EDUCATING ADOLESCENTS IN THE CONTEXT OF SECTION 504 POLICY:
A COMPARATIVE STUDY OF TWO MIDDLE SCHOOLS

By
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Key Words: Section 504, ADHD, Accommodations, Adolescents, Middle School
Section 504 “prohibits discrimination against persons with disabilities by school
districts receiving federal financial assistance” (First & Curcio, 1993, p.33). In public
schools, eligible students receive an Individualized Accommodation Plan (IAP),
guaranteeing a free appropriate public education (FAPE) and equitable access to
educational opportunities (Bateman, 1996). Interest in Section 504 has grown among
school personnel, especially in the use of this mandate for students with attention
deficit hyperactivity disorder (ADHD). Additionally, the number of students with
IAPs has increased nationally, in Virginia, and in the school district studied
(Elementary and Secondary Schools Compliance Reports, 1994 & 1997). It has been
hypothesized that these increases are attributable to ADHD. Therefore, the purpose of
this study was to explore who these adolescents are and how they are served under
Section 504 policy in two middle schools in southeastern Virginia. A comparative
case study design was used to explore Section 504 policy implementation through
within and cross-case comparisons of data from documents and interviews with
administrators and teachers about the number and content of IAPs, and decision-making pertaining to the Section 504 process. Grounded theory was used to generate propositions relative to how demographic profiles and IAP content are affected by the implementation process. Results identified relevant themes and factors as awareness of procedures, time, costs, and school profiles. The findings of this study are intended to raise stakeholder awareness about Section 504 decision-making practices and their influence on services for students, and to inform Section 504 staff developers of training needs.
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Lastly, I extend deep appreciation to those in my work and church families for their many prayers and "nuggets of wisdom."
DEDICATION

With deepest love, gratitude, and devotion

To my husband, Larry

For your love, prayers, patience, and constant reminders

That the Power behind me

Always was greater than any challenge placed before me.
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CHAPTER I
INTRODUCTION TO THE STUDY

During the fall of 1993, the Office for Civil Rights (OCR) renewed its commitment to ensure equal access and to promote educational excellence for students with disabilities. Its guarantee of vigorous civil rights enforcement gave added strength to Section 504 of the Vocational Rehabilitation Act of 1973.

Context of the Study

Section 504 states, “No otherwise qualified disabled individual . . . shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance” (29 U.S.C. §794 [a]). Thus, any school district that receives federal financial assistance must not discriminate against persons with disabilities (First & Curcio, 1993). Although Congress passed Section 504 in 1973, the release of a 1991 memorandum from the U.S. Department of Education brought Section 504 legislation into prominence and prompted widespread discussions about its implementation in schools. In particular, the memorandum answered questions about the applicability of the law to students with attention deficit hyperactivity disorder (ADHD), a condition that can affect learning through inappropriate manifestations of inattention, impulsivity, and high levels of activity (National Institute of Health, 1998).

Section 504 and ADHD

Substantive clarification of federal legislation helped local and state education agencies become aware of their roles in meeting the needs of students with ADHD, including making necessary accommodations available in both general education
classrooms and special education settings (Davila, Williams, & MacDonald, 1991). Section 504 policy mandates that eligible students receive a *free appropriate public education* (FAPE), guaranteed in a written individualized accommodation plan (IAP) that enumerates required supports and services. The IAP influences how teachers deliver instruction in general education classrooms to eligible students, including eligible students with ADHD (Bateman, 1996).

In recent years, many parents of children with ADHD have pursued school-based supports and services. Students with ADHD usually require instructional and behavioral supports and some will require a Section 504 plan. Even though hyperactivity levels tend to decrease over time, and attention and impulsivity often improve as students grow older, educators' demands for task-related independence and responsible behavior can often become problematic (Barkley, 1990). Many of these adolescents have trouble with “academic performance and eventual academic attainment” (Barkley, 1990, p. 123). Furthermore, the combination of difficulties associated with middle school, pubescence, and psychosocial challenges may intensify an attention deficit disorder, or result in behaviors that mimic the disorder (Parker, 1992).

Moreover, findings from literature and awareness campaigns on ADHD indicate that 50% of the school-age population with this disorder is eligible for services in general education classrooms. These findings suggest imminent challenges for the general education service providers who work with these youth. As middle school educators observe (and the literature that documents their work suggests),
adolescents tend to display behaviors that challenge school personnel to draw upon every available support. The challenges of serving some students with ADHD prompt administrators and teachers to continue to request in-service training on ADHD and on how to make reasonable accommodations for students under Section 504.

Statistics on the prevalence of ADHD in the United States and other countries show rates that vary from 1.7 to 16.1% among children and adolescents in the general population (Treatment of Attention-Deficit/Hyperactivity Disorder, AHCPR, 1999). Nevertheless, many experts on ADHD continue to reference estimates of 3%–5% as the national average (American Psychiatric Association, 1994; Barkley, 1990). Using Ritalin as a marker of ADHD prevalence, Virginia's per capita use of Ritalin in 1995 among children was higher than that of any other state in the United States (Lefever, Dawson, & Morrow, 1999).

Lefever et al (1999) found the prevalence rate of ADHD among elementary-aged children in southeastern Virginia to be 2–3 times higher than the reported national average. While the overall prevalence of ADHD is unknown for the school district under study, Lefever et al, in a community-based study of a school district with similar demographics, found a rate of 10% among a targeted population (N=23,967) in grades 2–5. After examining variables of gender, race, and age, these researchers found a higher rate of prevalence for ADHD among white children, particularly white boys. They also found that medication use increased with years in school. Increases in the diagnoses of ADHD suggest a likely increase in the number of students found eligible for Section 504 plans. Considering that
medication use increases with years in school, and that medication use may serve as
an indicator of ADHD prevalence, this study explores how schools apply the
Section 504 mandate to adolescents at the middle school level, including students
considered to have ADHD.

Purpose of the Study

The purpose of this study was to identify factors that affect the process used to
implement the Section 504 mandate and to examine how these factors affect the
number of plans, plan content, and the decision-making pertaining to adolescents in
two schools.

Research Questions

The following questions guided the research:

A. How is Section 504 policy implemented to serve adolescents in two
middle schools?

1. Who are the students served under Section 504 in these middle
schools?

2. What comprises the content of their Individualized Accommodation
Plans (IAPs)?

3. How do administrators and teachers describe the process with which
they develop and implement Section 504 policy?

B. How does the implementation process described in the case study affect
the demographic profile of the students who are served in these schools
and the content of their accommodation plans?
Methods Used

A comparative case study design was used to explore Section 504 policy implementation in terms of plan number, content, and the process used for making Section 504 decisions in two urban middle schools in southeastern Virginia. A grounded theory approach was used to address how the implementation process affects the demographic profile of students served in these schools and the content of their plans.

Definitions

The following terms are defined to lend meaning to the purposes of this study:

Accommodations - Instructional strategies, methods, and services that comprise a student's Section 504 plan so that the student may access and participate in a course, standard, or test. These provisions do not fundamentally alter or lower the standard or expectations of the course, standard, or test (Freedman, 1997)

Central office administrator’s awareness of the Section 504 process – The perceptions of selected central office administrators about Section 504 plan number, plan content, and the decision-making process as obtained through their provision of Section 504 technical assistance to a school in the study

Enrollment totals - Total number of days a student was enrolled in the middle school during the 180-day school year

Ethnic groups – Racial classifications represented among the student population of a particular middle school

Mobility - Indicator of the rate at which students moved into and out of a
middle school over a given school year

Number of students previously served in special education – The entirety of students identified under Section 504 who previously received specially designed instruction under the Individuals with Disabilities Education Act within one of the schools in the study

Number of students on free and reduced-price lunch – The sum of students in the study who receive lunch at no cost or at low cost based on their family's income level

School/pupil-teacher ratio - Average number of students assigned to a given teacher in each middle school

Section 504 plans - Individualized educational plans for students in the study who are eligible for accommodations or services under Section 504

Section 504 process - Routine actions or procedures used to implement the Section 504 mandate

Site administrator’s awareness of the Section 504 process - What each middle school administrator in charge of the Section 504 committee understands about the number of plans, content of plans, and the Section 504 process

Teachers’ awareness of the Section 504 process - What middle school teachers with experience in the development and implementation of Section 504 plans understand about the number of plans, content of plans, and the Section 504 process

Limitations

The number and the nonrandom selection of the two middle schools
investigated limit generalization. Selection of these schools was purposeful based on their high or low number of Section 504 plans. The individualized accommodation plans used in the study included only those of students with active Section 504 plans during the 1996-1997 school year. Therefore, the application of findings is limited to those schools and to the students in this particular study. In addition, because the researcher currently works alongside two central office administrators assigned to these two middle schools, familiarity with these informants poses the slight threat of a halo effect.

Significance of the Study

Insofar as this researcher can determine, this is the first study to explore the development and implementation of Section 504 plans for middle school adolescents in this school district. It is hoped that awareness will be raised among key Section 504 users about the influence of this unfunded mandate on educating students with attention deficit hyperactivity disorder, growth of Section 504 placement numbers, and Section 504's potential budgetary impact. The research findings may provide Section 504 users and capacity-builders with new and useful information relevant to the structuring of Section 504 staff development curricula for administrators, teachers, and other interested parties.

Organization of the Material

Five chapters comprise this dissertation. Chapter 1 has presented a contextual overview of Section 504 and its specific application to ADHD, along with the purpose, research questions, methods, definitions, limitations, and significance of the study. Chapter 2 reviews pertinent literature focusing on adolescents in middle schools, the
legal policies serving these adolescents, and data on those who using Section 504 policy to serve these adolescents. Chapter 3 describes the methodologies used to select data sources, design instrumentation, and collect and analyze data. Issues of validity and trustworthiness also are addressed in Chapter 3. The results of the research appear in Chapter 4. In the final section, Chapter 5, the conclusions and implications of the findings are discussed. Recommendations are made based upon the data. The chapter ends with lessons learned from research.
CHAPTER TWO

REVIEW OF LITERATURE

Introduction

This chapter presents the literature that informs the current study as it pertains to the problem of educating adolescents under Section 504 policy. Figure 2.1 illustrates the sequence in which the literature supporting this study is presented. Research addressing adolescents served in middle schools is examined first. Literature then is presented on the characteristics of middle school adolescents and on the characteristics of middle schools. Next, legal policies that serve adolescents with disabilities will be explained and compared. Literature on the expectation for knowledgeable implementation of Section 504 by service providers under this mandate is then presented. This chapter concludes with a summary of literature on these topics.

Adolescents Served in Middle Schools

Characteristics of Middle School Adolescents

Adolescents enter middle school concerned about autonomy and failure (Anderman & Maehr, 1994; Finks, 1990). More often than not, their concerns are compounded by complex and critical sensitivity to their physical changes and to the expectation of others that they conform more responsibly to the rules of school and society (Finks, 1990). Physically, they manifest a propensity towards restlessness, overexertion, and fatigue that prescriptively demands numerous opportunities for physical movement, changes of activity, and rest (Alexander & George, 1981).
Adolescents Served in Middle Schools

Characteristics of Adolescents

Characteristics of Middle Schools

Legal Policies

That

Serve Adolescents

. ADA . IDEA . Section 504

Awareness of

Section 504 Policy

by

Service Providers

Figure 2.1. Model of the Organization of Literature Presented on Educating Adolescents in the Context of Section 504 Policy
Intolerance, misunderstanding, and rapid change occurring in this phase of growth and development increases their susceptibility to age-based bias and emotional intensity (Finks, 1990; Arth, 1985). Hence, a greater likelihood for conflicts with peers and teachers exists.

Research undertaken by the Carnegie Council on Adolescent Development in 1993 tells us that students in middle school generally live in poverty, come from single-parent homes, and experiment with drugs more often than students at other school levels. Their propensity towards early sexual involvement places them more at risk for pregnancy and sexually transmitted diseases. Withstanding the risks of early sexual encounters, evidence suggests that school problems, family history of suicide, and poor parent-child communication increase the risk of suicide among these youths (Shaffer, Garland, Gould, Fisher, and Trautman, 1988). As a group, they “face an even greater risk of being poorly educated for the 21st Century” (Carnegie Council on Adolescent Development, 1993, p. 3).

Recognizing that these are the adolescents attending our middle schools, what are the middle schools like that serve these students? The next section provides a brief description of middle schools with an emphasis on demographics pertaining to the adolescents who attend these schools.

**Characteristics of Middle Schools Serving These Adolescents**

Middle schools were originally designed to balance the inadequacies of junior high schools through substantial improvements to students’ academic achievement and health development (Lipsitz, Jackson, & Austin, 1997; Alexander & George, 1981).
This belief is consistent with findings published in *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Council on Adolescent Development, 1989). Eight key middle school recommendations emerged from these findings: (a) divide larger middle school grades into smaller communities to build trust between adults and peers; (b) provide all students access to a common core of high-level knowledge and skills; (c) organize instruction to ensure student success; (d) empower teachers and administrators to make key pedagogical, managerial, and budgetary decisions; (e) prepare middle school teachers to teach young adolescents; (f) improve academic achievement through better fitness and health; (g) re-engage families in the education of young adolescents; and (h) connect schools with communities.

Another goal of middle school was the development of closer ties with students through the creation of teams to offset assemblyline instruction resulting from increasing student enrollments. Ford (1992) established connections between the needs of these students, not only to student enrollment, but also to factors such as ethnic diversity, school pupil-teacher ratio, free and reduced priced lunch/socio-economic status, special education, retention, and mobility. These factors will be considered in the discussion that follows.

**Enrollment totals.** Increasing enrollment totals threaten the intent of middle schools and the benefits to students served in them. Negative relationships have been drawn between large school size and student achievement, more especially when students come from low socioeconomic levels (Anthony, 1999; Walberg & Fowler, 1987). Based on a report entitled *New Education Study Shows U. S. Schools Face*
Third Consecutive Year of Record Enrollment (United States Department of Education, 1998), more than 54 million students will attend elementary and public schools by the year 2008. Growth in student numbers signifies potential growth in teacher staffing and the need for increased classroom capacity. In fact, rapid growth impacting high school and middle school levels is expected over the next 10 years. Enrollment projections for grades 6-8 convincingly indicate that one-half million additional students will enter school. Their presence may impinge upon the sense of community fostered by small school enrollments. Speculatively, growth in enrollment totals will accelerate the need for solutions to issues of diversity, overcrowding, large class size, and outdated technology, particularly at the upper school levels.

**Ethnic groups.** Recently, Section 21 of the 1992 Amendments to the Rehabilitation Act of 1973 called for the establishment of the Rehabilitation Cultural Diversity Initiative (29 U.S.C. 718a). Acknowledged within this document was evidence of "a changing racial profile in which one of every three Americans will be either African American, Latino, or Asian American by the year 2000" [Sec 21. (a)(1)]. Affirmation was given to the notion of “inequitable treatment of minorities" and to the presence of a disproportionately higher rate of disabling conditions among ethnic and racial minorities [Sec. 21 (a) (2) and (3)]. According to what is purported, many of the students who are subjects of the report will occupy the lower levels of educational tracks, socio-economic status, and educational achievement. As one example, the cultural differences of Hispanic or Latino students may lead to underidentification of these youth as ADHD (Harry, 1992). Even though evidence of
ADHD appearing more often in any particular ethnic, racial, or cultural group is inconclusive, the importance of sensitivity to the cultural needs of these youth remains solid (Burcham & DeMers, 1995; Reid, Maag, Vasa, & Wright, 1994).

Academic failure and school dropout are especially problematic among some ethnic groups and among some youth from low socioeconomic status (SES) communities and families. Some proponents of class size suggest that lowering pupil-teacher ratios can increase opportunities to attend to the needs of some of these students. Section 504 may provide a viable compliment to efforts made by schools to attend to any student with a history of school failure, especially when schools lower pupil-teacher ratios.

School teacher-pupil ratio. Glass and Smith (1980) point out that how some students perform in schools is influenced by how many students are assigned to receive instruction from a given teacher during an instructional period. The number of students assigned to a teacher is identified as pupil-teacher ratio. This ratio also is identified as class size. Certain teachers believe large class size hinders their efforts to accommodate students with low ability or low achievement (Gottlieb, Alter, Gottlieb, Lehman, & Wishner, 1994). This belief aligns with the findings of Scheck, Kinicki, and Webster (1994) in their study of a process-model based on the theory that class size, individual student characteristics, and elements of class format affect teacher performance. Specifically, their study showed that large class size negatively affects teacher-behavior, constrains teachers' efforts to effectively organize their classes, and inhibits their consideration of students' individual needs.
On the other hand, research on school size is clearly supportive of the likelihood that schools serving 100 to 1000 students will benefit students at risk (Anthony, 1999; Lee & Smith, 1995; Raywid, 1995). Benefits include improved attendance, attention, participation, academic performance, and less retention. Further indications of the study done by Scheck, Kinicki, and Webster (1994) show that teachers are more likely to give greater attention and sustained effort toward meeting students' needs in schools with fewer students and smaller classes. This may be especially true in cases where these students have come from low socioeconomic backgrounds.

**Free and reduced-price lunch.** Low socioeconomic status (SES) generally is linked to free and reduced-price lunch in that parents' income level often is used as a determinant of student entitlement to free and reduced-price lunch (Roscigno, 1998). Conversely, high socioeconomic status seems to be a cultural asset. Roscigno (1998) also purports that resource availability and school-class or race composition tend to be tied to a child's family background. Racial differences in a family's structure and socioeconomic status may negligibly affect educational outcomes. Subsequently, expectations, track placements, and access to significant educational resources often are lower for students from such families.

Some community experts believe ADHD is more prevalent among low SES minority students. For instance, Barkley (1990) found prevalence rates for ADHD more likely to be higher in urban areas, higher among males, and higher among families of low SES. He further indicated that individuals from low SES families are
more likely to experience and react to the negative impact of higher rates of instability, divorce, and parental psychiatric difficulties within their families. The influence of these factors intensifies in the presence of ADHD, sometimes to such a degree that special education is required.

**Special education.** The national prevalence rate for special education is approximately 10% to 12% (Twentieth Annual Report to Congress, 1998). In an era of accountability for what some critics deem as burgeoning costs and moderate benefits (Shapiro, Loeb, Bowermaster, Wright, Headden, & Toch, 1993), school administrators are challenged by expectations to lower special education numbers. Ironically, efforts to balance demands for accountability have been boldly interpreted as the deliberate downsizing of special education with the resulting effect of decertifying students with disabilities (Kauffman, 1999); many of these students require the additional support. As a support mechanism for students found ineligible for special education, referral to the school's Section 504 team would be an option. Some students more than likely will be retained without such assistance.

**Retention.** The research conducted by Woodward and Kimmey (1997) and Shepard and Smith (1989) shows that retention alone yields no lasting academic benefit in terms of the time or costs to provide the extra year. As one example, Woodward and Kimmey (1997) reviewed six longitudinal studies on retention with sample sizes ranging from 35 to 1225. Across each study, an ability-matched control group similarly at risk for school failure was used. While all studies included examination of academic achievement, four studies also examined personal
adjustment, which included "social, emotional, and/or behavioral development" (Woodward & Kimmey, 1997, p. 3). Findings of lasting academic benefits were unsupported in terms of raising achievement or providing economical benefits. Academic performance generally matched that of academically at-risk students who were promoted. Four of their six studies determined that retention is ineffective. In contrast, two of the six studies found retention to be beneficial if it occurs for one year only, if parents are supportive, and if schools provide intensive remedial assistance.

Shepard and Smith (1989) found that public schools in the United States retain 5% to 7% of their students each year. Retention is closely linked to a number of factors described by Slavin (1994) as poverty and deprivation, behavior and emotional problems, poor standardized test scores, low academic achievement, and culturally diverse backgrounds. Other factors linked to retention are minority status, history of poor instruction, and inadequate school resources (Slavin). Somewhat consistent with Slavin’s findings on retention, and with those of the Carnegie Council on Adolescent Development (1993), are the conclusions drawn by the National Association of School Psychologists (1998) which indicate that students retained at the secondary level are more likely to drop out of school and demonstrate risk-taking behaviors that often are untoward sound health practices.

Risk factors associated with retention and the practice of retention are more likely to be observed among boys, especially if they are smaller for their age, young for their grade, immature, or members of a school culture that favors the practice of retention (Section 504 Compliance Advisor, 1997). Retention candidacy or patterns of
a long history of no benefit from instruction could trigger a Section 504 referral. Section 504 accommodations and services may be one alternative for retention candidates, particularly if these students have low mobility.

**Mobility index.** In some school populations, mobility changes as much as 100% a year (Schuler, 1990). Unusually high rates of student mobility contribute to low achievement, discontinuities in performance, and limited school success to a pronounced degree among students from families of low socioeconomic status (Asher, 1991; Straits, 1987; & Sewell, 1982). An analysis conducted by Sewell (1982) of research on high mobility described children from single-family homes as more likely to have lower achievement and more likely to move twice as often as those living with two parents. His findings identified poor record keeping as another aspect of high mobility. Sewell points out that the untimely transfer of records and necessary paperwork interrupt a smooth transition into a new school. Sometimes records are lost. If records of students with disabilities are lost, their services will be delayed.

Moreover, research suggests the possibility that teachers are biased against students whose initial entry into their classes occurs during the second semester of schools. Such intolerance, if it does exist, may weaken of the sense of community established with students having longer tenure (Walberg & Fowler, 1991). It is conceivable that students with high mobility levels may require additional assistance in bridging gaps in their instruction. Referral to the Section 504 team may be appropriate for these students.
Summary of Issues Regarding Adolescents Served in Middle Schools

Essentially, middle school design provides organizational structure to accommodate the developmental needs of adolescents (Anderman & Maehr, 1994). While the design of middle school is attractive in terms of organization and curriculum, its’ design alone may be over-relied upon as a single effort to meet the needs of middle school students. Factors such as school size, ethnicity, pupil-teacher ratio, class size, socioeconomic status, special education, retention, and mobility may warrant further consideration in finding solutions for middle school students. While the use of Section 504 is not, in and of itself, a remedy for all of the concerns that may exist about middle school, it may provide a formidable starting point for the teachers of some of these students.

Furthermore, if schools ignore the needs of adolescents, school and its rules may hold little importance for adolescents who view both as a five- to six-hour encroachment on the autonomy they so desperately seek. Because the lasting effects of middle school as an accommodation are not recognized to an appreciable degree (Clark & Clark, 1993), pathways to more specific accommodations may be sought more vigorously. The individualized nature of legal policies for students with disabilities provides such prescriptive pathways when students are eligible for services.

Legal Policies That Serve Adolescents with Disabilities

Three laws hold major significance for individuals with disabilities from preschool on through post-secondary education, the Americans with Disabilities Act (ADA) of 1990, the Individuals with Disabilities Education Act (IDEA) of 1997, and
Section 504 of the Vocational Rehabilitation Act Amendments of 1973. Common threads of antidiscrimination embedded in these three laws protect persons with disabilities. Legal entitlements under the ADA and the IDEA are dealt with briefly in this section. More attention, however, has been given to Section 504 due to the pervasive nature of its impact on the study of educating adolescents in middle schools.

**Americans with Disabilities Act**


When public schools apply this law, they are to ensure that students with substantially limiting physical or mental impairments are accommodated in accessing public school facilities and programs. If schools neglect their responsibility and are in violation of the ADA, punitive measures may be applied. These measures include lawsuits, attorneys’ fees, and investigation by the United States Department of Education under the auspices of the Department of Justice. While the ADA neither replaces nor nullifies Section 504, it does expand Section 504 protections and similarly requires enforcement by the Office of Civil Rights (OCR).
Individuals with Disabilities Education Act (IDEA)

Formerly known as the Education for All Handicapped Children Act of 1975 (EAHCA, P. L. 94-142), the Individuals with Disabilities Education Act (IDEA) (P. L. 105-17) regulates education programs receiving federal funds for students of ages 3–21 years old with specific disabilities. It is an exclusive mandate in that it identifies 13 designated categories of eligibility that limit who can be protected. Amendments were made to this law in 1986 to support early intervention and again in 1990 to add transition services and the categories of autism and traumatic brain injury. Its subsequent reauthorization in June of 1997 added clarity, but offered no substantive changes.

Four broad goals subsumed under the IDEA offer assurances to children with disabilities and to their parents. These goals are clearly identified among information from the Clearinghouse on Education of Handicapped and Gifted Children (1992). First, children must receive a free appropriate public education (FAPE). Second, the rights of children with disabilities and of their parents must be protected. Third, federal assistance must be given to states and localities providing services to children with disabilities. Finally, assurances of the effectiveness of efforts to educate and assess children with disabilities must be honored.

The IDEA is a funding statute containing eight parts (A through H). Part B ensures the availability of categorical funding based on the number of students at ages 3-21 years identified in each state. In the Commonwealth of Virginia, the age range includes students of ages 2-22 years (Regulations Governing Special Education
Programs for Children with Disabilities in Virginia, 2000). Under this statute, schools must maintain an individualized education program (IEP) for each identified student, and adhere to procedural safeguards, FAPE provisions, and placement of eligible students in general education environments to the maximum extent appropriate. Also contained in this statute is the requirement that parents have an opportunity to have their complaints addressed through due process hearings. Rights and assurances granted under the IDEA automatically subsume entitlements under Section 504 (Ballard, Ramirez, & Zantal-Wiener, 1989).

Although school districts bear fiscal responsibility for local students, the funding of this mandate is a shared responsibility. Federal dollars assist localities in providing eligible students with a floor of equal access and the guarantee of a free appropriate public education. Contextually, "free" means services are provided at no cost to parents. The term "appropriate" describes special education and related services provided under public supervision and direction as defined in an IEP consistent with the requirements of the IDEA (Bateman, 1996). Services occur in the least restrictive environment (LRE) with students without disabilities to the maximum extent appropriate. Somewhat similar to the ADA, actions may be taken by parents when their rights, or the rights of their children, are violated. These actions generally involve due process proceedings that parents may initiate against schools, or proceedings that schools may initiate against parents, when improprieties are committed. The proceedings also apply when the needs of students are threatened or neglected. In essence, the IDEA is a student-centered educational funding statute
Students with ADHD can be served by the IDEA under the categories of specific learning disabilities or emotional disturbance, if specially designed instruction is required to meet their needs. If a student’s ADHD is considered a chronic health problem that affects alertness and adversely affects educational performance, special education could be provided under the category of other health impairment. When students with ADD fail to qualify for special education services under the IDEA, they still may be eligible for special education and related services under Section 504. Similarities exist between Section 504 and the IDEA. Misapplication of the IDEA to Section 504 issues has led to some differences of opinion resolvable only in civil arenas. Because of the nature of their similarities, a comparison of the relationship between Section 504 and the IDEA is presented in Table 2.1.

**Section 504 of the Rehabilitation Act of 1973**

Section 504 of the Vocational Rehabilitation Act of 1973 (29 U. S. C. §794, P. L. 93-112) is a federal antidiscrimination statute. It protects the civil rights of persons with disabilities by preventing the denial of benefits or access to programs and services supported by federal funds. Originally, this legislation was intended to ensure that soldiers returning from World War II suffered no discrimination as they tried to rebuild their lives. Many of these veterans required rehabilitation for injuries that substantially limited one or more major life activities (MLA), such as their ability to earn a living. Major life activities are undefined under Section 504. Nevertheless,
Table 2.1

Comparison of Section 504 and the Individuals with Disabilities Education Act of 1997

<table>
<thead>
<tr>
<th>Issues</th>
<th>Section 504</th>
<th>IDEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Is a civil rights law that protects the rights of individuals with disabilities in programs and activities that receive Federal financial assistance from the U. S. Department of Education.</td>
<td>Is a federal funding statute whose purpose is to provide financial aid to states in their efforts to ensure a free, appropriate public education for students with disabilities.</td>
</tr>
<tr>
<td>Responsibility</td>
<td>General education</td>
<td>Special education</td>
</tr>
<tr>
<td>Funding</td>
<td>State and local responsibility (no federal funding)</td>
<td>State, local, and federal. IDEA funds cannot be used to serve students eligible only under Section 504.</td>
</tr>
<tr>
<td>Population</td>
<td>Individual who had, has, or is regarded as having a physical or mental impairment that substantially limits a major life activity.</td>
<td>Identifies 13 qualifying conditions.</td>
</tr>
<tr>
<td>Eligibility</td>
<td>Only eligible when she/he meets the definition of a qualified person with disabilities. The student is not required to need special education services to be protected (receive services).</td>
<td>Only eligible for special education and/or related services under one of 13 categories if found eligible by a multidisciplinary team.</td>
</tr>
<tr>
<td>Free Appropriate Public Education (FAPE)</td>
<td>Requires FAPE for eligible students. Requires a written accommodation plan. “Appropriate” means an education comparable to that provided to students without disabilities.</td>
<td>Requires FAPE for eligible students. Requires the district to provide IEPs. “Appropriate education” means a program designed to provide “educational benefit.”</td>
</tr>
</tbody>
</table>

(table continues)
Table 2.1 (continued)
Comparison of Section 504 and the Individuals with Disabilities Education Act of 1997

<table>
<thead>
<tr>
<th>Issues</th>
<th>Section 504</th>
<th>IDEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>Addresses regulations concerning building and program accessibility &amp; reasonable accommodations.</td>
<td>Requires that modifications must be made if necessary to provide access to FAPE.</td>
</tr>
<tr>
<td>Procedural safeguards</td>
<td>Requires notice to the parent or guardian with respect to identification, evaluation, and placement.</td>
<td>Requires notice to the parent or guardian with respect to identification, evaluation, and placement.</td>
</tr>
<tr>
<td></td>
<td>Minimum requirements of notice are specified.</td>
<td>Notice provisions are much more comprehensive.</td>
</tr>
<tr>
<td>Grievance procedures</td>
<td>Requires districts to provide a grievance procedure for parents, students, and employees.</td>
<td>Does not require a grievance procedure.</td>
</tr>
<tr>
<td>Due process</td>
<td>Both require impartial hearings for parents/guardians who disagree with the identification, evaluation, or placement of students with disabilities.</td>
<td></td>
</tr>
<tr>
<td>Exhaustion</td>
<td>Administrative hearing is not required prior to OCR involvement or court action.</td>
<td>The parent or guardian should exhaust all administrative hearings before seeking court action.</td>
</tr>
</tbody>
</table>

examples such as self-help skills, fine and gross motor activities and tasks, learning, rudimental sensory abilities, and working (34 C.F.R. §104.3[j][2][ii]) are contained in the statute and give a general sense of the meaning to the term MLA.

Seven subparts comprising this mandate are: (a) General Provisions; (b) Employment Practices; (c) Program Accessibility; (d) Preschool, Elementary, and Secondary Education; (e) Post-Secondary Education; (f) Health, Welfare, and Social Services; and (g) Procedures. For the purposes of this study, it is appropriate to focus only on subpart D (34 C.F.R. §104.31). Eligible students qualify for equal access to general education programs and extracurricular activities. Subpart D specifically explains components identified as location and notification, free appropriate public education, educational setting, evaluation and placement, procedural safeguards, and non-academic services. Location and notification for school-aged students in preschools, elementary schools, and secondary schools is explained first.

**Location and notification.** The essence of this subpart stipulates that schools must make efforts to identify and locate every qualified school-age child with a disability (34 C. F. R. §104.32). Notification of the school’s responsibility under the law must be given to persons with disabilities and their families. Typically, Child Find satisfies this requirement. Child Find is best explained as the procedures and means of communicating with and directing schools and the public sector when it is suspected that a child may have a disability. Child Find and subsequent actions or related procedures occur at no cost to parents under the FAPE component of Section 504.

**Free appropriate public education.** Qualified students shall receive FAPE, a
free appropriate public education (34 C.F.R. §104.33[a][b]). Services provided are at no cost to the student or the student’s parents, except at times wherein such costs would be required of general education students and their parents (34 C.F.R. §104.33[c][1]). General or special education and related aids and services must be provided to qualified students as adequately as they are provided to students without disabilities (34 C.F.R. §104.33[b][1][i]). An IEP written in accordance with the IDEA (34 C.F.R. §104.33[b][2]) may meet the requirements of FAPE. This IEP, or individualized accommodation plan, is usually addressed in a general education setting.

**Educational setting.** Students with disabilities must be educated with nondisabled peers “to the maximum extent appropriate to the needs of handicapped persons” (34 C.F.R. §104.34[a]). Removal from the general education setting is allowed only when it is demonstrated that education in that setting cannot be achieved satisfactorily, even with supplementary aids and services (34 C.F.R. §104.34[a]). Similar standards apply to nonacademic and extracurricular services and activities (34 C.F.R. §104.34[b]). When alternative settings are required, such settings must be comparable to the facilities, services, and activities made available to general education students (34 C.F.R. §104 34[c]). Decisions about the educational setting occur after evaluation.

**Evaluation and placement.** Evaluation tools and materials must be valid for their specific purpose, administered by trained personnel according to the test producer's instructions, and accurately reflect what they purport to measure (34 C.F.R. §104.3[3][b]). Multiple sources of information must be used during the interpretation of
evaluation data and decisions about placement (34 C.F.R §104. 35[c]). Placement decisions must be reevaluated periodically. Procedural safeguards ensure that parents are notified of their child’s referral to the Section 504 team and of any evaluations required following such referrals.

Procedural safeguards. Procedural requirements minimally include "notice, opportunity for parent review of relevant records, an impartial hearing with opportunity for parent participation along with representation by counsel, and a review procedure." Schools must enact and utilize these requirements (34 C.F.R §104.36), even in regard to nonacademic services.

Nonacademic services. Qualified students must have equal opportunity to participate in nonacademic and extracurricular activities in a manner comparable to those available for general education students (34 C.F.R. §104 37[a][1]). Activities such as interscholastic clubs, intramural athletics, or other services available to students in general education (34 C.F.R. §104.37[c]) are included among Section 504 provisions. Cited among examples of services covered under this standard are transportation, counseling, health services, clubs or special interest groups, and referrals to agencies such as those dealing with student employment (34 C.F.R. §104.37[a][2]).

Number of Section 504 Accommodation Plans

Research addressing the number of Section 504 of individualized accommodation plans (IAPs) is sparse. However, data maintained by the Office for Civil Rights (OCR), the use of Ritalin as a marker for ADHD, and the high prevalence of
ADHD in Virginia suggest the need for attention to the growth of IAP numbers.

In 1994, the OCR conducted a national survey entitled the Elementary and Secondary School Civil Rights Compliance Report. Using stratified random sampling, descriptive data on student characteristics collected from 5,173 of 14,814 school districts were examined. Data results on Section 504 showed student counts of 88,222 nationally, 3183 in Virginia, and 405 for the district under study. In four Virginia school districts with student memberships ranging from 45,538 to 139,130, the number of students served under Section 504 ranged from 6 to 608. Data taken by the OCR under similar conditions in 1997 indicate that, for the school district under study, the number of students served under Section 504 had increased to 1227, an increase of approximately 33% over three years. Because qualified students are entitled to an IAP, it seems reasonable to conclude that over a three-year period the school districts’ IAP numbers may have tripled as well.

At a recent legal conference, Charles Weatherly likened Section 504 to the awakening of a “sleeping giant.” In his words, “504, and the enforcement of 504, [and] 504 plan development has escalated well beyond anything that Congress had ever intended, and frankly beyond anything the courts have ever intended” (Weatherly, Speaker, 18th National Legal Institute on Educating Students with Disabilities, 1997). Weatherly contends that underutilization of prereferral intervention strategies by general educators is resulting in more referrals to Section 504 committees. His remarks seem to suggest an overuse or possible abuse of Section 504.
Concerns about the appropriate use of Section 504 surfaced in a Times-Picayune article entitled *Too Good To Be True* (1997). Reportedly, IAP numbers for New Orleans’ students in grades 3 and 4 had more than doubled to 269 from the preceding two years. Some New Orleans principals candidly admitted to placing students on Section 504 plans to assist these students in performing more favorably on statewide tests. Expressing his opinion on the matter, one Louisiana state official indicated that placing ineligible students on IAPs to “drive up” test scores could be viewed as abuse of Section 504.

Perry Zirkel (2000) added to concerns about Section 504 as he addressed an audience at a legal conference. Citing one issue paramount among Section 504 interests, he discussed how schools determine “substantial limitation” of a major life activity as referred to in the statute. In his opinion when a substantial limitation is suspected, schools should look at the national population and consider any mitigating circumstances in making their qualification decisions. He posed the question, “How is the student learning globally in relation to the general population?” As one example of mitigating circumstances, he stated, “If the parent puts the [student] on medication, and proof exists that the [student] is doing okay with the medication, [do not] give the student a Section 504 plan.” Continuing, he posited that overidentification is generally linked to ignorance, intimidation, or niceness, but if the mandate is applied appropriately, and the process is done correctly, approximately 1% of the general population comprises pure Section 504 kids. When Section 504 students are found to have excessive needs, they should be referred to special education for specialized
supports. Remedies for Section 504 violations include injunctive relief, compensatory education, and monetary reimbursement. The standard for monetary damages is bad faith and gross misconduct such as that observed in the case of Doe v. Withers. Zirkel encourages school divisions and those who work with Section 504 to remember what he termed the 3Rs. First, respect parents throughout all aspects of the Section 504 process; second, respond to the parent in a timely manner; and third, record in some type of written documentation, all communication with parents or others.

**Cost-Potential of Section 504**

The number of students with special needs and the cost to serve them is rising (Duenas, O'Reilly, & Parrish, 1993). Few studies exist pertaining to the cost of educating students with disabilities served under Section 504. Where data do exist, the cost impact may be imprecise.

Such was the finding made by McKiernan (1997) in his study of the impact of Section 504 implementation on Arizona public schools. He examined educators’ experiences related to: (a) enforcement strategies, (b) financial costs and budgetary implications, (c) provision of services to students, (d) and other factors in the context of demographic variables identified as region/locality (rural, suburban, urban) and administrative/instructional (administrator vs. instructional roles). Using a multi-method approach of open-ended qualitative research measures and fixed-choice Likert-scaled items, data were collected from nine schools through focus groups and surveys of Section 504 administrators from urban (12), suburban (12), and rural school districts (12). McKiernan also distributed a follow-up survey with teachers and
administrators to investigate structures for success in implementing the legal and cost elements of Section 504. A convergence of these multi-method findings revealed that the influence of enforcement strategies on school districts induces the development of accountability procedures to address this federal mandate, creates the perception that the OCR is antagonistic in its enforcement practices, and deepens their awareness that some confusion and misunderstanding exists concerning Section 504’s intent and application. Findings on financial costs and budgetary implications revealed that Section 504 implementation requires system-wide awareness and support because methods and strategic modifications have actual costs attached. In fact, major costs were observed in regard to transportation, technology, and staff time demands. Related costs influence management and organization budgets based on district size, compliance issues, and increases in the number of students served under Section 504. As far as services provided to students, findings showed that faculty and some administrators view Section 504 as a positive law that protects the rights of students and teachers. Additionally, it creates a better learning environment and cultivates positive opportunities for student success when classrooms are modified. Other findings emerged to show that lack of leadership and understanding result in poor implementation. For the most part, the research from McKiernan’s study suggests that Section 504 is a fair and just law that requires system accountability, support, communication, and awareness. However, clear indications are given that Section 504 implementation also is regarded as a funding concern to many educators.
Devitt (1995) conducted a qualitative evaluability assessment of Section 504 with an emphasis on ADHD among Mid-Atlantic States (Delaware, Kentucky, Maryland, North Carolina, South Carolina, Tennessee, Virginia and West Virginia). Devitt sought to determine if the effectiveness of state and local Section 504 policies could be evaluated in terms of goals and objectives established by respective state and local education agencies. Using an eight-step evaluability assessment model developed by Wholey (1979), she examined pertinent documents and interviewed staff (four federal policy-makers, three disability advocates, eight state personnel, and six local education agencies) within each of these states to ascertain intended resources (cost); activities (assessment procedures and eligibility criteria); and outcomes (placement, treatment, and due process procedures) for children with ADHD and a Section 504 plan. The 8 step-process included: 1) review of pertinent documentation on Section 504; 2) a review of literature on ADHD; 3) on-site interviews with Federal policy-makers; 4) the development of a logic model to compare the policies of state and local agencies; 5) on-site visits to 8 state agencies with a sampling of 6 local agencies in each state, 6) telephone interviews with two administrators and two teachers in each local agency; 7) the development of an equivalency model to compare federal, state, and local objectives; and 8) the development of the evaluability model that compared the resources, activities, and outcomes of local agencies in the study. Comparisons of findings made among local agencies show that Section 504 was not ready for evaluation due to a lack of clear logic associated with its implementation,
and that cost was a barrier to implementation. Examining her findings among six school districts in the state of Virginia with 2,560 to 15,459 students, Devitt found that IAP numbers ranged from one to 52. Another finding showed that very few IAPs are likely to be found in school divisions that adapt and modify instruction to address students’ needs. Devitt’s study raises questions about the implementation logic that schools may associate with Section 504: What then should school districts expect from state education agencies? What should school personnel know about Section 504?

Katsiyannis and Conderman (1994) conducted a study that offers some insight into what occurs among states in regard to Section 504. Special education directors in 50 states and the District of Columbia were surveyed by these researchers to determine state practices on serving students under Section 504, to determine the availability and content of Section 504 policies or guidelines, and to provide suggestions for developing a model Section 504 policy. They found that, including the District of Columbia, only 24% of the states had Section 504 guidelines. From the content of guidelines shared by 10 of the 14 states, all components of subpart D (pertaining to discrimination in schools) were addressed. A modicum of guidance was offered on staff development, accommodations, self-evaluation, and accessibility checklists. Reportedly, 15 state departments of education monitor Section 504, 22 receive complaints through their Complaints Management Office, and only 34 states require their local education agencies to have a Section 504 coordinator, a position usually assigned to administrative or general education staffs. Based on the findings of Katsiyannis and Conderman (1994), recommendations were made for state guidance
and training. These recommendations encompassed the development of comparisons between the IDEA and Section 504, specific policy requirements, relevant forms, and a self-evaluation checklist. Their findings are important to the refinement of state practices and signify implications for other administrative aspects of Section 504.

Guidance for those at the school level, especially in school districts that practice site-based management, is more explicit in findings by Schweinbeck (1995) on areas of actual staff development content. She conducted a qualitative study to generate a list of Section 504 compliance issues to target during staff development for teachers and administrators in Kentucky public schools. Five questions were addressed through the examination of databases, legislative documents, pertinent Section 504 case law, OCR letters of findings on Section 504, and other laws related to students with disabilities:

1) How have outcomes of landmark educational litigation affected usage of Section 504 to address perceived student discrimination issues? 2) How has Section 504 evolved to its present encompassing mandates, and how have other statutes and regulations defined it? 3) What areas of additional Section 504 coverage have been determined in recent litigation and OCR findings? 4) What specific sections of Subpart D, Section 504 (Preschool, Elementary and Secondary Education) should be included in staff development by local educational agencies? and 5) What specific Section 504 compliance issues from court decisions and OCR rulings can be targeted for staff development training? (p. 47)
Schweinbeck emphasized that staff development should be inclusive of a basic understanding of: (a) staff responsibility for carrying out Child Find procedures; (b) the meaning of free appropriate public education; (c) how the term “reasonable” applies to accommodations; (d) discipline of students under Section 504; (e) procedural safeguards; and (f) teacher accountability in the evaluation process. From her perspective, understanding is essential to meeting general education requirements and to clarifying what is viewed as the overlapping coverage of the IDEA and Section 504. Additional findings showed that some administrators lack knowledge about the Section 504 process. Inherent in lack of knowledge is the probability of inappropriate service delivery or the commission of procedural improprieties. Among public schools, interest in Section 504 appears more student-focused than regulatory. No mention was made of how these accommodations should be funded, but costs for assuring nondiscriminatory access to an appropriate education under Section 504 are the responsibility of local school districts.

According to Reid, Maag & Vasa (1994) two obvious barriers exist for users of Section 504 policy, one is operationalizing the term “substantial limitation” and the second is adjusting to the “conceptual departure” required to acclimate to the differences between Section 504 and the IDEA. Other barriers exist as well. These barriers encompass: (a) reliance on qualitative aspects associated with evaluation and assessment; (b) discerning the presence of a substantial limitation in the absence of obvious debilitation or adverse impact on academic performance; and (c) balancing the indistinguishable impact of variables such as comorbidity of disabling conditions.
on qualitative outcomes leading to eligibility for Section 504 services (Reid et al., 1994). Most often, these barriers are observed as school-based teams deal with ADHD, which is described by Reid et al (1994) as a major educational issue that carries numerous consequences. One of these consequences is an increasing number of students with this disorder. Given the connection between ADHD and requests for individualized accommodation plans, Section 504 and school practices used for students with ADHD should be closely monitored.

**Summary of Legal Policies that Serve Adolescents with Disabilities**

Three major antidiscrimination laws protect the rights of students with disabilities. These laws are the ADA, the IDEA, and Section 504. Components of these laws address who is protected, how qualification determinations are made, how assessment and placement are carried out, and how services are prescribed. Eligible students are entitled to a free appropriate public education guaranteed through procedural safeguards and due process to ensure the rights of parents, students, and the schools. Each of these laws defines sanctions that may be applied to public schools for misapplication. Among these federal statutes, only the IDEA provides financial aid to states in their efforts to ensure a free appropriate public education.

Focusing on the application of Section 504, schools may not engage in explicit discrimination against individuals solely based on these individuals' disabilities. An individual’s disability must substantially limit one of the individual’s major life activities; for school-age students, this typically means learning. Qualified students receive services or accommodations in general education classrooms. Intentional and
gross discrimination can result in reimbursement of attorneys’ fees as a form of relief to parents (29 U.S.C §794a[b]). The Council for Administrators of Special Education (CASE, 1991) has indicated that guidelines similar to those used in the IDEA usually signify compliance with Section 504. This statute appears to have come of age (Devitt, 1995), especially concerning its’ usefulness to students with ADHD, and their parents. Advocacy groups have been successful in using Section 504 to further the rights of the children they represent. It has been hypothesized that the prevalence of ADHD has increased and given rise to an increase in requests for Section 504 protection. Subsequently, a corresponding increase has been observed among the number of IAPs developed by school-based teams to meet the needs of some adolescents. Concerns have evolved over the use, and possible abuse of Section 504, when less pejorative remedies may sufficiently address the diverse needs of some middle school adolescents. Concerns also have arisen when administrators and teachers over or under-manage a process regarded by some as lacking clear implementation logic and engaging costs. If adolescents are to receive appropriate benefit from Section 504, such benefit should occur because their disability substantially limits one or more of their major life activities, and because the team of individuals making this decision understand Section 504 policy, used it properly, and reasonably applied accommodations to help these students.

Awareness of Section 504 Provisions by Those Who Serve Adolescents

Although school districts are becoming more proactive, parents continue to take primary responsibility for explaining their children's disability to administrators
and teachers. According to Fowler (1992), parents seem more knowledgeable than
teachers and administrators about making recommendations for needed accom-
modations and adaptations, especially concerning children with ADD/ADHD.
Awareness of the implications of laws serving adolescents is essential for
administrators and teachers. Staff development is one way to ensure that information
about Section 504 reaches those needing it.

Administrators’ Awareness and Use of Section 504 Policy and Procedures

Westberg (1996) reported that principals are key instructional leaders.
However, less than one third of those in the United States with general education
endorsements claimed any prior knowledge of laws related to students with disabilities.
Even with knowledge of these laws, some principals admitted feeling pressured to
accommodate parents rather than help students (Huefner, 1994). Likewise, findings
among judicial decisions emphasize the importance of having Section 504
administrators understand how Section 504 applies to instructional accommodations
and of ensuring that persons responsible for making such accommodations are
constitutes reasonable instructional accommodations also is needed as the term
“reasonable” prevails in the ADA and filters over into Section 504 through case law
(Madera Unified School District, 1995). Legal decisions include consideration of the
"reasonableness" standard. Typically, issues of noncompliance “tend to center on
evaluation and eligibility issues” (Reid & Katsiyannis, 1995, p. 46), thereby extending
the base of information needed by the Section 504 coordinator. Broad coverage under
Section 504 requires no educational impact and generates no funds for implementation. Noncompliance, however, is penalized through cessation of federal funds. Consequently, administrators of Section 504 need to know and understand the scope of their responsibility in regard to collaborative participation in the plan development and implementation process.

In much the same manner that administrators support the collaborative decision-making function of structures such as the Child Study or Teacher Assistance Team models, consideration should be given towards support of the collaborative decision-making function used in the Section 504 process. When administrators are supportive of such structures, the outcomes reached by these teams are much more meaningful to students with learning or behavior problems, and to the teachers who serve them.

For instance, Kruger, Struzziero, Watts, and Vacca (1995) investigated the relationship between organizational support and satisfaction with a collaborative team-based problem-solving structure known as the teacher assistance team. For the purposes of their study, “organizational support” was defined as the extents to which organizational conditions help facilitate the implementation and outcomes of an innovation such as teacher assistance teams (TAT). Data on four factors (administrator support, perceived purpose of the collaboration, co-worker social support, and training) were collected from 127 consumers and 161 members of TAT services in 27 elementary schools. Using 6-point Likert-type scales of TAT satisfaction, they found that TAT members and consumers were more than slightly satisfied with their TAT.
Under administrator support variables, positive feedback and release time for meetings were deemed significant to satisfaction; in addition to these variables, training was also identified as significant to satisfaction among consumers. In terms of perceived purpose of the collaboration, satisfaction among members and consumers was significant for “intended to provide help to general education teachers.” Of the three social support factors examined, all were significantly related to member satisfaction. For the two training variables explored, satisfaction with training was significantly related to TAT satisfaction. In all, specific feedback, lack of release time for meetings, understanding of perceived purpose, social support (dependence upon co-worker assistance), and training (quality preferred over quantity) were related to TAT satisfaction.

**Teachers’ Awareness and Use of Section 504 Policy and Procedures**

While a key element for administrators is understanding legal and compliance issues associated with educating students with disabilities, the major issue for teachers is implementation of IAPs. Scott, Vitale, and Masten (1998) conducted a comprehensive literature review of 21 studies addressing the implementation of instructional adaptations for students with disabilities in inclusive classrooms. Findings showed that general education teachers across all levels were positive in their attitudes toward making instructional adaptations. On the other hand, they were less positive about the reasonableness or feasibility of implementing these adaptations. Further indications were that adaptation usage correlated positively with clear attitudes toward inclusion and ratings of high self-efficacy. However, general education...
teachers were more likely to use whole-group instruction rather than differentiate instruction to the level required to benefit some students with disabilities. Generally, teachers identified lack of training in skills, knowledge, and limited school supports as significant barriers to effective implementation of adaptations.

Because of reasons mentioned previously, teachers should be made aware of penalties attached to noncompliance in providing required accommodations on IAPs. In the case of Doe v. Withers (1993), a Fourth Circuit court upheld a jury’s verdict against a general education teacher's refusal to provide oral testing as indicated in the IEP of a student with a learning disability. Noncompliance also can take the form of offering more than is necessary. In instances where the provision of accommodations or services exceeds the scope of Section 504, or does more than necessary to eliminate discrimination, Section 504 is not required (Lyons v. Smith, 1993).

Summary of Awareness of Section 504 by Providers

Students with disabilities are entitled to individualized accommodations, modifications, or adaptations. Protection for these students falls under one or more of the legal policies identified as ADA, IDEA and Section 504. Accommodation plans developed under Section 504, and their content, should direct meaningful access to instruction. Basic components of a plan should address the nature of the student’s disability and the major life activity it limits, the basis for determination of the disability, the educational impact, necessary accommodations, and placement (Section 504 Compliance: Issues, Analysis & Cases, 1997).

Issues related to Section 504 laws and procedures, placement decisions,
discipline, and provision of accommodations warrant clarification through staff development. Such clarification would ensure that administrators and teachers respond properly to the needs of any student unable to access general opportunities to learn. Conderman and Katsiyannis (1995) point out in their study of Section 504 accommodation plans that loose identification methods and vague assessment practices could influence an increase in the number of identified Section 504 students. An increase in students eligible under Section 504 would have a corresponding impact on IAP numbers.

Need for Further Study

According to Devitt (1995), observations made by the OCR suggest that administrators, teachers, and parents lack knowledge of Section 504. Some parents view themselves as more knowledgeable than administrators and teachers where ADHD/ADD and accommodations for students with this disorder are concerned. Issues of benefit, participation, autonomy, and legality require administrators and teachers to participate in training directly related to critical aspects of Section 504.

In response to the increasing use of Section 504 in Virginia schools, it is imperative to better understand how Section 504 policy is being interpreted and implemented. This study of IAPs and the process used to implement the Section 504 mandate is designed to address issues essential to the appropriate education of adolescents with disabilities in two middle schools.
CHAPTER THREE
METHODOLOGY

Introduction

Interest in Section 504 has grown among school personnel, especially interest in how this mandate is used for students with attention deficit hyperactivity disorder (ADHD). Ritalin has been identified as a marker of ADHD and its’ use has increased in the school district. Increases also have been observed in the use of Section 504 plans nationally, in the state of Virginia, and in the school district under study. Locally, it has been hypothesized that increases in Section 504 plans, the greatest of which have been observed among middle school adolescents, are attributable to ADHD. However, little is known about these adolescents, the content of their plans, or about how the Section 504 team makes decisions on their behalf. Therefore, the purpose of this study was to identify factors that affect the process used to implement the Section 504 mandate and to examine how these factors affect the number of plans, the content of these plans, and the decision-making that occurs on behalf of adolescents in two schools.

This qualitative case study was supported by grounded theory. The use of these methodologies to select data sources, design instrumentation, and collect and analyze data is described. Data were acquired through document analysis and interviews with multiple groups of informants. Procedures used in document analysis, interview protocol development, and content validity are included. The overall research question addressed through the case study is, How is Section 504 policy implemented to serve
adolescents in two middle schools? Three sub-questions guide the exploration into the overall question. First, Who are the students served under Section 504 in these middle schools? Second, What comprises the content of their Individualized Accommodation Plans (IAPs)? Third, How do administrators and teachers describe the process with which they develop and implement Section 504 policy? A grounded theory approach then is used to address a final question: How does the implementation process described in the case study affect the demographic profile of the students who are served in these schools and the content of their accommodation plans? Decisions about the order of the questions evolved from the origins of the problem, which follow in the next section.

Origins of the Problem

In 1994, the Elementary and Secondary School Civil Rights Compliance Report showed Section 504 student counts of 88,222 nationally, 3183 in Virginia, and 405 for the district under study. In the spring of 1995, 405 students in the school district were served under Section 504 (Elementary and Secondary Schools Compliance Report, 1994). An unofficial hand-count taken three months later showed that plan numbers totaled 738. Middle schools averaged a higher number of plans per school (20) than did elementary (5) or high (17) schools. Consequently, middle school plan numbers were selected for exploration. Documentation that wavered over the 1995–1996 school year made year-to-year comparisons difficult until the end of 1996-1997. Data collected by the OCR under similar conditions in 1997 show that the number of students served by the plans in the school district under study had increased...
to 1227. At that time, the average number of middle school plans continued to exceed elementary or high school averages. Attention then was directed to the content of these plans.

Plan Content During 1994-1995

An informal review of plan content developed during the 1994-1995 school year showed as few as two to more than 22 accommodations for a given student. Preferential seating and use of daily planners emerged as accommodations used more often across all school levels. The second accommodation found most often at elementary and middle school levels was extra sets of books, whereas at the high school level, it was extended time for test taking. Stipulations were placed on how some accommodations were used. For instance, if needed was stipulated on some plans, but conditions defining the term if needed were imprecise.

In landscaped format, the plan document required Section 504 teams to identify the student, provide an annual review date, and briefly address certain demographic information: address, school, date of birth, and phone number. Teams then were to address six remaining sections on the document. On the left side of the page, listed respectively under sections A to D, were conference date, four spaces for names and positions of team participants, six lines to address accommodations, and space for the beginning and ending dates of the plan. Section E combined parental consent information with a brief explanation of parental rights, and due process information. In the event that the parent disapproved of the plan, the reason for the decision was listed in section F. Space also was provided to obtain the parent’s
signature and date of consent. Questions about who was served, what disabilities were addressed, what needs and behaviors were considered, and how relevant were the accommodations used to address the needs and the behaviors of these students peppered the researcher’s thoughts.

**Emerging Issue of ADD/ADHD**

Explicit information placed on some accommodation plans clearly addressed attention deficit disorders (ADD or ADHD). In 1991, this disorder became a national focus for lobbyists and advocacy groups that influenced decisions affecting legislative changes pertaining to ADD/ADHD. Organizations such as the Association for Children and Adults with Attention Deficit Disorders (CHADD) sought federal acknowledgment of ADHD under the Individuals with Disabilities Education Act (IDEA) and Section 504. Other questions surfaced. Were plan content and numbers influenced by the ongoing interests of advocacy groups, news media coverage, medical communities, or communities at-large that are interested in ADD/ADHD? Was plan content specific to the needs of students with ADD/ADHD? Are schools aware of the needs of students with ADD/ADHD?

**In-service Response Related to Section 504 and ADHD**

Prior to 1989, the Virginia Department of Education (VADOE) focused on educating school personnel about the characteristics and treatment of ADHD. Shortly afterwards, statewide technical support and capacity-building projects were undertaken in collaboration with institutions of higher education (Task Force Report on Attention Deficit Hyperactivity Disorder and the Schools, 1989). Subsequently, local
school districts were directed by the VADOE to develop Section 504 guidelines.

Locally, staff development and capacity building efforts were underway between the special education office and individual schools. Institutions of higher education and experts on ADHD collaborated in some of these local efforts. Simultaneously, the school district's special education administrators introduced newly developed local guidelines on Section 504. School administrators were apprised of changes in Section 504 regulations and the concomitant impact of these changes on public schools. Special and general education instructional support staff from the school district's central office shared some staff development duties. Collaboration between these groups led to a system-wide training initiative on best practices in assisting students with attention deficit disorders. Insofar as this researcher can determine, from 1989 until the present, in-service requests on Section 504 and ADHD have continued. It became important then to understand the relatedness of IAP numbers, IAP content, the Section 504 process, and capacity building in relation to the needs of adolescents served in middle schools.

The Research Design and Procedures

Case study design and grounded theory were used to examine factors believed to affect the plan development and implementation process, content, and the number of Section 504 plans in two middle schools. Flexible use of constant comparisons resulted in the discovery of meanings that individuals placed on events, processes, and structures (Miles & Huberman, 1984). In this study, this flexibility is observed when phenomena are examined in their context, and when the framework of questions exploring those phenomena primarily begins with "how" and "why" (Yin, 1993).
Grounded theory provided a means of comparing and shaping findings from both schools to support the development of theory that future research may confirm or disconfirm (Turner, 1981). The conceptual model (Figure 3.1) shows how data were used to describe factors affecting the number and content of plans, and the plan development and implementation process found in two representative middle schools. From these factors, theory was derived to explain how the process used to implement Section 504 policy in these middle schools affects the protections provided to adolescents with disabilities at these different sites.

Selection of Sites and Samples

This investigation was conducted in a large urban school district in southeastern Virginia. Data from School Profiles (1997) and Facts & Figures (1998) showed 78 schools that served 76,697 students during 1996-1997. More than 5000 teachers served this diverse student body of Caucasians (68%), African-Americans (24%), Asian-Pacific Islanders (5%), and a mixture of other racial groups (3%). The teacher-pupil ratio was 24 to 1 in grades 6 through 12. According to the school division’s count of students with disabilities, approximately 14% of this population received special education (Virginia Department of Education, 1996). At the middle school level, 28% of these students received free and reduced-price lunch. In grades 6, 7, and 8, the percentage rates for retention were, respectively, 8%, 12%, and 12%. For this same body of students, the mobility rate was 23%. In selecting sites and participants for this study, purposeful sampling was employed to select two middle schools, nine teachers, two school-based Section 504 administrators, and two central office
Research Question: How is Section 504 Policy implemented to serve adolescents in two middle schools?

Sub-questions:
Who are the students served under Section 504 policy in these middle schools?

What comprises the content of their Individualized Accommodation Plans?

How do administrators and teachers describe the process with which they develop and implement Section 504 policy?

Data Sources
- Documents
- Interviews

Data Analysis
Comparative Case Study

Grounded Theory
How does the implementation process described in the case study affect the demographic profile of the students who are served in these schools and the content of their accommodation plans?

Findings

Figure 3.1 Model of Exploration Into Section 504 Policy Implementation In Terms of the Difference in Number of Plans, the Plan Content, and Decision Making Found In Two Middle Schools
special education administrators. Criterion sampling was used in the selection of students’ IAPs.

**Middle school site selection.** Academic and exploratory courses are offered in many of the district's 16 middle schools. Academic core subjects include English, mathematics, science, social studies, and health and physical education. Exploratory subjects, flexible block scheduling and interdisciplinary instructional approaches also are provided. Eleven of these schools served as the pool from which two sites were selected. Site selection was based primarily on differences in IAP numbers found among schools.

Five schools were eliminated from the initial pool; two followed atypical programming formats in that one was a gifted magnet school and the other, an alternative education site. Of the third and fourth schools eliminated, one only housed sixth grade and the other only housed seventh and eighth grades. The fifth school was eliminated because it received Section 504 technical assistance from the researcher.

Frequency counts taken of middle school Section 504 plans were ranked from highest to lowest among 11 remaining schools. Schools then were ranked and paired from highest (38) to lowest (3) number of IAPs. From this ranking, selection of the highest and lowest school was rejected to eliminate outliers and to increase the teacher sample pool. The second pair of highest (33) and lowest (8) schools was selected.

Of the two schools selected, one was labeled HPU for *high IAP users*, the other LPU for *low IAP users*. Both schools followed the typical structure of middle school, which incorporates homebase (homeroom) and traditional teams (students rotate
among four teachers for instruction in language arts, math, science, and social studies). One or more administrators headed each grade level. Demographics for each school are shown in Table 3.1.

**Student sample selection.** Criterion sampling was used to select students served by an IAP from September through the end of the 1996-1997 school year. School rosters were generated of these students. The records of 41 students were identified and selected for participation in the study, 33 from School HPU and 8 from School LPU.

**Central office administrator selection.** Based on purposeful sampling, two central office administrators who provided school-based administrators and teachers with technical support concerning Section 504 regulations and procedures were interviewed. These two participants were special education program coordinators assigned to either School HPU or LPU. With the exception of the number of schools they serve, their jobs are identical to that of the researcher, who also is a central office special education coordinator. The primary responsibility of a special education coordinator is to provide administrative and instructional support to the specific schools to which they are assigned. Most of the central office special education administrators are assigned to six or more schools. Specifically, they assist principals and their staff in understanding the special education needs of the students with disabilities served in their school; provide continuous administrative guidance and staff development to site-level special education coordinators; and assist special education teachers with resolving programmatic concern of teachers regarding the
Table 3.1

Demographic Profiles of Schools with High Plan Users (HPU) and Low Plan Users (LPU), 1996–1997

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>High plan users</th>
<th>Low plan users</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Number of schools</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Enrollment totalsb</td>
<td>1184</td>
<td>100</td>
</tr>
<tr>
<td>Ethnic groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>990</td>
<td>84</td>
</tr>
<tr>
<td>African-American</td>
<td>138</td>
<td>12</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>36</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>Pupil/teacher ratioc</td>
<td>22:1</td>
<td>—</td>
</tr>
<tr>
<td>Free and reduced-price lunch</td>
<td>263</td>
<td>22</td>
</tr>
<tr>
<td>Special education</td>
<td>114</td>
<td>10</td>
</tr>
<tr>
<td>Section 504</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>Retentiond</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Mobility indexe</td>
<td>237</td>
<td>.21</td>
</tr>
</tbody>
</table>

*School Profiles, a local document of demographic factors on in-district schools.  
*Based on September 30th count.  
*Ratio of average number of students assigned to one teacher-taken from English class enrollment.  
*Retention-number of students retained in June of 1995-1996.  
*Obtained by dividing the enrollment total by the number of times a student moved into or out of the school to show the turbulent effect of such movement on probable adjustments (i.e., additional books, scheduling, class size, etc.) required within the school environment.
mild to moderate categories needs of their students with disabilities. Each of these central office special education administrators has collateral duties (i.e., grant programs, preschool initiatives, participation of students with disabilities in state testing programs, staff development on special education matters, and technical assistance on Section 504). In addition to a grant program, and testing, the researcher was assigned the quasi responsibility of “keeping up” with Section 504 and sharing information with her peers. Responsibility for Section 504 is recognized across the school district as residing in the special education office. Requests have been made to have it returned to general education. Therefore, it is believed that their participation in this study provides insight on IAP numbers, IAP content, and the Section 504 process in their assigned schools. They also added validity to the study through participation in the content validation process discussed later in this chapter.

**School site Section 504 administrator selection.** Within-school purposeful sampling was used to select administrator or designee interviewees. Each school was requested to identify its Section 504 coordinator, the individual who chairs the school-based Section 504 committee. One site-level Section 504 coordinator from each school was interviewed. Information was obtained about how each site-level Section 504 coordinator described high or low IAP number, IAP content, the IAP development and implementation process.

**Teacher selection.** Teachers were selected based on their awareness of the Section 504 process as determined from the listing of their signatures on students’ IAPs. From their signatures, it was presumed that they had participated in some phase
of the IAP development and implementation process. Their signatures then became the
data source from which two rosters of teacher names were generated, one each for
School HPU and School LPU. Within-school purposeful systematic sampling was
used to select teacher interviewees. Every fourth teacher listed on each roster was
selected, resulting in nine teachers. Five teachers were from School HPU and four
from School LPU. Responses made by these participants provided the depth required
for the study. Information then was obtained on what each teacher knew about the
high or low IAP number, IAP content, and the IAP development and implementation
process in their respective middle school. If any teacher selected was unable to serve,
another was chosen.

Three teachers from School LPU were withdrawn because of their absence at
the time of teacher selection. Therefore, three teachers were chosen from the LPU
teacher pool to replace them. Although the site administrator for School HPU was
reassigned to another school, she was interviewed to minimize the impact of history
on the study and to maximize relevant information regarding the implementation of
Section 504 policy during her tenure.

Data Collection Tools

Data were collected using interview guides and document analysis, tools
synonymous with instrumentation when used in qualitative studies (Miles &
Huberman, 1994). A separate general interview guide was administered respectively
to selected central office administrators (Appendix B1), school site-level Section 504
administrators (Appendix B2), and teachers (Appendix B3). Interviews provided a
means of examining participants' perceptions (Marshall & Rossman, 1995) of the
number of IAPs, their content, and the Section 504 implementation process.

Initially, four documents were used. Two of these four documents, *School Profiles (1997)* and *Facts & Figures (1998)*, contained descriptive profiles of each school and each school’s student population. Students’ cumulative files (containing a Section 504 plan, eligibility information, grades, attendance, test records, discipline records, and related documents) comprised the third document. The last document reviewed was the school district's local Administrative Guidelines Governing Section 504 (1996). Document analysis questions are shown in Appendix C.

**Development of the Interview Protocols and Document Analysis Questions**

Three interview protocols were developed from questions linked to literature on Section 504, accommodations for students with disabilities, ADHD, and middle school adolescents. Whenever possible, research on the IAP development and implementation process, IAP content, and IAP numbers was used to further the development of questions.

Protocols were validated with the assistance of 11 school administrators enrolled as doctoral students at Virginia Polytechnic and State University. Given a brief explanation of the study, these participants read and followed directions written on the validation instrument to identify domains and data sources for each question and probe (see Appendix D). These participants also addressed item clarity and made recommendations for improving the protocols.

Ten validation instruments were returned. A frequency count was taken of the number of times a particular domain, data source, and level of clarity was selected.
Items and probes receiving average frequency counts of 50% or more were added to the final set of interview protocols or under document analysis. The ranges of percentages were 43%-100% under domain, 14%-71% across data sources, and 14%-57% for item clarity. Frequency counts were lower than anticipated, so adjustments were made to the instrument based on content validation results and additional feedback from discussions held with four of the content validation participants. The stem and three of the seven probes under item number two were modified to obtain clarity on school demographics. The terms *content* and *number* were modified and a probe referencing increase or decrease was eliminated from item number one.

Adjusted validation instruments were then administered to individuals familiar with the structure of Section 504 in the school district and representative of the Section 504 users proposed in the study. Five individuals with administrative and instructional awareness of Section 504 completed the revised instrument according to the directions given. Two of these individuals were central office special education coordinators who provided Section 504 technical assistance and training to their assigned schools. Two administrators managed the Section 504 process in their schools. One former elementary-level administrator who addressed the Section 504 questions of parents and teachers through the school district's Parent Resource Center also was selected. Based on their responses, the frequency ranges of responses were 50-100% under domains, 60-100% across both data sources and item clarity. Comments from these five participants and those of an expert judge (university professor with expertise in principles of qualitative research) were incorporated into
the development of protocols and document analysis items.

Additional comments from this group led to renaming the knowledge domain the "process" domain. Other suggestions aligned with changes made to expand the definition of various domains. The probe "other" was added as needed to give depth to possible responses. The order of the domains was changed to content, number, and process. Domains were reordered to place school demographic questions at the end of the interview (Goetz & LeCompte, 1984). Adjustments made prior to the final listing of items are shown in Appendix D for interview protocols and in Appendix E for document analysis.

Prior to field-testing the protocols, the interviewer was trained in techniques of conversational interviewing. Rudimentary training on interviewing techniques was administered by a Public Information Coordinator who is an accredited member of the National School Public Relations Association; presenter and consultant; contributing author to national, state, and local education organization publications; and former teacher of drama, speech, and English. Training included how to: (1) conduct a conversational interview; (2) relate positively to interviewees; and (3) use appropriate body language and gestures. Four participants requested telephone interviews. Prior to their interviews, each was reminded of confidentiality and conditions pertaining to recording the interview. After consent was obtained, an adapted transcription machine was used to record their responses that later were transcribed to facilitate in-depth analysis.
Field-testing of Interview Protocols

The interview protocol for site-level administrators was field-tested with a Section 504 administrator-participant experienced in the development and implementation of IAPs at both the middle and high school levels. Previously, he had served as a central office special education administrator who provided Section 504 technical assistance to site-based Section 504 administrators in the school district. Fifty-three minutes were required for administration of the protocol. The site-level administrator protocol was selected for field-testing because it contained all items included on the teacher and central office administrator protocols. Revised protocols were submitted to the Institutional Review Board of Virginia Tech and to the school district's Office of Accountability for approval. Approval was granted.

Data Collection Procedures

Face-to-face contact was made with both principals who were told the purpose of the study, the manner and extent of school-staff involvement, and the researcher’s role. Initial contact with both principals was followed-up with a letter requesting permission to conduct the study, access confidential Section 504 files, and interview selected staff. A brief introduction to the researcher, explanation of the purpose of the study, information on the interview format, acknowledgment of the researcher's desire to tape the interview, and an assurance of confidentiality were provided (Appendix F). Once entry had been gained, directives from each principal were followed to contact the interviewees and request assistance in conducting the study.

Collection of Documentation

Documents were requested as directed by each principal. Publications of
demographics on each school in the district (School Profiles, (1997) & Facts and Figures, (1998)) and students’ confidential IAP files were requested. Demographic data on the schools under study were entered into Table 3.1. Data from students’ confidential files are listed into Appendix G.

Students' Section 504 files were reviewed for information on eligibility, reasons for referral to the Section 504 team, impairment category, targeted behaviors, and specific accommodations. Raw data were entered into matrices (Appendices I through J). Efforts were made to retrieve missing student documents. Because documents had to be retrieved from other schools, the principals of those schools were contacted. The purpose of the study was explained to each principal. Required information then was requested. Procedures previously indicated for gaining entry to school sites were repeated to the extent necessary to gain entry and access pertinent information.

Collection of Interview Data

Interview participants were reminded of confidentiality and the conditions of tape-recording. Attempts were made to help participants feel at ease with the interviewer. In a conversational manner, attention was directed toward the question stems on the interview guide. Depending on the depth of participants' responses, comments were probed for clarification. Questions answered out of order were not repeated, unless additional information was sought. After checking final concerns, sessions were ended and appreciation was extended to the interviewees. Raw data from each interview were transcribed into matrices (Appendix K-L). Only those raw
data directly addressing each interview question were included.

Data Analysis

Raw data from interviews and pertinent documents were sorted according to each interview or document analysis question. These data were entered into matrices to establish categories, analyze the data, identify emerging themes, and compare results. Four basic steps then were followed: preparation of the data, discovery of big ideas, utilization of the constant comparative method, and verification of the trustworthiness of the data (Glaser & Strauss, 1967; Maykut & Morehouse, 1994).

Raw data pages were coded to their sources and photocopied for identification of units or chunks of meaning as suggested by Maykut and Morehouse (1994). Concepts were identified based on recurring words, phrases, and topics in the data. Other recurring phenomena in the data were considered. Emerging themes expressed as phrases, propositions, or questions were identified.

Materials then were gathered to conduct the constant comparative process using a variation of the materials proposed by Maykut and Morehouse (1994). These materials included focus of inquiry sheets, initial discovery sheets, markers, tape, blank multi-colored 3"x 3" self-adhesive post-its, large sheets of 25 in. x 30.5 in. self-sticking easel pad post-it paper, and a pair of scissors. From initial discovery sheets, themes were collapsed. One noticeable theme or idea was selected and written on a 3"x 3" post-it, which was then taped onto the left side of the discovery sheet. The single word or phrase formed the first provisional category.

Analysis of Data From Documents

Document analysis included (a) identifying and selecting relevant documents
according to specified research questions, (b) developing a category-coding procedure, and (c) conducting the content analysis (Gall et al., 1996). Actual comments and entries were entered into raw data matrices. This process was used to treat data obtained through document analysis. It involved organizing, structuring, and adding meaning to the volume of data collected in the search for generalizations about relationships among data categories (Marshall & Rossman, 1995).

Four sets of documents were analyzed: School Profiles, Facts & Figures, students’ confidential files (Section 504 plan, eligibility information, attendance, test records, grades, discipline records, etc.), and school district’s local Administrative Guidelines Governing the Administration of Section 504. Data were reported in matrices, narrative, or a combination or matrix and narrative formats.

Analysis of Data From Interviews

Participants’ responses were scripted using a transcriber with a pedal device. All data were separated into relevant categories. Categories were refined and developed according to their relationship. Categories linked to other categories were identified using a system of color-coding that permitted easy identification of relationships and initial themes. Information from margin notes was incorporated. Transcripts were analyzed within and across each school using this method.

Reliability

Multiple data sources were used. To ensure reliability, the researcher documented actions in an audit trail. The audit trail increased internal validity, and the likelihood that replication of the study under the same or similar conditions would
yield the same or similar results (Gall et. al., 1996). Descriptions of the interactions or observations at the site increased the external validity, or transferability, of the study. A combination of these methods increases trustworthiness and reduces bias. A chain of evidence was created to further validate findings.

Coding for Document Analysis and Interviews

Four individuals participated in the determination of reliability and coding of responses. Three of these individuals were randomly selected to assist with interrater reliability and coding of emerging themes. The fourth individual was the researcher. Each individual was given a set of responses to three items representing one response from each user group. Coded responses made by these individuals were compared to those of the researcher. Agreement was 100% across ratings for user groups (Appendix H1 to H4). Coding of IAP content was high with the exception of confusion over which items fell into the "other" category (Appendix J4). Based on results obtained, reexamination was not required.

Conceptual Framework

The conceptual framework that follows provides a roadmap of the undertaking of this study. As shown in Figure 3.2, a comparative case study is used to describe and analyze of the number and demographic profiles of students served and the content of their IAPs. From interview responses, administrators and teachers in each school describe the process used to develop plans and implement Section 504 policy. Schools are designated High Plan User (School HPU) and Low Plan User (LPU) based upon their number of plans. Results are analyzed within and, subsequently, across three
EDUCATING ADOLESCENTS IN THE CONTEXT OF SECTION 504 POLICY:
A COMPARATIVE STUDY OF TWO MIDDLE SCHOOLS

LITERATURE REVIEW
Adolescents Served in Middle Schools  Legal Policies that Serve Adolescents
Awareness of Section 504 Policy by Service Providers

RESEARCH QUESTION
How is Section 504 policy implemented to serve adolescents in two middle schools?

COMPARATIVE CASE STUDY (Sub-questions)
Who are the students served under Section 504 policy in these middle schools?
What comprises the content of their Individualized Accommodation Plans?
How do administrators and teachers describe the process with which they develop and implement Section 504 policy?

GROUNDED THEORY
How does implementation process described in the case study affect the demographic profile of the students who are served in these schools and the contents of their accommodation plans?

DATA SOURCES
SCHOOL: HIGH PLAN USER (School HPU)
DOCUMENTS:
• Number of plans
• Demographic profile of students served
INTERVIEWS
• Central office administrators
• Site-based administrators
• Teachers

SCHOOL: LOW PLAN USER (School LPU)
DOCUMENTS
• Number of plans
• Demographic profile of students served
INTERVIEWS
• Central office administrators
• Site-based administrators
• Teachers

GROUNDED THEORY
Examining implications of the implementation process

Figure 3.2. Conceptual Model Supporting the Discovery of Factors Affecting the Number of IAPs, Content of IAPs, and the Plan Development and Implementation Process Found in Two Middle Schools
domains: number of plans, content of plans, and process used to develop and implement plans in each middle school. Grounded theory then is employed during cross-case analysis to derive theory relative to how the implementation process described in the case study affects the demographic profile of the students and the contents of their accommodation plans.

Constant comparisons were made as data from documents and interviews were categorized under each research question according to their identification as a high or low plan usage school. Emerging themes were identified and explored to ascertain relevant

Presenting The Results

Tabled data compiled into descriptive narratives addressing the research questions, the resulting comparative case study describing how Section 504 policy is implemented in the two middle schools, and the theoretical examination of its consequences, are presented in Chapter 4.