutes. He then lost interest and moved to the playground equipment.

	Description of particular events	The SWD played soccer with the nondisabled peers. The game continued but he moved on to other playground equipment. He did try to engage the regular education teacher in conversation and play. She followed him to the playground but eventually walked away. He played alone for the remainder of the recess period.
	Description of observer's behavior	The observer sat on a bench close to the SWD. There was a good view of the recess area.
Recess 5	Description of the participants	Approximately 40 nondisabled students, two playground monitors, one regular education teacher, one special education teacher, and one SWD were present.
	Reconstruction of conversations	The SWD talked with the regular education teacher about games he liked to play.
	Description of physical setting	It was sunny and warm. There was an open field with playground equipment in one corner.
	Description of activities	During the first five minutes of the observation, one SWD, 15 nondisabled boys, and one nondisabled girl were engaged in a soccer game. After that, the SWD played alone except for a short conversation with a regular education teacher.
	Description of particular events	The SWD was playing with the other nondisabled students during a soccer game. He was running with the other nondisabled students and in the middle of the action. At one point he pushed another student running next to him. The student responded by asking, "why did you do that?" The SWD did not answer and both kids continued playing the game. At another point, a boy gave the SWD a "thumbs up" when play was stopped. After the game ended, the SWD played by himself on the playground equipment until recess ended.
	Description of observer's behavior	The observer sat on a bench near the SWD and had a good view of the field.
Recess 6	Description of the participants	Approximately 40 nondisabled students, two playground monitors, one regular education teacher, one special education teacher, and one SWD were present.
	Reconstruction of conversations	The SWD's special education teacher commented to the observer that he often engages in unprovoked aggressive acts and foul language.
	Description of physical setting	It was sunny and warm. There was an open field with playground equipment in one corner.

Description of activities	The SWD did not play with his classmates. He played in a sandbox with the younger students.
Description of particular events	Initially the SWD played cooperatively with a particular nondisabled student. He was able to move between the groups of students easily. The younger kids appeared to be more accepting of him.
Description of observer's behavior	The observer stood to the side of the sandbox and observed. At one point during the observation, the special education teacher engaged the observer in a short conversation about the SWD.

JB

Classroom 1	Description of the participants	Three SWDs, 13 nondisabled students, and one regular education teacher were present. There was no special education teacher in the room.
	Reconstruction of conversations	The regular education teacher lectured on language arts. He explained the lesson and asked lots of questions of the class.
	Description of physical setting	Typical classroom setting. There were clusters of three to six desks together. The SWDs sat on the floor to the side.
	Description of activities	The nondisabled students sat on the floor in front of the regular education teacher who sat in a chair.
	Description of particular events	The special education teacher who walked the SWDs to the room left at the beginning of the observation. The two SWDs on the floor started to play silently. The regular education teacher did not look at the SWDs or address them even when they started to move around more. No adult addressed any of the three SWDs until another special education teacher came back and asked the SWDs to get their supplies to work on an activity, but this occurred as the observation ended.
	Description of observer's behavior	The observer sat to the side of the room.
Classroom 2	Description of the participants	Thirteen nondisabled students, one regular education teacher, one special education teacher, and three SWDs were present.
	Reconstruction of conversations	The regular education teacher was giving a math lesson on collecting data. She asked questions of the class and the class answered as a group and individually. The SWDs did not engage in this exchange.

	Description of physical setting	Typical classroom setting. There were four clusters of six desks for the nondisabled students. The SWDs sat on the floor to the side. They were facing the chalkboard. The special education teacher sat behind the SWDs. The regular education teacher was standing at the chalkboard.
	Description of activities	The regular education teacher presented the lesson using the chalkboard and created a graph with the help of a few nondisabled students.
	Description of particular events	One SWD was asked to turn around and participate in a one-to-one activity with the special education teacher. He was asked to trace numbers.
	Description of observer's behavior	The observer sat to the side of the classroom.
Classroom 3	Description of the participants	Seventeen nondisabled students, three SWDs, one regular education teacher, and one special education teacher were present.
	Reconstruction of conversations	The regular education teacher was instructing students on how to use computer software.
	Description of physical setting	Computer lab setting with approximately 25 computers. Each student worked at their own computer.
	Description of activities	The SWDs worked on a computer program with the assistance of the special education teacher.
	Description of particular events	The SWDs worked fairly independently with little input from the special education teacher.
	Description of observer's behavior	The observer sat in a chair to the side of where the students were working.
Recess 4	Description of the participants	Approximately 40 nondisabled students, two regular education teachers, two special education teachers, and four SWDs were present.
	Reconstruction of conversations	The target SWD talked to the regular education teacher about her keys. They pretended to call each other on imaginary phones and had a conversation.
	Description of physical setting	It was sunny and warm. There were basketball courts, playground equipment, and an open field.
	Description of activities	All the students were told to play on their own when they tried to engage the adults in conversation. Some played on the equipment while others played kickball in the field or basketball on the courts.

	Description of particular events	The SWD walked up to a nondisabled student and tried to play with him. The nondisabled student was responsive for a few minutes. The SWD generally interacted with others and spent very little time playing alone.
	Description of observer's behavior	The observer stood about ten to twenty feet away from the target student at all times.
Recess 5	Description of the participants	Approximately 40 nondisabled students, three regular education teachers, two special education teachers, and four SWDs were present.
	Reconstruction of conversations	The SWD interacted with the regular education teachers and special education teachers about falling off the playground equipment and possibly hurting himself.
	Description of physical setting	It was sunny and warm. There were basketball courts, playground equipment, and an open field.
	Description of activities	The nondisabled students played various games. The target SWD mainly walked around and climbed on the playground equipment.
	Description of particular events	The SWD approached some kids and sat down beside them. They looked at him but kept talking. He sat and stared at them for a while. Eventually the kids got up and left. The SWD walked on the playground equipment and then fell off the steps. He fell about one foot and seemed a little shaken up but not hurt.
	Description of observer's behavior	The observer stood about ten to twenty feet away from the target student at all times.
Recess 6	Description of the participants	Approximately 40 nondisabled students, two regular education teachers, one special education teacher, and four SWDs were present.
	Reconstruction of conversations	Conversations among the adults centered on having the students return to the playground. The students talked about playing kickball.
	Description of physical setting	It was sunny and warm. There were basketball courts, playground equipment, and an open field.
	Description of activities	The students engaged in free play and organized a kickball game.
	Description of particular events	The SWD tried to play kickball with the nondisabled students. He didn't seem to understand taking turns, but the students let this go and gave him lots of turns to kick the ball and run bases.
	Description of observer's behavior	Two observers were present. The observers stood about ten to twenty feet away from the target student at all times.

Walt

Classroom 1	Description of the participants	Approximately 20 regular education students, two SWDs, one regular education teacher, one special education teacher were present.
	Reconstruction of conversations	The class talked about a language arts assignment.
	Description of physical setting	Typical classroom setting with three to six desks clustered together. The SWDs were seated at individual desks. One nondisabled student was assigned to work with each SWD.
	Description of activities	The SWDs were asked to point at different letters on an alphabet chart.
	Description of particular events	The SWDs worked one-to-one with the nondisabled student with whom they were paired.
	Description of observer's behavior	The observer sat at the side of the room to observe. A few nondisabled students looked at the observer a couple of times, but continued to work.
Classroom 2	Description of the participants	Fifteen nondisabled students, three SWDs, one regular education teacher, and one special education teacher were present.
	Reconstruction of conversations	The regular education teacher told students to get started on their computer assignment.
	Description of physical setting	Computer lab setting with approximately 25 computers. Each student worked at their own computer.
	Description of activities	The teacher walked around and checked on students as they worked on a language arts project with the computer software.
	Description of particular events	The SWDs were left to play educational games on the computer. They did not interact with the regular education teacher or nondisabled students.
	Description of observer's behavior	The observer sat to the side of the room.
Classroom 3	Description of the participants	Fourteen nondisabled students, three SWDs, one regular education teacher, and one special education teacher were present.
	Reconstruction of conversations	No direct conversations were had with the students.
	Description of physical setting	Computer lab setting with approximately 25 computers. Each student worked at their own computer.

	Description of activities	The nondisabled students were working on a statewide testing preparation program.
	Description of particular events	There was little to no interaction between the target SWD and the others in the room.
	Description of observer's behavior	The observer sat across from the target SWD.
Recess 4	Description of the participants	Approximately 40 nondisabled students, three regular education teachers, three special education teachers, and four SWDs were present.
	Reconstruction of conversations	The target SWD did not talk to anyone during this observation.
	Description of physical setting	It was sunny and warm. There were basketball courts, playground equipment, and an open field.
	Description of activities	Students were playing in various areas of the playground.
	Description of particular events	The target SWD sat alone on the ground near the playground equipment.
	Description of observer's behavior	The observer sat approximately ten feet from the target SWD.
Recess 5	Description of the participants	Approximately 40 nondisabled students, three regular education teachers, two special education teachers, and five SWDs were present.
	Reconstruction of conversations	The target SWD did not talk to anyone during this observation.
	Description of physical setting	It was sunny and warm. There were basketball courts, playground equipment, and an open field.
	Description of activities	Students were playing in various areas of the playground.
	Description of particular events	The target SWD sat alone on the ground near the playground equipment.
	Description of observer's behavior	The observer sat approximately ten feet from the target SWD.
Recess 6	Description of the participants	Approximately 40 nondisabled students, four regular education teachers, two special education teachers, and four SWDs were present.
	Reconstruction of conversations	The target SWD did not talk to anyone during this observation.
	Description of physical setting	It was sunny and warm. There were basketball courts, playground equipment, and an open field.
	Description of activities	Students were playing in various areas of the playground.

Description of particular events	The target SWD sat alone on the ground near the playground equipment.
Description of observer's behavior	The observer sat approximately ten feet from the target SWD.

Blake

Classroom 1	Description of the participants	Thirteen nondisabled students, three SWDs, one regular education teacher, and one special education teacher were present.
	Reconstruction of conversations	The regular education teacher lectured on decimals. He explained the lesson and asked many questions of the entire class.
	Description of physical setting	Typical classroom setting with clusters of three to six desks. The nondisabled students sat at desks. The SWDs sat on the floor.
	Description of activities	The nondisabled students were asked various individual and group questions. The SWDs sat quietly next to the special education teacher.
	Description of particular events	The SWDs were redirected by the special education teacher to pay attention to the regular education teacher.
	Description of observer's behavior	The observer sat to the side of the room.
Classroom 2	Description of the participants	Thirteen nondisabled students, one regular education teacher, three SWDs, and one special education teacher were present. Part way through the observation, another regular education teacher came into the classroom and helped the target SWD sit up and start his activity and then left the room.
	Reconstruction of conversations	The special education teacher worked with the SWDs on counting blocks while the regular education teacher taught a math lesson to the nondisabled students.
	Description of physical setting	The SWDs sat at a table with the special education teacher in the back corner of the classroom. The nondisabled students sat at desks clustered in groups of six in the middle of the room facing the chalkboard.

	Description of activities	The regular education teacher presented a math lesson and did activities with the nondisabled students while the special education teacher did a separate lesson with the SWDs in the classroom at the same time.
	Description of particular events	One SWD fell asleep during the lesson and was woken up by the special education teacher. When he awoke he complained that his foot hurt and had a hard time refocusing on his math work. The regular education teacher talked with the special education teacher about supplies but did not address the SWDs directly.
	Description of observer's behavior	The observer sat at the side of the room.
Classroom 3	Description of the participants	Fourteen nondisabled students, two SWDs, one regular education teacher, and one special education teacher were present.
	Reconstruction of conversations	The nondisabled students were reading stories they wrote out loud. The regular education teacher and the other nondisabled students commented on the stories in a group discussion format.
	Description of physical setting	Typical classroom setting with clusters of three to six desks. The nondisabled students sat at desks. The SWDs sat on the floor.
	Description of activities	The SWDs did not have stories to read but sat quietly and listened to the stories.
	Description of particular events	The target student sat at the back of the group and appeared fidgety.
	Description of observer's behavior	The observer sat at the back of the classroom.
Recess 4	Description of the participants	Approximately 40 nondisabled students, two regular education teachers, three special education teachers, and six SWDs were present.
	Reconstruction of conversations	One special education teacher told the target SWD to go play on two occasions.
	Description of physical setting	It was sunny, warm, and humid. There were basketball courts, playground equipment, and an open field.
	Description of activities	The target SWD sat down in the shade and did not interact with anyone during the observation.
	Description of particular events	Many of the other students took part in free play. The target SWD sat alone and seemed hot and tired.

	Description of observer's behavior	The observer sat to the side of the target SWD about 20 feet away.
Recess 5	Description of the participants	Approximately 40 nondisabled students, two regular education teachers, two special education teachers, and four SWDs were present.
	Reconstruction of conversations	The target SWD talked with the special education teachers about whether or not he should put on his coat. He did not talk with other students.
	Description of physical setting	It was chilly, but sunny. There were basketball courts, playground equipment, and an open field.
	Description of activities	The students played various games on the playground. The target SWD walked around the field observing the other students play.
	Description of particular events	The target SWD did not interact with other students.
	Description of observer's behavior	The observer sat to the side of the target SWD about 20 feet away.
Recess 6	Description of the participants	Approximately 40 nondisabled students, three regular education teachers, three special education teachers, and six SWDs were present.
	Reconstruction of conversations	The target SWD did not talk with anyone during recess.
	Description of physical setting	It was sunny, warm, and humid. There were basketball courts, playground equipment, and an open field.
	Description of activities	The target SWD played alone and spent most of his time sitting at the top of a piece of playground equipment. The only time he moved was to go get a drink of water inside.
	Description of particular events	The target SWD went in to get a drink and didn't come out for about ten minutes. When he came out, he was escorted by a teacher. He went back to the top of the play equipment and stayed for the remainder of recess.
	Description of observer's behavior	The observer sat to the side of the playground equipment.

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