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EFFECTS OF SCHOOLS ATTUNED ON SPECIAL EDUCATION REFERRALS FOR AFRICAN AMERICAN BOYS

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

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Indiana University of Pennsylvania

August 2010

Indiana University of Pennsylvania The School of Graduate Studies and Research Department of Education & School Psychology

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Title: Effects of Schools Attuned on Special Education Referrals for

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This study compared the number of special education referrals for African American boys before and after the implementation of the training program, *Schools Attuned*. The purpose of the research was to ascertain if the number of special education referrals for African American boys generated in schools with teachers trained in *Schools Attuned* were significantly lower than referrals for African American boys that were generated in schools without teachers trained in *Schools Attuned*.

Four consecutive years of archival special education referral data from 64 urban schools in a major metropolitan area comprised the research sample. The schools were divided into two groups. One group consisted of 32 schools with teachers who were trained in *Schools Attuned*. An additional group of 32 schools consisted of teachers who were not trained in *Schools Attuned*. The referral data from the group of schools with *Schools Attuned* trained teachers were compared to the data from the group of schools without *Schools Attuned* trained teachers. The first two years of referral data were designated base line data. The last two years of the data from sample were compared to the base line data to determine if there was a difference in referrals for African American boys in the *Schools Attuned* group when compared to the No *Schools Attuned* group.

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The results of the repeated measures analysis of variance showed no significant difference in referrals for African American boys in schools with *Schools Attuned* trained teachers when compared to referrals in schools without *Schools Attuned* trained teachers. When the referrals for African American boys for each group of 32 schools were compared to their own time period baseline, a significant decrease in the number of referrals was shown.

ACKNOWLEDGMENTS

The journey toward the completion of this dissertation was not walked alone. I offer my heartfelt thanks to all those who walked with me. The support and encouragement that I received from friends and family sustained me through the years and will stay with me for a lifetime.

I offer my earnest gratitude and sincerest appreciation to:

- My committee for their on-going support;
- My husband, Narciso, for being there;
- My sister-in-law, Martha, who has always been my biggest supporter and nurturer;
- Jennifer, Pat, Betty, and Josefina who provided time, energy, notes of support,
 and care packages when necessary;
- Sally, my IUP roommate and friend who walked this road by my side;
- Joan, who gave me the gift of clarity;
- Dr. S. Aymer, my mentor and friend and,
- Four precious boys, now men, Adrian, Aurelio, Michael, and Nicolas, thanks to you all.

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CHAPTER I

INTRODUCTION

"What the best and wisest parent wants for his own child . . . must be what the community wants for all of the children" (Dewey, 1898).

Disproportional overrepresentation of African American boys in special education is a civil rights concern and is a crisis (Harry & Anderson, 1995). This circumstance has been a concern of the federal government since efforts to provide appropriate academic environments for students with handicapping conditions were initiated.

To acknowledge and address the issues of overrepresentation protects the civil rights of all children (Jeffords, 2002). The failure to define and address the factors that contribute to disproportional representation of African American boys in special education defers the guarantee of equitable education for all children. Norma Cantu, during her tenure as Assistant Secretary for Civil Rights during the Clinton administration, identified disproportionate placement of minorities in special education as one of her three enforcement priorities (Glennon, 2002). Addressing this problem remains an area of concern on the educational horizon.

The *Individual Disabilities Education Improvement Act* (IDEA, 1997) strengthened the educational rights of students with handicapping conditions. This law and its precursors, including PL 94-142, are as important to educational services accessibility for students with disabilities as Brown v. Board of Education (1954) was in protecting the educational rights of minority children. IDEA (2004) extends equitable educational benefits to all children, and requires states to provide adequate resources so that students with disabilities benefit from instruction (Orfield, Losen, &

Wald, 2004). IDEIA's full impact is inhibited if its benefits to handicapped children are not distributed equitably, are withheld, are inappropriately administered or are misapplied to students of color.

Need for the Study

Educational quality affects the strength of a country's economy as a whole. It influences the individual income of a nation's citizens and the standard of living in communities. In the United States, notable gaps in living standards exist between racial groups. These differences in living standards due to income are grounded in educational quality (Hanushek, 1994). This situation needs to improve for all students to ensure that the United States remains economically viable. Providing adequate education to minority students, including African American boys, is especially appropriate since it is expected that in the year 2050 around 50% of the United States population will be African American, Hispanic, and Asian (Alliance for Excellence in Education, 2007).

The impact of the overrepresentation of African American boys assigned to special education services in schools will influence the quality of all education in this country in the foreseeable future. In the United States, over six million students between the ages of 6 and 21 receive special education services.

Nationally, African American students comprise 17% of public school students, yet they make up 41% of special education placements (Losen & Orfield, 2002).

African American children are labeled mentally retarded 2.88 times more often than White children are and they are labeled emotionally disturbed 1.92 times more often than their White peers (Parrish, 2002). At 12.4% of the total student population of

school age children in the United States, African American children comprise the second largest percentage of all children who receive special education services. The United States Office of Special Education Programs (OSEP) Data Analysis Systems report for the year 2002 showed that nationally 33% of African American children with disabilities spent greater than 60% of their school day outside of general education classrooms (Fierros & Conroy, 2002).

Large percentages (85%) of all African American students placed in special education are African American boys (Schott Foundation for Public Education, 2004). If they are found to need special education services, they are given the most restrictive placements, in self-contained classes segregated from general education students (Harry & Anderson, 1995).

Transforming the statistics of disporportionality requires scrutiny of current practices and routines, an openness to explore new and innovative ways of defining educational practices, and the development of programs not previously considered. It requires a commitment to utilize only effective practices and abandon those that are not valuable. In times of scarce dollars for education and given the need to demonstrate educational progress for all subgroups as required in *No Child Left Behind* (NCLB), local educational agencies (LEAs) need to ensure that the practice models and programs employed are able to withstand the scrutiny of scientific study.

Inappropriate referrals to special education result in students who may need other kinds of academic help being inappropriately labeled and given unsuitable services that do not remediate their deficits. The inappropriate placement of African American boys in special education prohibits them from receiving the services they need to make academic

progress. Additionally, students who spend their school years in special education often leave school without basic reading and math skills, making it difficult to impossible to complete high school with a diploma (Sen, 2006). African American boys with Individual Educational Plans (IEP) are generally less likely to participate in post-secondary job training and are less likely to attend college. Students who lack skills or training are less likely to get or maintain jobs that provide a living wage.

The issues of limited skills and other community factors make it more likely that within five years of leaving high school, African American boys with IEPs will be involved in the criminal justice system rather than attending college or any post-secondary school training (Comstock-Galagan & Brownstein, 2007).

Special Education Referrals

Special education referrals are initiated for various reasons. Teachers may not have the training needed to work with students whose skills are outside the usual range of ability or they may be apprehensive if they do not believe they have the appropriate training in classroom management. They may feel they do not have enough teaching experience to work with some children. The pressures teachers have to raise test scores and to demonstrate that students are making educational progress are also factors that present extra burdens for teachers. These concerns may prohibit teachers from providing the type of instruction that supports learning differences. Some special education referrals also may be initiated by factors of individual or institutional perception of the need for special education (Diamond, 2006). A lack of familiarity with the culture of African Americans may also influence the initiation of special education referrals (Harry, 2002).

The perceptions that fuel the initiation of special education referrals may be influenced by the academic or cultural expectations of the larger community or the school community where the referral was initiated. Referrals may be influenced by the teacher's perception of the student's ability to learn or the child's comparative demonstration or lack of demonstration of knowledge and skills that the teacher believes the child should have previously attained. The personal bias of teachers' perception in special education referrals and placement were noted by Harry and Klingner (2006) found teachers' referrals for special education assessment could override an evaluation team's data and result in a prominent likelihood of a student's placement in special education. Special education referrals may be attributed to the student's poor overall performance, or to the teacher's belief that the academic performance of the referred student is markedly different relative to other students.

Dunn (1968) addressed the inaccuracy of identifying large numbers of African American children as mentally retarded and placing them in special education. Dunn heightened the level of awareness that assessment professionals, including school psychologists, needed to address concerning the accurate identification of children with disabilities. Dunn (1968) amplified the importance of being able to differentiate between students who have not received effective general education instruction that allows them to make educational progress and children who require specialized help.

Students referred for special education assessment are often identified when teachers believe the students cannot benefit from their instruction. When teachers do not have a variety of instructional methods or adaptations that reach a broad range of learning capabilities, they are more likely to refer students. Expanding and extending teachers' instructional methods and practices through effective staff development and teacher training

will improve the likelihood teachers will be able to support a wider range of learning variations, and therefore, will only initiate referrals for students who are most likely to need special education.

School psychologists benefit if teachers improve their instructional skills. Students referred for assessment by teachers who successfully modify their instruction to meet the educational needs of more students are likely to initiate special education referrals for students who have not, despite modification, made academic progress. The students they refer may benefit most from special education.

The role of school psychologists is enhanced and improved if they are only required to assess students who do not make appropriate educational progress when exposed to effective instruction. Elimination of school psychologists from the special education gate-keeping function will allow them to be more specific in pinpointing deficits in those students who do require assessment. Effective classroom instruction will also allow school psychologists to be more accurate in recommending specific and appropriate modifications and services provided in the classroom. This will permit school psychologists to function more effectively and offer more services, such as development of effective preventive services; school-wide academic and behavioral interventions; teacher consultation strategies; effective Response to Intervention (RTI) models; and whole school interventions, including positive school culture, climate, and building environment.

School professionals, including teachers, bring expertise to the initiation of special education referrals, but each referral may also be subject to individual beliefs about students that can result in inaccurate referrals. This leaves the possibility of as many inaccurate as accurate special education referrals. Harry and Klingner (2006) discussed the impact of

teachers beliefs on referrals to special education. They concluded that in some school environments, teachers' beliefs that students will receive help specifically designed for their needs influences their decision to make special education referrals. A teacher's identification and recommendation for special education may reflect an accurate perception of a student's skill deficit, but the student may need skill building or instructional modification rather than special education.

Often, teachers who work in neighborhoods that are economically and racially segregated may have fewer instructional and classroom management skills. Generally, teachers who work in low socio-economic and segregated schools have fewer years of professional experience, and advanced degrees. Often they do not have the appropriate credentials for the subject or area they teach (Losen & Orfield, 2002). The lack of required skills contributes to the number of teacher-initiated referrals to special education (Harry & Klingner, 2006). Teachers who make referrals may not feel they have the skills to teach children whose backgrounds are different from their own (Delpit, 1993). They may believe students they cannot reach have special needs, thus motivating referrals to special education (Cummins, 1993, Howard, 2006). Teachers, who lack experience and advanced training in pedagogical practices including classroom management, may not know how to implement appropriate instructional modifications, support appropriate behavior or manage difficult classroom behavior.

Furthermore, many new teachers begin their careers through alternative paths, without university credits in teacher education, or they may have attended accelerated or truncated courses given in a brief period of time so they can quickly obtain eligibility for certification. Individuals who arrive as classroom teachers from fast track training may not

have sufficient knowledge of age appropriate behavior or academic expectations for the students they teach. In addition, experienced teachers tend to move to schools that are more desirable, which are usually in higher income-based neighborhoods (Sen, 2006).

Poorer urban schools tend to have high teacher turnover, with some classes having a series of teachers assigned to them within a single school year. Quick turnover can prevent teachers from being able to observe a student's ability over an extended period of time, which would have allowed them to develop a more intricate understanding of specific modifications to improve students' learning.

A recent analysis of the effects of teacher professional development on student achievement revealed that certain kinds of professional development support instructional improvement and student achievement. Among the pivotal factors were direct staff development rather than train the trainer presentations, sustained duration of 14 hours or more, and the inclusion of study or follow-up sessions. When stated factors were incorporated in staff development, they were found to be the most effective in changing teacher practices and improving student achievement (Yoon, Duncan, Wen-Yu-Lee, 2007).

Cultural Factors

Teachers working in schools in poor and segregated African American communities are generally acculturated to different socioeconomic and ethnic norms than their students. They may lack familiarity with the culture of their students (Harry & Klingner, 2006). This may cause teachers to misinterpret common behaviors of African American boys such as play fighting. Teachers may misinterpret levels of individual activity and other types of peer interactions (Artiles, Harry, Reschly, & Chinn, 2002) and align such behaviors with more serious implications. Some teachers

may see behaviors as dangerous, maladaptive, and indicative of emotional disturbance, rather they are reflective of children's survival within their cultural community. Misperceptions of non-threatening playful behaviors such as those that are typically shown by African American boys in some communities may occur. For example, an African American child's method of solving a problem may not necessarily be considered appropriate in a school where the cultural orientation is more mainstream (Hale & Benson, 1988). In some African American communities, children settle differences within their own peer group rather than involve adults. In other instances, the school community's discipline structures and behavioral expectations may be incongruous with the student's cultural and behavioral expectations. If the rules of a child's cultural community are not considered when teachers respond to behavioral and academic situations, then disciplinary procedures are initiated and produce a spiral of events that may eventually lead to inappropriate special education referrals (Benson, 1988; Losen & Orfield, 2002). Lo and Cartledge (2003) found that African American students were more likely to be suspended for certain behaviors than other students and when they were suspended, they were subjected to more severe penalties for misbehavior than other students.

In Fist, Stick, Knife, Gun: A Personal History of Violence in America (Canada, 1995), a memoir of an African American man raised in the South Bronx, Geoffrey Canada describes a childhood incident where he and his brothers return to their home after Canada's winter coat was stolen by other boys on a playground. His mother sends them back to the playground and tells them that if they return without the coat they will be physically chastised. Canada's family's limited resources made it

necessary for his brothers and him to retrieve his coat by any means necessary to avoid punishment at home. Canada and his brothers not only threaten, but also use physical violence in confronting the boys responsible. They return home with the coat. The way the siblings handle the situation ensures their survival in the community.

Collectively, the boys become a reckoning force. Their response to the dilemma is set in motion by their mother, who determines the parameters within which her boys will respond. Her direction creates precedence for her sons' future interactions with their peers and allows them to maintain respect among their age mates. Canada's response is predicated on survival. Yet the solution he chooses means solving the problem within the peer group as is his family's and his culture's expectation. Mainstream culture's solution might have been for the boys to seek assistance from adults, which was an unsuitable solution for Canada in this situation.

Other Factors

Other elements such as class size, usually higher in poor communities; the pressure of high stakes testing; and teachers' limited tolerance for certain disruptive behaviors are also factors in the decisions teachers make to initiate referrals for special education (Terman, 1996). Teacher attitude and classroom instruction are also among crucial school-wide issues in the determination of special education referrals (Hocutt, 1996).

Overrepresentation may also be the result of social decision making rather than distinctly objective measures (Losen & Orfield, 2002). Social decisions based on negative stereotypes or negatively held personal beliefs about the learning ability or the behavior of

African American boys may also affect referrals to special education (Aronson, Cohen, & McColskey, 2009). The negative residual of historical stereotypes and societal constructs of race and racial images can create illusions of danger and fear pertaining to African American men (Kivel, 1996). These lingering stereotypes may contribute to teachers' initiation of special education referrals for African American boys and may affect some educators' impressions of their intellectual ability as well. Power relationships involving parental versus school expectations, especially around discipline, behavior, and educational ability, can be significant factors, which affect referral decisions. The beliefs of educational professionals, that their explanations for a student's lack of educational progress are the only factors to be considered when evaluating academic ability, consistently override the considerations of parents' understanding of their children's strengths and weaknesses and contribute to over identification of African American children in special education (Harry, 2006).

As presented, the causes of the overrepresentation of minority students in special education are multi-faceted and include elements that are legitimate considerations for students' progress however, other institutional and cultural factors that are intertwined make bad decisions as well as good ones probable. The greatest consideration should be given to interventions provided before referrals to special education are necessary. Effective teacher training and other pre-referral activities all may serve as positive contributions to the prevention of inappropriate recommendations for special education services.

Teacher initiated referrals for special education are usually honored and often result in special education placement (Reschly, 1996). Teacher referrals are excellent predictors of assessment outcomes, but they are not necessarily accurate predictors of disability

(Harry, 2002). The consequences of many current assessment practices are as likely reflective of teachers' beliefs about a student as they are of an identified disability or the student's need for special education services (Harry, 2002).

Instructional Practices

African American boys are most vulnerable to over identification in special education and will benefit from the development of effective teaching skills (Lo & Cartledge, 2003). The identification of effective practices for a vulnerable group such as African American boys can guide educational practices that are effective for general and special education students (Sen, 2006).

Hocutt (1996) identified effective instructional practices that supported positive outcomes for students in special education. Hocutt's findings indicated that it did not matter whether interventions were practiced in special education or in general education classrooms. Among the factors that contributed to achievement of special needs students were academic and social success, appropriate instructional models, classroom environment, and a student's own sense of competency. Student competency was found to be more important to outcomes than placement in a general or special education environment, and competency was found to be influenced by teacher instructional strategies. Hocutt found that frequent teacher monitoring of special needs students' work and individualization of instruction were also factors of importance. While these practices were identified as effective, Hocutt's analysis was that these techniques are not usual practices for most teachers.

Hocutt (1996) also indicated that undifferentiated instruction hindered students who received special education. Teachers who followed a curriculum sequence to cover subject content and expected students identified as special education to "keep up" without attention

or modification encumbered academic success. A strategy identified as effective for students with Individual Educational Plans (IEPs) was the adaptation of a lesson in response to students' lack of understanding. Yet this study also indicated that lesson adaptation was not a practice teachers in general education usually elected to use. Middle and high school teachers were found to monitor the work of general education students more than they monitored the work of students with disabilities. Skills consistently used by effective teachers included practicing positive support, allowing students to practice new skills, reteaching, giving corrective feedback, and closely monitoring progress. Teachers who used these and other techniques were able to teach both general and special education students with success (Hocutt, 1996). Also, effective classroom instruction, support by administrators, in-service training, and the teacher's ability to respond to needs in the classroom are attributes of teachers who work successfully with general and special education students (Diamond, 2006). High intensity consistent instruction works for students in general and special education (Terman, 1996).

Changing teacher practices that perpetuate disporportionality can be shaped by a conscious search for instructional alternatives that can be implemented without special education referrals. Teacher training that supports effective practices are helpful for all students. Effective practices should be easily facilitated with any curriculum or school instructional methods and should be able to withstand empirical study. For teachers to use new strategies, they need to trust the recommended methods can work while they use their present routines and practices (Ferguson, 2005). The strategies offered to teachers should enhance their confidence and be adaptable skills easily used with a range of student abilities. Teacher training opportunities should

develop, support and improve teachers' instructional ability; be easy to implement; and be adaptable to teachers' personal work mode. They should be able to be independently and consistently used with minimal outside assistance and support. Interventions should facilitate teachers' ability to build methodological diversity in instruction. It is important that interventions do not impede their ability to institute their curriculum. Strategies should broaden teachers' knowledge of the wide range of behavioral and academic skills that are typical in childhood development.

Economic Implications of Educational Quality

Education is of economic value to our society as a whole. Education influences the overall economic well being of a society by the personal decisions that are made by families and individuals. Education affects how families spend and invest money, the level of medical and preventive health care afforded, and access to medical services (Alliance for Excellent Education, 2007). Education has a great effect on individual earnings. An individual's level of educational achievement is linked to annual and lifetime earnings and overall family wealth. Usually, more years of education, correlates to a larger annual and lifetime income. Higher income individuals and families are more likely to participate in the local governance of their communities and in national governance, and these individuals and families are less likely to have negative involvement in the criminal justice system (Hanushek, 1994). In contrast, lower income levels create likely dependence on particular types of government assistance. Moreover, there is a positive relationship between school quality and the level of education in a community (Losen & Orfield, 2002).

Basic markers of educational achievement are the attainment of a high school diploma, which contributes to developing the skills that an individual needs to take into the

workforce. A university degree can also be viewed as a subset of skills necessary for work. Skilled work and higher education are commodities in our culture that are frequently rewarded by higher salary, more selective working conditions and less hazardous working conditions.

The U.S. Department of Education identifies three milestones that are measures of educational achievement and major student progress. They are on-time graduation from high school, attendance at a post-secondary institution the same year as high school graduation and on-time attainment of the aspired credential (certificate, associate's degree, or bachelor's degree). Fewer African American students than White students reach these milestones (National Center for Educational Statistics [NCES], 2003). The cumulative consequences of fewer positive educational outcomes for African American boys are more severe than for other groups of students (Schott Foundation, 2004). Variations in the quality of education are easily visualized when the data concerning academic performance in schools is disaggregated by socioeconomic status and by race (Noguera, 2008). Decisions concerning the parameters and effectiveness of education can influence international trade and the economic future of the nation (Hanushek, 1994). School quality is a factor that helps to determine the productivity and growth of the national economy. Variations in the quality of education are easily ascertained when the data concerning academic performance in schools are disaggregated by socio-economic status and by race. In the United States, African American communities experience the lowest quality schools (Losen & Orfield, 2002).

Leading Different Lives

The socioeconomic gap between African American communities and other communities has often been grounded in the quality of schools (Oswald, Coutinho, & Best,

2002). States with high numbers of African American students in their schools are likely to have fewer resources than states that do not educate a large percentage of African American students (Sen, 2006). If three-fourths of a high school's population is of low socioeconomic status (SES), the school is likely to have more teachers who teach out of their license or area of skill (NCES, 2003). More than 60% of African American children attend schools with greater than 50% of their population identified as living in poverty. This is true for only 18% of White students.

Most 13 year olds are in eighth grade. At age 13, 49% of African American boys are in a lower grade than other children of the same age. African American high school seniors read at about the same level as the average White eighth grade students. Their reading scores are lower than other racial groups in the nation (NCES, 2003). Students retained in a grade are more likely to drop out of school and African American students are more likely than White students to do so. African American boys remain the ethnic group with the lowest high school graduations rates of all students with and without disabilities (U.S. Department of Education, 2007). Only 59% of African American boys obtain a high school diploma with their grade cohorts (Schott Foundation, 2004). Figures from the U. S. Census for the year 2000 indicate that for youth between the ages of 16-19, one-fourth of African American youth are neither enrolled in school nor employed. This is more than double the national average for others in this demographic group. Upon high school completion, African American young adults are more likely to have repeated a grade in high school than other students (NCES, 2003).

In 2003, based on high school admissions date, only 55% of African American students graduated from high school with a regular diploma "on time" (NCES, 2003). In

comparison 78% of White students graduated within the expected parameters for their date of admission. Half of the African American students who attended high school attended schools where graduation was not the norm. In 2002, only one-fourth of the African American high school students who entered high school were prepared for college (Alliance, 2007). Only 10% of African American students who entered a post-secondary institution within one year of high school graduation, obtained the credential they sought on time (NCES, 2003).

Only half of special education students received most of their instruction with their nondisabled peers in mainstream environments (Losen & Orfield, 2002). Federal education statistical information for 2002 indicated that students with speech disabilities spent the greatest amount of their school day with their nondisabled peers. Learning disabled students spent from 21% to 60% of their school day away from their peers. Students who had IEPs that indicated a classification of mentally retarded and students whose IEPs indicated emotional disturbance spent the most amount of time away from their general education peers, up to 60% or more of their academic time in classrooms segregated from general education environments (U.S. Department of Education, 2007).

Slightly more than one-half of students with disabilities graduated from high school with a regular diploma. In New York City, in the 2003-2004 school year there were 12,000 special education 12th grade students. Of these students, only ten received a Regent's Diploma, which is New York's universally acceptable certification that is considered for college admission (Advocates for Children, 2005).

One-third of special education students dropped out of school with no prospect of high school completion (Wagner, & Blackorby, 1996). Students who were most likely to

finish high school are those with vision or hearing impairment (Wagner & Blackorby, 1996). Least likely to finish high school were those students identified as emotionally disturbed (Schott Foundation, 2004). Students with IEPs that state mental retardation are the second largest group of students who fail to complete high school with a regular diploma. Sixty-eight percent of non-disabled students participated in post-secondary education activities, while only 30% of students classified as emotionally disturbed participated in such activities (Terman, 1996). Recent information available from the Office of Special Education Programs (OSEP) (Orfield, Losen, & Wald, 2004) indicated slightly more than half of students with disabilities graduated from high school with a regular diploma. Only 35% of students identified with emotional disturbance achieved their high school diploma. They had the lowest graduation rate of all students with IEPs.

The National Longitudinal Transition Study (NLTS), a representative group of students entering high school were periodically monitored. Progress reports of this group found that only 50% of students previously enrolled in programs for emotionally disturbed classified students were employed after exiting school. Only 73% of students identified as learning disabled (LD) were working or studying (SRI International as cited in Harry & Klingner, 2006).

More recently, the Office of Special Education Programs (OSEP) published national data for 2002 to 2003 regarding students exiting school with IEPs. The statistical data from this study shows 39.4% of students age 14 to 21 with IEPs graduated with a regular diploma or certificate. Another 7.2% of the IEP students moved and were not known to continue with any educational program, while 13.2% dropped out of school (Alpert, 2004). It cannot be assumed the remaining percentage of students continued their education. They may have

been excluded in this federal count. For the years these figures were collected, the Office of the Inspector General directed OSEP to include students identified as "moved, known to continue" and "moved not known to continue in the future" in the 2003-2004 drop-out figures for high school students. OSEP did not comply with the order and included in the count only those students identified as "moved not known to continue." Revised figures using the newer guidelines reported 20.5% of IEP students did not complete high school (OSEP Data Analysis System, 2004).

Suspension, Expulsion, Disability, Incarceration

African American boys in special education comprise a substantial percentage of students identified as emotionally disturbed, mentally retarded and learning disabled (Fierros and Conroy, 2002). A student with an IEP that identifies the student with an emotional disability is more likely to become involved with the criminal justice system before leaving high school or within five years of leaving high school than other students (Sen, 2006). Seventy percent of children involved in the criminal justice system have disabilities (National Center on Education, Disability and Juvenile Justice, 2007). Compared to students with other disabilities, students with an emotional disability are twice as likely to be homeless or to live in a correctional facility, drug treatment center or halfway house (Comstock-Galagan, 2006). Nationally, from 1993 to 1997, the number of students with disabilities rose by 13%, while the number of students with disabilities in correctional facilities rose 28% over the same time period (Alpert, 2004). In 2002, reported statistics by the National Center on Education Disability and Juvenile Justice (NCEDJJ) (2006) indicated 45% of incarcerated students were classified as learning disabled and 43% were classified as emotionally disturbed. NCEDJJ also reported 13% of incarcerated students were classified as students with mental

retardation, speech impairment or other disabilities. For White students under 18,105 of every 100,000 students are incarcerated. For African American young people, the incarceration rate is 350 per 100,000. It is more likely for a young African American boy to get a GED while incarcerated than it is for him to graduate college.

Leone (1995) discussed theories relating to the special education juvenile justice link particularly for those students identified as having emotional disturbance or learning disabilities. Three prominent theories in Leone's discussion are:

- School academic failure contributes to poor self-esteem for students with disabilities, often leading to school dropout. Without school as an anchor in their lives, the initiation of delinquent behavior frequently begins.
- Many children with disabilities present behaviors such as impulsivity, poor eye contact, poor detection of social cues, and repetition of other negative behaviors that make children with emotional disabilities susceptible to delinquent behaviors.
- Students with disabilities are treated differently in the way they are disciplined in school and in the juvenile justice system.

The United States Department of Education Office of Special Education and Rehabilitative Services' findings from its 2005 Report to Congress (U. S. Department of Education, 2007) indicates disabled students are more severely punished in school. A representative sample of parents of handicapped students reported by survey that 35% of children between the ages of 13 and 17 with IEPs were suspended from school (U.S. Department of Education, 2007). Students with disabilities also are more severely punished for the same behavior or offense than students without disabilities (Comstock-Galagan,

2006). When teachers were shown videos of students in their own classes, they noticed almost half of the negative behaviors of students who were referred and less than one-sixth of the negative behaviors of students not referred (Hosp, 2003).

There is a large discrepancy between the numbers of suspensions given to African American students when compared with White students for the same behavior. To some degree, this discrepancy is the result of ethnic and cultural difficulties in student-to-student and teacher-to-student relationships (Howard, 2006). Research also shows that out of school suspensions disproportionately affect students who are minority, are of low SES and are students with disabilities (National Center for Culturally Responsive Educational Systems, 2004). African American students were usually given longer periods of suspension than White children and were expelled two to three times more than White students. In a study of an urban school, African American students received disciplinary referrals at almost double the normal rate of the student population in the school (Lo & Cartledge, 2003). Other research showed that African American students were cited with more minor infractions or for nebulous reasons such as "acting threateningly" (National Center for Culturally Responsive Education Systems, 2004).

Students with disabilities are more likely to be apprehended by police for criminal offenses since they often lack the ability to plan strategies to avoid detection (Leone, 1995); Lo & Cartledge, 2003). Children with disabilities, specifically students with IEP classifications of emotional disturbance or learning disabilities, may not be able to comprehend warnings during interactions with authorities including police (Leone, 1995). Research also shows boys with disabilities are more than two times likely to be arrested than girls (NCEDJJ, 2000). While there are economic and social reasons that may account for a

fraction of the larger numbers of African American boys in special education relative to their numbers in the population, justification for the disproportional numbers of African American boys in special education is not supported by the existing data. For most African American children, special education does not reflect the goal of sending skilled individuals into the work force. Instead, it tends to preclude effective participation in many societal roles.

Need for Special Education Referrals

Special education referrals are sometimes made by teachers who do not believe they have the skills to teach children whose academic needs they see as different from those of most other students (Acker, 2006; Harry & Klinger, 2006). Teachers who refer students for special education believe the students recommended for assessment are outside of typical development (Noguera, 2008). Therefore, classroom modifications to change the disproportional numbers of African American boys in special education require an assessment of teacher practices. Recommendations to decrease disproportional representation in special education should also include providing teachers with instructional methods that can be used before special education referrals are necessary (Dunn, 1968). Other recommendations include identification and implementation of effective classroom instructional practices that have been empirically validated (Lo & Cartledge, 2003) and are culturally responsive (Artiles, 2002).

Response To Intervention (RTI) represents a methodology that, when successful, screens out those who can be successful in the regular classroom but have not been exposed to the most effective research based instruction. Instructional consultation teams can also help identify academic deficits of students and provide appropriate individually oriented interventions based on instructional need. Gravois and Rosenfield (2006) explored the impact

of instructional consultation teams on special education referrals for minority students. Their study used referral comparison data of schools that did not have consultation teams with schools that did. The research results showed schools that used a consultation model showed a decrease in the number of special education referrals for minority students when an odds ratio or a composition index was used to measure the rate of minority referrals. Gravois and Rosenfield's research indicated that high quality instruction supported and developed using teacher consultation, was an important factor in the prevention of inappropriate referrals for minority students.

Teachers' impressions of students' ability to learn or benefit from instruction, and their belief that they have the skills to teach all students, are important component underlying the initiation of some special education referrals (Hocutt, 1996). It is probable that teacher instructional practices can be developed to provide students with an appropriate education without the label of special education. Effective instruction for all students should encourage inclusive teaching practices and the opportunity to meet expected educational milestones including high school graduation and post-secondary training. Students should be encouraged and supported to meet all expected educational milestones.

A Crisis in Graduation Rates

Two major cities, New York and Chicago, educate about 10% of the nation's African American boys. These cities graduate only 30% of this population on time (Schott Foundation, 2004). An African American boy in New York City has a 2.4 greater chance of being identified as needing special education services than a White student. Identifying effective practices, particularly in locations that educate a large percentage of African

American boys, will help determine academic procedures that work for all students. *Schools Attuned* may be an effective tool to improve their education outcomes.

Schools Attuned is a teacher-training program that emphasizes instructional practices identified as important in effective teaching. It is designed to improve teachers' abilities to support variations in students' learning in their classrooms. One of the stated goals of Schools Attuned is to improve teachers' abilities to meet the challenges of increasingly demanding curricula (All Kinds of Minds, 2006). Schools Attuned may modify teachers' responses to challenging academic and non-academic classroom behaviors and enable teachers to work with students' strengths, thus decreasing the overrepresentation of African American boys (Levine, 2002).

Hypothesis

It is hypothesized that since *Schools Attuned* training includes teaching methods that are effective for a wide range of student academic and social skills, schools with *Schools Attuned* trained teachers will initiate fewer referrals for special education for African American boys than schools without *Schools Attuned* trained teachers. It is expected that there will be a significant difference in referrals generated in schools with teachers who have completed *Schools Attuned* training when compared to schools that do not have teachers trained in *Schools Attuned*.

This research can provide further knowledge about the efficacy of *Schools Attuned* training on the reduction of special education referrals for African American boys. The results of this research can inform local educational decisions on programs that support atrisk students and prevent disproportional representation of African American boys in special

education. The results of this inquiry may have relevance to other urban areas that need to develop effective educational practices for African American boys.

Research Procedures

Four years of special education referral data were collected from schools in an urban school district. Special education referral data for two years prior to the school district's offering of *Schools Attuned* training were collected and designated the base line for the special education referrals made for the schools used in the sample. Data for two years that *Schools Attuned* training was offered by the district were compared to baseline data.

The referral data included students' race, grade, sex, referral school, district, and borough. To the extent possible, schools that used *Schools Attuned* were matched to schools without *Schools Attuned* by socioeconomic status using free and reduced-priced lunch data. The ethnic populations of schools in the *Schools Attuned* condition in the sample were matched when possible to similar schools in the no *Schools Attuned* condition. If it was determined that the school had a sufficient student population of African American students (> 3%), and met other criteria, it was included in the sample. The special education referrals for African American boys from schools with *Schools Attuned* trained teachers were compared to special education data from schools that did not have *Schools Attuned* trained teachers. The referral data were analyzed and the significance of the difference between the means of the baseline data and the *Schools Attuned* training data were examined.

Assumptions

The assumptions for this research were:

1. Schools with teachers trained in *Schools Attuned* implemented said techniques.

- 2. *Schools Attuned* training was consistent across all schools and teachers included in this study.
- 3. Schools in the sample were similar enough for comparison.
- 4. The schools were consistent across the years that the data were collected.

Limitations

External and Internal Threats to the Study

The external and internal threats to the research were:

- The number of special education referrals of African American boys may be influenced by conditions other than implementation of *Schools Attuned*.
- Demographic or administrative changes in schools, such as a change of a principal, or changes in teacher or student demographics may influence the outcome.
- Teachers' experience, certification and education are factors that influence decisions to refer students to special education.
- Despite demographic similarities, the student populations of the control and experimental groups chosen for this study may not have characteristics that are similar enough for comparisons.
- Teachers may choose not to use *Schools Attuned*.
- Teachers who received the *Schools Attuned* training were selected randomly.

 The selection process was unique to particular schools or districts. Some participants were selected by their administrators; some were selected to attend based on the grade they taught, and some were ancillary teachers who taught many grades. If the training spaces offered to the school were not

filled, teachers could volunteer for the training. The variability of a random selection of training participants may influence the outcome of the research.

To ensure that schools from all five boroughs of the school district were
included in the sample, a random number (seven) was selected as the
minimum number of trained *Schools Attuned* teachers per school that was
needed for inclusion in the sample.

Schools Attuned was not designed specifically to reduce the number of referrals to special education, nor was it designed specifically to address the cultural diversity of most urban environments. It is not sensitive to the cultural needs of African American boys.

Other classroom and school factors such as percentage of student ethnicity, primary language as other than English, or community poverty or wealth might influence the number of special education referrals.

The sample used for the research contained a small number of teachers and a small number of schools. This may limit generalization of results to other situations.

Definition of Terms

African American boys. Any male children of African descent self-identified, or identified by their parents as African American and male. For the purpose of this study, race, ethnicity and gender information were usually disclosed by the parent when the student is first registered in the district.

Special Education Referral. Any recommendation for a student evaluation for special education services acknowledged and recorded by the school district as required by their practices.

Schools Attuned. Professional development training through the All Kinds of Minds Institute.

Schools Attuned trained. Teachers or other school professionals who completed the NYC Schools Attuned training program as defined in the contractual agreement between the school district and the oversight organization of Schools Attuned, All Kinds of Minds.

Summary

The disproportional representation of African American boys in special education negatively influences their lives, and has far-reaching lifetime effects. The negative outcomes include lower high school graduation rates, limited college eligibility or attendance, and a greater possibility of negative involvement the criminal justice system.

Causes of disporportionality include socioeconomic factors such as access to health care and adequate schools. While some special education referrals are based on legitimate educational concerns, other may be due to cultural ignorance or cultural incongruence.

Interventions designed help teachers provide effective instruction for all students can prevent inappropriate referrals to special education. School psychologists can assist teachers in providing appropriate academic help if they are aware of effective and scientifically proven practices.

If *Schools Attuned* training uses effective methods that work for a broad range of student skills, schools with teachers who have *Schools Attuned* training may need to make fewer special education referrals, thus lowering special education referrals for African American boys.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter provides a brief overview of special education laws and regulations related to disproportional placement of African American boys in special education. It reviews some of the plausible causes that influence disproportional placement including some teaching methodologies, relevant federal and state practices and regulations, and efforts to reduce disproportional placement. It gives an overview of *Schools Attuned* training as it was implemented in the school district used for this research.

Related History of Special Education

Services and Laws

Civil Rights legislation, including Brown v. Board of Education, is the foundation for laws and regulations that address non-discriminatory practices in education. For students with disabilities, this legislation remains the platform of educational rights and reforms. For more than three decades, funding and legal rulings to support education for children with special needs were influenced by the court decisions based on Brown. The case of Diana v. State Board of Education (1970) questioned the use of the Intelligence Quotient (IQ) test to identify and place Spanish-speaking students into classes for students with retardation. The court case of Larry P. v. Riles (1971) was a further extension of Diana (Bloomfield, 2007). The Larry P. decision questioned the use of IQ tests to identify retardation in African American students. In California, the decision resulted in the elimination of IQ tests with African American students when making decisions for special education. Larry P. compelled

other states to use multiple clinical indicators and assessments before determining the need for special education services (Terman, 1996).

Legal changes in civil rights laws and practices pertaining to handicapping conditions continued in 1973 with the passage of PL 93-112. Section 504 of this law highlighted some of the rights of individuals with handicapping conditions. Section 504 requires that individuals with handicapping conditions receive equal protection under the law in all areas, including education. This ruling also reinforced the rights of individuals with handicapping conditions against discriminatory actions by beneficiaries of federal funds (Bloomfield, 2007). The year 1975 saw the development of PL 94-142, which mandated services to children with special needs.

Individuals with Disabilities Education Act

The Individuals with Disabilities Education Act (IDEA) began in the Select Education Subcommittee of the House of Representatives in 1975 (Jeffords, 2002). Through the years and legislative processes, the Education for All Handicapped Children Act (EHA) of 1975 melded into the current familiar identity of the law identified as IDEA by 1990. The Americans with Disabilities Act (ADA) of 1990 addressed discrimination practices in employment and laid the groundwork for education for individuals with disabilities. It was the precursor to IDEA as it is currently formed. IDEA, along with the civil rights legislation of Section 504 of PL 93-112 and the Rehabilitation Act of 1973, is among the most influential federal laws that are operant in the shaping of federal policy regarding education for children with disabilities. Later legislation continued formation and development of these laws and regulations (Alpert, 2004).

IDEA's two recent reauthorizations, IDEA 1997 and IDEIA 2004, address the disproportional representation of minority students in special education. IDEA 1997 required states to collect data on disproportional representation of children of color and to reverse policies that perpetuate disporportionality when it is found (Daugherty, 1997). The Individuals with Disabilities Education Improvement Act (IDEIA), initiated in 2004, strengthens the requirement of Local Education Agencies (LEAs) to identify disproportional representation. The reauthorization requires LEAs to develop early intervention services and other supports if disporportionality exists. IDEA provides guidelines for identifying students with disabilities with definitions for handicapping conditions and guidelines for educational eligibility. Further, IDEIA helps to ensure resources for children to derive educational benefit from instruction.

Consideration of demographics such as poverty and low SES, as factors related to students who comprise special education classes nationally, have contributed to IDEA's adaptation and changes. IDEIA 2004 reauthorization required that the LEA identify and examine referral data by race, sex or other categorical groups that might be negatively influenced by current educational and placement factors that produce discriminatory outcomes. IDEIA authorized the use of its funding for early intervention services as a preventative measure to referral to special education. IDEIA supports demonstration projects, provides technical assistance, and support with LEA's use and identification of scientifically researched based instructional measures also contribute to help prevent inappropriate referrals to special education.

Some of IDEIA's 2004 language, for example, the encouragement and support of using a Response To Intervention model, may significantly reduce the number of minority

students who are erroneously identified with disabilities. IDEIA's support for preventive services when disproportional representation is shown may also reduce the number of students, are not making educational progress and do not have handicapping conditions. The changes may also modify outcomes for students, who do not benefit from special education service or do not complete high school courses, and as a result, are being left out or being pushed out of schools with few prospects for the future (Advocates for Children, 2005).

Current special education laws and practices strive to insure that children with handicapping conditions have equal protection under the law (Martin, 1996) and strengthen the educational rights of handicapped students, offering them services uniquely designed to meet their needs (Orfield, et al., 2004). IDEIA supports the states financially by providing some of the funds for students with handicapping conditions to receive special education services.

Defining Disability

Special education disability classifications are sometimes identified as "hard" and "soft" (Parrish, 2002). Hard categories are those such as hearing, visual or orthopedic impairments and autism. These categories are generally medically certifiable and remain with the child throughout their lifetime. Soft categories are those such as mental retardation, learning disabilities and emotional disturbance. While many classifications require some medical verification, soft categories rely on individual clinical reasoning and synthesis of other information. The soft categories are less dependent on medical verification and more reliant on subjective judgment (Losen & Orfield, 2004). Disability classifications show more closely representational assignment by race, in respect to census population figures in categories that are medically verifiable, but are substantially skewed in soft judgment

categories (Reschly, 1996). African American boys are identified disproportionally in the soft categories, specifically mental retardation, emotional disability, and learning disabilities. In the soft categories, a student's disability classification or eligibility for services provided through special education may change when the student moves from one state or geographic area to another (Markowitz, 2002)

Limitations of Tools and Methods Used to Determine Special Education Disability

Nationally normed academic and intelligence tests are some of the tools most relied upon to determine disability. These measures are not the only tools that contribute to disability determination, but their use has not substantially decreased disproportional overrepresentation in special education. Harry (2002) indicates the use of IQ tests as the core of special education eligibility does not necessarily represent an objective process. Harry posits that the assessment professional's determination of which quantitative measure is used for assessment is reflective of practices that rely heavily on the professional's judgment. Individual judgment is influenced by the professional's own belief system, particularly concerning the value of the test in making social and educational determinations and in beliefs about special education as an alternative to mainstream education. Special education decision making may be heavily influenced by pre-conceived ideas and beliefs concerning the need for special education services (Harry, 2002). Harry, Klinger, Sturgess, and Morre (2002) discuss how referral decisions may be influenced by social constructs and personal beliefs of psychologists and other educational professionals. Teachers' beliefs about a student "belonging" in a certain setting may suggest the student does not have the inherent social-emotional or academic aptitude to remain in general education (Harry & Klingner,

2006). Assessment professionals' personal beliefs concerning a child or his family may greatly influence the decision of restrictiveness of environment suggested with limited regard for the quantitative reality of the assessment outcome. If, during the determination process, school professionals believe a family is more culturally middle class and socially savvy; or if the family is perceived as having sufficient economic or social resources, the referred individual may sometimes avoid a more restrictive environment (Fierros & Conroy, 2002; Harry & Klingner 2006). A family's perceived ability to provide support and resources may also sanction a child to obtain a less stigmatizing special education category even when a different category might more closely define a child's ability. Children with resources may be identified as Other Health Impaired or Speech Impaired even if the classification is not reflective of their major disability.

Another influence is the referral culture within schools (Harry, et al., 2002). If the school strongly believes special education is an effective alternative for learning or behavioral problems in school, they are more likely to make special education referrals. If a school's culture sees special education referral as a reflection of poor teaching or classroom management, there will likely be fewer referrals to special education for all children within a school or district. Schools and individual teachers may respond to high stakes testing by increasing special education referrals. If a student does not make appropriate annual progress as expected by NCLB, teachers may seek special education assessment with the belief that the student's lack of progress is due to a disability, when other instructional methods might suffice.

Other social and cultural beliefs held by individuals and groups in schools play a role.

If teachers hold certain beliefs about a specific ethnic or racial group, which suggest that

children from the group can only be educated in special education, it will be reflected in referrals and in ethnic overrepresentation placements for that school or district (Harry, 2006).

The assessment measures used for special education identification have substantially improved over time and are generally more reflective of the multicultural populations within many school districts across the nation. These tests, however, remain highly representative of majority culture, and of designed elements that are staples of middle income and above socioeconomic status (Cummins, 1993). Children with higher SES will perform better on these tests, and so the assessments continue to be a measure of an individual's access to information rather than the illusive concept of intelligence (Harry, et al., 2002). Assessment professionals may tailor the assessment tools used to justify beliefs that they or the school hold about students who are referred or use assessment measures that validate the evaluation request, thereby justifying and supporting beliefs of within-student disability. Despite substantial issues, the reliance on intelligence tests to make special education eligibility decisions continues to be a controversial issue when investigating the causes of the overrepresentation of minority students in special education (Harry & Klingner, 2006).

The administration of intelligence tests to determine eligibility for special education services after exposure to alternate instruction methods have not shown effective is expected protocol (IDEA, 1997). However, there is limited evidence to suggest that prior to the 2004 reauthorization of IDEA alternative instructional practices were consistently implemented in the experience of African American boys in school environments (Harry & Anderson, 1995). Additionally the determination of disability in "soft" category classifications may make certain assumptions about intellectual ability and behavior. "Soft" disabilities are often identified later in a child's school life, in contrast to "hard" disabilities, which are generally

identified early. This suggests that referral for disability assessment may be related to the inability of the educational environment to support a variety of student academic skills. Teachers who believe disability traits are fixed within the child may not institute changes in the classroom. School personnel may hold that disability is not influenced by cultural factors, socioeconomic factors, personal interactions, or the personal beliefs of the decision makers in the special education process. Ysseldyke (1983) found that when asked their reasons for making educational or behavioral referrals for special education services, 62% of teachers reported that it was due to student deficit and did not consider the educational setting as part of the cause of student difficulty. Ysseldyke's research found that teachers believed they had no effect on the cause of the referral and that 67% of teachers who made student referrals for behavior attributed the need for the referrals to home factors.

Unexpected Bias

The influences of race of examiner on psychological assessment of examinee outcomes are realistic considerations given the recent demographics of the National Association of School Psychologist (NASP) members, who are often responsible for assessments in schools. Among NASP membership less than 2% are African American (NASP, 2004).

Neural imaging shows that sections of the brain associated with danger are activated when non-minority individuals are shown neutral photographs of African American faces.

When the same individuals are shown neutral faces of non-minority people, the activation does not occur (Eberhart, 2005). The neural changes found in this research may have wider implications for teachers and for school psychologists. They are changes that occur beyond consciousness but may influence perception and individual responses to behaviors presented

by African American boys in school and in their communities. Neural activation of areas of the brain associated with trust may also have an affective predilection on the relational factors required to optimize assessment responses in IQ assessment. Issues of trust may account for other negative attitudes and reactions for African American boys regarding school discipline outcomes, and their interactions with police and other authorities.

Using high achieving minority college students, Markus, Steele, and Steele (1998) conducted several studies on stereotype threat, a condition in which an individual is primed to believe his or her intellectual ability will be judged by commonly held stereotypes about ethnic or racial group. The activation of the stereotype threat condition had a negative effect on the test scores of students who were primed to the stereotype threat condition before they were given a Scholastic Aptitude Test (SAT). The scores of students in the research study improved when they were not faced with the stereotype threat condition prior to the administration of the test. The results of this study concluded that even the threat of students academic performance being measured by commonly held stereotypes or beliefs about one's ethnic group was enough to change performance on tests that measure academic and achievement ability. Another study on stereotype threat by McKay (2003) indicated that when the stereotype threat condition was activated, it produced a negative effect on the cognitive performance of African American students when they were administered the Raven's Advanced Progressive Matrices.

Jordan and Lovett (2007) state that the influences of race on psychological assessment should be considered in school age assessment, although more research using younger than college age students is needed. Their research concluded that even inquiries about music preference may evoke minority individuals' concern that they may be judged by

their response to certain questions. Strong evidence exists that the achievement and assessment performance of younger children may also be influenced by the negative performance factors that follow the initiation of stereotype threat.

Jordan and Lovett (2007) offer concrete recommendations for school psychologists to lessen the impact of stereotype threat on psychoeducational assessments conducted with minority group children. They recommend school psychologists acknowledge that stereotype threat can influence assessment performance of minority children and it can be inadvertently evoked in standard assessment procedures such as rapport building. Other recommendations from their research were for school psychologists to complete all achievement measure assessments before making inquiries about family background, home environment, siblings, or other home-related factors. They further suggested that examiners refrain from describing assessments as measures of intellectual capacity, as to do so might evoke concerns of the group stereotype and change an individual's assessment performance.

In discussing the role of school psychologists in general education programming,

Jordan and Lovett (2007) recommend they work with school organizations to lower the
possibility of students experiencing stereotype threat and help teachers ensure minority
students that grades are not the full measure of their worth, but reflective of the kind of work
the individual puts into tasks. They also suggest students be given more information about
the development and substance of high stakes testing. With older children, they recommend
frank discussions of stereotype threat. School psychologists have many opportunities to take
the lead to diminish stereotype threat in their own assessment practices and in the educational
environments of schools. Factors of unconscious responses to perceived stereotypical beliefs
may be operative in any assessment situation and could affect African American boys when

they are assessed for special education. More research needs to be conducted to explore the effects of stereotype threat and other relational influences that may be part of the assessment process for minority students.

The special education assessment process for African American students often leads to different outcomes due to many reasons. The confluence of many factors collude to make the current process of disability determination frequently inconsistent. External pressures, impression of the family, tools used for assessment, beliefs about the student's capability, confirmatory bias, the decision making team's beliefs that special education will benefit the child (Hosp, 2003), and social decision making contribute to disproportional representation of African American boys in special education. While special education strives to serve only students who need it, it has not yet met the mark.

Defining Disproportionality

In 1968, Lloyd Dunn documented the overrepresentation of minority and low socioeconomic background children in classes for children with mild mental retardation. Dunn found that the students placed in classes for mentally retarded students were often speakers of nonstandard English and of low socioeconomic background. Dunn indicated there was little justification for separate placement of students in the categories of educable mentally retarded, since greater academic improvement did not ensue with separate student placements. Dunn considered academic tracking a way of separating out slow learners rather than an opportunity to provide appropriate or specialized instruction. Dunn advocated students with disabilities should be educated with their peers without disabilities, since students performed well in classrooms with their non-disabled peers (Dunn, 1968).

Mercer (1973) completed an inquiry in California and found African American students were identified as mentally retarded more than three times their percentage of the student population. In 1982, The National Research Council suggested some districts were using intelligence testing and special education to circumvent school desegregation (Fierros & Conroy, 2002). For example, Johnson v. San Francisco Unified School District (1974) was a court case that alleged the district used special education classification of minority students as a tool to resist desegregation. The hearing of the case of Larry P. et al. v. Wilson Riles et al. (1979) at the United States Court of Appeal directly addressed the state of California's issues with special education identification of African American children. The court case of Larry P. required California to monitor and eliminate disproportional representation of African American children as EMR in school districts. If any district within the state was found to have an EMR rate for African American students greater than one standard deviation above the districts' White students in the EMR category, the district was required to develop a correction plan for the imbalance. Finn (1982), using Office of Civil Rights (OCR) data, revealed IQ tests were determined to be biased, and their use as the sole deciding factor of intellectual abilities resulted in an underrepresentation of minority children in gifted programs and of their overrepresentation in mentally retarded and emotionally disturbed categories (Reschly, 1996).

Regional and local court decisions reflected national practices regarding educational disability placements; some were frequently used in urban school districts. The Larry P. lawsuit represented African American children in the state of California and addressed the school district's identification of African American children as mentally retarded with the use of IQ tests. This 1979 court decision declared that the use of IQ tests for placement of

African American children in classes under the classification of Educable Mentally Retarded (EMR) violated the Civil Rights Act of 1964, the Rehabilitation Act of 1973 and the Education for All Handicapped Children Act of 1975, the precursor to the current IDEA laws. The courts ordered that all African American children who were previously identified with Mental Retardation be re-evaluated without using IQ tests.

Bias, as seen in overrepresentation and disproportional assignment to special education, is measured in numerous ways in the current literature (Markowitz, 2002). Measures of bias in special education placement and identification have been as simple as the researcher's "best judgment," as was elucidated by Dunn (1968) in his study questioning the classification of mildly mentally retarded students of color, specifically African American children. Measures that were more sophisticated include the following:

- Population percentages of a category in a specific group, also known as a composition index (Reschly, 1996);
- The percentage of a group in a category, obtained by dividing the number of students of a group in a specific category by the entire number of individuals in that category, also known as a risk index;
- Risk ratio: The comparison of minority children's probability of identification within a certain category to a White child's probability of being identified in that same category.

Using the odds or risk ratio formula, overrepresentation of a group is defined as being twice the risk for a White student. Current peer review research or scientific articles on overrepresentation usually use risk or odds ratio formulas. However, among scholars there is no agreement that any one of these indices is sufficient to determine disproportional representation of minority students.

IDEA permits states to determine the method used to define disproportional representation of minority students in their jurisdiction. Twenty-nine states have data collection criteria ranging from percentage point discrepancy, the most popular method of determination to other variations such as odds ratio, confidence intervals, tests of significance, chi-square, z scores, and t-test. All of these methods and others are used by states to determine disproportional representation. The percentage of minority students who reside in a jurisdiction before it is required to apply measurement is also defined by the LEA's set of guidelines. The federal government offers suggestions to LEAs for categorical reporting, yet no state is compelled to use any method recommended. A state may choose a method or develop its own model (NASDSE Project Forum, 2002).

IDEA 1997 reauthorization required states to collect data on the number of minority students in special education by race, disability, and type of placement. The Office of Civil Rights has always accessed these data, but IDEA 1997 encourages the LEA to modify educational practices if they are found to have significant disproportional placement of ethnic minority students (Daugherty, 1999). This requirement presents an opportunity to change the negative demographics that follow for minority students with handicapping conditions.

Accounting For and Addressing Disproportionality

Coutinho and Best (2002) conceptualized the discussion of disproportional representation of minority students in special education in light of three aspects: demographic make-up; fiscal/economic base; and school-related factors. They concluded that all three factors contributed to disproportional representation of minority groups in

special education (Oswald, Coutinho, & Best, 2002). Their framework explored two competing hypotheses of overrepresentation, which are frequently discussed. One hypothesis is that certain ethnic and minority groups are more susceptible to certain categories of disability. Another hypothesis is that overrepresentation is the result of assessment and identification practices that are culturally limited and those limitations frequently result in decisions which require minority students to receive special education service. Oswald, et al. (2002), further concluded that susceptibility to disability, if it is determined, is complex in that it is intertwined with fiscal and social factors that influence the minority communities or the minority individuals in their educational environment. While one can identify the outcome of the interplay of these complex factors, it is a laborious if not impossible undertaking to separate the degree of impact of the many individual contributing factors that lead to disproportional overrepresentation. Therefore, to enhance understanding of the interplay of the pertinent factors, it is important to include discussions about poverty, economics, and social factors as elements that contribute to the ill effected outcomes.

Poverty is a contributing condition to the overrepresentation of African Americans in special education (Terman, 1996). There is a greater percentage of the United States' African American population who live in poverty than the comparative percentage of the United States' White population. In 1999, 26% of African American households fell below the poverty line. For example, according to Census Bureau statistics of 1999, single parent households had higher rates of poverty than two parent families. Eight percent of single parent White families lived below the poverty level, while 23% of African American single parent families lived below the poverty level, for that same period. High rates of poverty contribute to lower standards of nutrition and reduced access to prenatal care, as well as other

pediatric healthcare requirements (Sen, 2006). Adequate health care is essential to early child development (Artiles, 2002; Parrish, 2002). Due to limited access to health care, the assumption is often made that minority communities are prone to have higher incidences of disability categories that require medical confirmation; yet African American and White children are equally likely to be classified with medically confirmed disabilities. It remains, however, that African American children are disproportionately overrepresented in categories such as mental retardation, emotional disturbance, and learning disabilities.

The Influence of Economic Status and Poverty

When a community experiences poverty, its lower tax base contributes to the lack of availability of educational resources. Low income and poverty are generally associated with lower academic achievement (Artiles, 2002). The presence of lead based paint in older buildings often inhabited by the poor, particularly in urban areas, causes greater risk of lead poisoning that can result in learning problems. It is a compounding health problem that contributes to disproportional representation. Environmental factors that contribute to poor health such as inadequate heating and cooling systems, dust, air pollution, insects, and vermin, contribute to medical conditions such as asthma and other breathing problems. Consistent inadequate or nutritionally unbalanced diets for growing children and limited access to adequate, safe housing also contribute to the percentage of disproportional representation. However, when the variables of poverty and poor living conditions are controlled in representational calculations, overrepresentation of African American boys is still greater than expected for their numbers in the population (Losen & Orfield, 2002).

Effective Instruction

The need to identify research based effective interventions and teaching strategies was recognized in the National Center for Learning Disabilities' public policy report as one of five major policy recommendations to the federal government (National Center for Learning Disabilities, 2005). This policy report recommends a federal initiative to identify successful instructional strategies and offer economic support to implement successful practices at a local level.

In a review of the importance of effective instruction for students who have IEPs, Hocutt (1996) found cognitive strategy instruction was one of the skills used by effective teachers. Other effective teacher practices included allowing students to practice new skills, re-teaching skills, frequently giving corrective feedback, and closely monitoring students' progress. Teachers who used these skills were able to instruct both general and special education students with success. Effective classroom instruction, classroom support by administrators, in-service training, and the teacher's ability to respond to students' needs in the classroom are additional factors that work successfully with general education students and special education students (Ferguson, 2005). High intensity, consistent instruction is necessary for students in both general and special education (Terman, 1996). As well, helping teachers develop highly effective teaching skills and strategies are essential in schools with high poverty factors and high concentrations of African American children.

Hocutt's (1996) analysis of research from 1980 to 1996 found that lack of effective instruction, rather than placement, is a more critical factor in academic progress or social success for children with disabilities. This research explores commonly implemented general education practices and compares them with the instruction that special education teachers

provide. A practice frequently instituted in general education is following a sequenced curriculum, which usually requires teachers to cover material at a prescribed time and to maintain a patterned sequence. A time sensitive sequenced curriculum requires special education students to follow along independently at the same pace as other students. It may be difficult for students with learning issues to keep up the pace of this manner of classroom instruction.

Some classroom instructional practices, such as full class lecture, are not effective learning procedures for special needs students. For students with special needs, small group instruction is more effective. As a tool, small group instruction is used in general education classrooms, but not frequently enough to provide sufficient benefit for students with special needs who are included in such classrooms. Hocutt's (1996) inquiry found the progress of special education students in a general education classroom was less likely to be monitored than the progress of general education students in the same classroom. Direct feedback to a student was another teaching method found to be effective for students with IEPs. Yet this is another practice not often provided by a general education teacher to support special education students in general education classrooms.

In summary, according to Hocutt (1996), teacher practices that support special education students best are adaptation of instruction, development of individual goals for students, modifying curriculum materials and using alternative curricula. Other supports are a teacher's ability to adjust the delivery of information for grading purposes, for example allowing a student to give an oral presentation instead of writing a research paper or using small group instruction. Frequently used special methods such as limiting individual assignments and encouraging group work may also provide great benefit to students not

identified with disabilities who are struggling. Other effective teacher practices for students with disabilities include promoting student practice of new skills, having teachers review students' work, and checking with students to ensure they understand lessons. This research indicated teachers should provide students with individual feedback and provide weekly and monthly reviews of student progress (Hocutt, 1996).

Hocutt (1996) discusses the instructional models that best work with special needs students: methods such as inclusion classes and direct instruction, which uses a task analysis approach to teaching that divides learning into small discreet tasks. Small group environments, which foster cooperative learning, also work well to assist children with special needs and provide them with the opportunity to participate and learn in a general education setting. Cognitive strategy instruction, whereby a student is taught specific strategies to problem solve, is effective if student and teacher have sufficient signals that indicate a strategy is to be implemented. School-wide models such as teacher assistance teams pre-referral intervention teams and specific classroom strategies, such as peer tutoring, cognitive approaches, and cooperative learning, greatly increase reading achievement of learning disabled students in OSEP demonstration projects (Yoon, Duncan, & Lee, 2007).

Hocutt's (1996) extensive review of this topic concludes that considerable resources are necessary to prevent special education referrals and educate students with special needs in the mainstream. Schools as they now exist need to modify and refine their practices to provide appropriate instruction for all children. What is needed is extensive training for teachers and technical support from outside of the school setting (Ferguson, 2005). Schools and districts need to provide additional administrative support for teachers to restructure their time for training and planning.

Pianta (2007) describes dimensions of good teaching, identified as the CLASS system, applicable across all school grades. The areas emphasized in this structure are emotional support, which includes whether a school's or classroom's environment is positive or negative; teacher sensitivity, described as responsiveness to a student's social and academic needs and understanding a student's perspective while respecting the student's point of view. Organizational support includes the teacher's skill in managing, and redirecting student behavior before it is a problem. Other items discussed as structural needs are the classroom's productivity, defined as routine management and the teacher's ability to direct classroom activity so that it is most productive. The CLASS system identifies inservice learning as a dimension of instructional support used to help teachers improve their skills in leading discussions and encourage higher order thinking in their students (Pianta, 2007).

Doherty, Hilberg, Pinal, and Tharp (2003) similarly identify five effective teaching standards: first, to encourage teachers and students to work together for the production of learning; second, to develop literacy and language common to all curriculum areas; third, to make meaning by connecting school to students' lives; fourth, to teach complex thinking and challenging students to reason critically; and fifth, to teach through conversation. The research evidence of these factors' effectiveness is shown in demonstration projects and through a series of studies, which indicate that the five identified standards are linked to overall achievement and higher gains in student comprehension. In addition, teachers reported that the consistent implementation and use of the standards increased student motivation. In schools where the five principles were emphasized, it was determined that

motivation and attitudes improved and support of inclusion of special education students in general education classrooms was positively affected (Center for Research, March 2004).

Educational Interventions

There have been many attempts to reduce the disporportionality and misplacement of children in special education (Daugherty, 2005). Interventions that support teachers in the classroom and help them build and improve their instructional skills are part of the pre-referral intervention team model (Kovaleski, 2002). This model can help by providing students with supportive services available in the general education realm without labeling the individual as a student who receives special education services. Pre-referral intervention teams help teachers target academic and behavioral problems that students present and help them address students' problems in the classroom. Many pre-referral team consultations result in providing teachers with concrete procedures they can implement when working with students at other times in their classrooms. Implementing recommendations of pre-referral teams also helps teachers build skills. Methods used for one child, once learned, are available to the teacher for use with other students.

RTI, the process of assessing a student's progress and providing him or her with incrementally more specific high quality instruction, offers an optimistic model of addressing academic needs before a referral to special education is made (Kovaleski, 2003). While this model of intervention also requires attention to cultural factors in order for it to be most effective (National Center for Culturally Responsive Educational Systems [NCREST], 2005), RTI provides for overall effective classroom instruction and student-focused interventions that are scientifically researched. RTI systematically measures student progress over time and offers opportunities to modify instruction to meet students' needs in general education

classrooms (National Joint Committee on Learning Disabilities, 2005). RTI can provide teachers with classroom support by providing direct, targeted intervention to address the students' academic deficits. RTI services are offered without the need to face the stigma of being labeled as disabled; however, it may face challenges when implemented with different cultural populations, such as assuring the implementation of interventions, which include cultural strengths to improve and build upon the students' academic skills, strengths, and abilities (NCREST, 2005).

Instructional consultation, the process of advisement on the improvement of instruction and academic skills, is another tool that can be used before a special education referral is necessary (Gravois and Rosenfield 2006). Instructional consultation can improve the quality of instruction as the skills develop in consultation are used with other children. Consultation improves the teacher's ability to handle various facets of classroom management, improves the teacher's instructional practices, and improves his or her interactions with students. Thirteen schools with a structured instructional consultation model were compared to schools without the model. The model used in the schools addressed both content and process. Content focused on evidence-based interventions for behavior and academic problems. Process included orientation to the model before implementation began. The consultants developed effective relationships with the teachers to help them enhance their performance. The model included components of guided decisionmaking, instructional training, on-line coaching for team facilitators, and on-site technical support for participants. When teachers had consultants available at their request rather than only at prescribed consultation sessions, the consultations were found to be effective. In collecting information concerning the effectiveness of the instructional consultative model,

Gravois and Rosenfield (2006) reported that this model reduced disproportional special education referrals for minority students whether risks, odds, or risk ratio was used to define it. Secondly, the research reported that the model reduced all referrals to special education over a specific time period.

Effective Teacher Training

The National Staff Development Council (NSDC) (Sparks & Loucks-Horsley, 1989) also identified standards of good teacher training. Their standards included school-wide staff development programs in conjunction with school-wide efforts of acceptance of teachers as planners and as mutual support partners. Teachers were provided with the opportunity for self-instruction and identification of their own training opportunities with the expectation that teachers will actively participate in training by self-selecting their own goals and activities.

NSDC also recommends the inclusion and emphasis on skill demonstration feedback and the development of training that is ongoing and delivered in sustainable and digestible increments. NSDC further recommends training be delivered over an extended period in the school year, and that participants receive the opportunity to seek help, advice, or clarification concerning the topic of training and that they get assistance and support when necessary to improve and develop their skills.

Kratochwill, Volpiansky, Clements, and Ball (2007) discussed the role of professional development when implementing school practices such as RTI. Their inquiry identified several characteristics of professional development, which were reflective of all effective staff development training for teachers. Kratochwill, et al. (2007) discussed structural and core features of professional development that resulted in changes in teacher practices. Structural considerations were collective participation, including networks and

study groups. These practices improved the probability that an effective change in teacher practices of teachers from the same school would occur. Participants with a common grade, subject or an area of interest, such as elementary students versus adolescent age students, were more likely to institute practices learned in training. This also proved true for teachers who were provided with a sufficient amount of time to learn the instructional practices.

Moreover, Kratochwill, et al. (2007) identified core features of professional development that are important in sustaining use of new teacher skills. These features are active learning, strong content focus and topic coherence. The study found that if the training process is sensitive and supports the teachers' professional goals, then it is more likely to produce positive results.

Schools Attuned

All Kinds of Minds (AKOM) is the oversight organization of *Schools Attuned*.

AKOM's philosophy affirms that labeling students to provide academic support has limited usefulness. AKOM literature states that it is more effective to describe how learning behaviors interfere with a student's ability to produce academic work than to label a student. *Schools Attuned's* philosophy indicates academic differences in learning should be viewed as incidental, specific, and modifiable, not as a manifestation of a child's character or inability. AKOM also holds that there are wide variations of learning differences that occur in typically developing children (All Kinds of Minds Research Base of the Schools Attuned Program Executive Summary, 2008).

The *Schools Attuned* training program was developed in 1995 and reflects the philosophy of AKOM. *Schools Attuned* developed from a foundation grant to design teacher training that supports struggling learners. The training provides teachers with strategies to

modify their classroom practices and accommodate students with a range of academic abilities. *Schools Attuned* training has been redesigned and updated over time, but it continues to use concepts from pediatric developmental neurology as the foundation to show teachers how to support struggling students in school. *Schools Attuned* encourages instructional skills identified as effective with general education and special education students (Hocutt, 1996). Since it is not curriculum specific, it can be used with any curriculum or instructional program. It is convenient for teachers to use *Schools Attuned* independently and it can be modified to match a teacher's focus and classroom approach.

In *Schools Attuned* training neurodevelopmental constructs are used to identify students' academic and behavioral skills and assist students in managing and eliminating their academic weaknesses. The eight neurodevelopment constructs used in *Schools Attuned* training are identified in Table 1.

Schools Attuned Training

Schools Attuned training is a 35-hour staff development sequence delivered over six days. In addition to the 35-hour training, there are 10 hours of follow up training. Once training is completed, participants have unlimited computer access to all of the tools necessary to create plans for other students. The computer site also allows completers access to an on-line professional website with topical discussion groups, trainer help for Schools Attuned implementation and peer chat groups. A year of on-line trainer support encourages teachers to use the Schools Attuned methods.

Table 1

Neurodevelopmental Differences As Presented in Schools Attuned Training

Neurodevelopmental Constructs	Underlying Mental Requirements Needed
Attention	The ability to sustain alertness and focus and to monitor and sustain attention sufficient enough
Temporal-Sequential Ordering	The ability to remember and sustain all aspects of a sequence and the order needed to successfully complete a task.
Spatial Ordering	To have and maintain a spatial understanding of objects and the world including configuration and gestalt, spatial relationships and spatial recognition.
Memory	The ability to have sufficient short term memory, long term memory and active working memory to complete necessary school and life related activities.
Language	Sustaining sufficient expressive and receptive language skills including semantic understanding, phonological processing, sentence production, sentence organization, verbal organization, articulation of language, and comprehension of language.
Neuromotor Functions	Adequate gross motor, fine motor, and grapho-motor functioning.
Social Cognition	Verbal pragmatics and communication in social aspects of interpersonal interaction. Flexibility and modification of approach as needed and appropriate to the situation.
Higher Order Cognition	Critical thinking, mental flexibility including creativity and problem solving, use of rules, and mental representation.

Each five-hour day of training focuses on learning one or two neurodevelopmental constructs leading to the culminating activity of 'Attuning' a student. The participants learn by viewing video tapes of student profiles that are complemented with interpretations by the trainers and other participants. Training sessions consist of guided discussions, work in various groups throughout each day and collaborative discussions designed to develop solutions for each student profile that is presented. As trainees' knowledge increases, they use profiles of students in their schools and develop learning profiles for them.

The trainers coach participants while they develop learning profiles for students. Profiles are made by using information from student observations and consultation with others who know the student. Participants must determine academic and nonacademic strengths and weaknesses of students from information gathered from all sources. After the information is compiled and analyzed, participants determine which neurological function relates to the student's area of difficulty. A learning plan is developed to make tasks in the area of weakness accessible. Specific modifications of instructional tasks addressing the skills students need are developed as the plan is constructed. For example, if a student has difficulties with written language but is very good at visual organization, a time-line video presentation that shows the sequence of events in a book might substitute for a written book report. While determining the academic difficulties a student is faced with, the teacher is required to find a student's academic, social, or recreational strengths and use them to help the student improve their academic functioning. Finally, teachers are to create an atmosphere of optimism for the student.

The intervention approach used by *Schools Attuned* requires teachers to build an alliance with students and collaborate with them to find a solution for specific learning

problems. It encourages teachers and students to collaborate and problem solve. This process may also help to decrease the number of special education referrals of African American boys since alliance formation encourages teachers to involve at least one family member in analyzing the student's abilities.

The "Attunement" is a major aspect of *Schools Attuned* trainings. Trainees are encouraged to work with parents, colleagues, and the student to develop the "Attuning." The culminating activity of *Schools Attuned* training requires teachers to observe and "Attune" a student and develop an individual strategy for learning. The goal of this task is for the participant to use insights, understanding, and skills obtained through training to build an individualized plan. A trainer, who decides if it demonstrates that the participant understands the construct and the process of attuning a student, views the plan. The activity serves as an exam to determine if the participant understands the process. The instructor determines if the plan is complete, and if appropriate, interventions are recommended and used. If the trainee does not have an effective plan, the trainer will work with that individual to develop one. Course completion requires attendance at all of the training sessions and the 10-hour follow-up meetings. When all requirements are completed, the participant is awarded a certificate of completion.

While *Schools Attuned* is not culturally specific to any ethnic or racial group, it does require in-depth individual inquiry of students' abilities, which may help to decrease teachers' need to make special education referrals. Studies show (Diamond, 2006; Ferguson, 2002) that African American students report greater sensitive to teachers' beliefs about them, and African American students who believe their teachers care about them as individuals, reportedly worked harder in school and spent more time studying. Since *Schools Attuned*

requires an individual relational process and alliance formation with a student, it may overcome some of the social constructs (Harry, et al., 2002) affiliated with disproportional placement of African American boys in special education.

System Change and Schools Attuned

The New York City public schools recently experienced substantial changes in educational policy and practices at every level and throughout most structures of the system. This massive reorganization set the stage for organizational changes that began in the 2000-2001 academic school year. The changes initiated in the New York City School System helped gain national recognition as a model for change for other urban school systems. Reorganization encouraged individuals from other fields to become school administrators to infuse the leadership with thinking that was innovative and reflective of more of a business model. Reorganization demanded that school principals accept greater autonomy, responsibility, and accountability for student success or failure (Children First Initiative, 2001). Principals were accountable for the academic progress of their students as quantified through the school's standardized test scores and the school's relative standing among other schools in the New York City School System.

The initiative also launched a citywide uniform curriculum, the first in recent history for New York City public schools. Other changes included the initiation of varied models of teacher training and academic programs to improve all classroom instruction. The changes engaged teachers in improving their classroom practices, preventing academic failure, and preparing students to pass all of the required achievement tests.

As part of this multi-year system-wide reorganization, New York City Department of Education (NYCDOE) introduced various training options for school reading and

mathematics specialists, administrators, and classroom teachers. Among the training opportunities offered was the Wilson Reading program (Uhry & Clark, 2005) which is an Orton-Gilligham based reading instruction program and *Schools Attuned*.

Schools Attuned training was offered to teachers in the New York restructuring initiative. NYCDOE contracted with the Schools Attuned oversight organization, All Kinds of Minds, to provide training to teachers and school based academic specialists. A three-year contractual agreement with Schools Attuned to train cohorts of 260 teachers per year was initiated. Furthermore, Schools Attuned was budgeted to train 50 school district intervention service providers as field facilitators. Upon completion of their Schools Attuned core training, these district representatives worked as co-facilitators with the Schools Attuned personnel. The teams provided training for groups of teachers in the years from 2003-2008. Schools Attuned also provided 300 New York City education administrators with two days of informational overview about the content, concepts, and structure of Schools Attuned so they would be familiar with the training teachers received.

Usually the training was presented over a period of weeks or months during the school year. Principals chose teachers to attend the training. However, with the approval of the school administrator, other school personnel were also trained. In addition, it was possible for teachers to request to attend the training based on its availability.

Two evaluation studies of the New York City schools implementation of *Schools Attuned* were conducted. First, the Watts-English study (2007) was an independent evaluation report that described and evaluated a *Schools Attuned* program in two NYCDOE schools (PS 145 and PS 246). This initiative financed the *Schools Attuned* training for a cohort of teachers in the participating schools. *Schools Attuned* student assessments were

conducted at the AKOM Student Success Center in New York City. Teachers in the two participating schools of the project were able to recommend students to the AKOM Student Success Center for extensive educational and psychological assessments by AKOM evaluation teams. Upon completion of a student evaluation, the student's teacher and parents were provided with a written learning profile and a consultation with AKOM assessment professionals. The consultation reviewed the results of the student's evaluation; explained the student's *Schools Attuned* profile; and gave recommendations to teacher, student, and parents. Teachers of the students who received evaluations were also provided with a student-learning plan. The Watts-English evaluation reported teacher and parent enthusiasm for *Schools Attuned*; however, it did not find that *Schools Attuned* implementation produced significant changes in the measurable academic or behavioral progress of students whose teachers had completed the training.

Another evaluation was conducted by Harman (2006). This independent evaluative report also was initiated to determine the effectiveness of *Schools Attuned* in New York City. The Harman report obtained information from surveys of teachers and parents in schools identified as implementing *Schools Attuned* as their primary pre-referral intervention tool. Harman surveyed teachers about the manner and frequency with which they typically used *Schools Attuned* in their classrooms. Parents who responded to the survey were asked their impressions of *Schools Attuned's* effectiveness in improving the academic success of students in their classrooms. Harman also reviewed academic achievement and behavioral data of students and collected additional information concerning the impact and value of *Schools Attuned* as perceived by the local school district administrators and instructional specialists affiliated with the participating schools. Teachers who participated in Harman's

study stated that *Schools Attuned* helped them understand how their students learned. The report did not conclude significant findings of academic or behavioral improvement for students of teachers who received the training.

Other research concerning the effectiveness of *Schools Attuned* in averting school failure consisted of surveys and interviews of participants subsequent to course completion. These interviews and surveys indicated that teachers who completed the training reported that the course gave them more knowledge regarding how students learn (Combs & Jackson, 2006). Another study by Fiore (2006) indicated teachers who completed the course stated they felt more confident working with academically diverse students than did comparable teachers who had not completed the *Schools Attuned* training. Surveyed teachers often felt empowered by the training they received in *Schools Attuned*. Sireci and Keller (2007) reported teachers who were course completers indicated a high frequency of use of *Schools Attuned* learned strategies in their work. Other research demonstrated that some schools experienced changes in test scores (Ashmore & Holcome 2007; Sireci & Keller, 2007). One program evaluation (Spagna, 2003) found non-significant decreases in special education referral rates, changes in tests scores, and lower special education referral rates (Spagna, 2003).

Summary

This chapter reviewed why special education referrals for African American boys might result in a bleak educational future. It reviewed some of the relevant judicial cases, education laws, and regulations that contribute to the current requirements for assessment and assignment of students with handicapping conditions to special education. The role of social and cultural differences and beliefs as they are essential to teaching were addressed.

Contributing factors of community and economic limitations were also explained. One focus of the chapter was to bring to light the importance of identifying and utilizing pedagogical practices that are effective for students with IEPs and by extension effective for other students with learning differences.

Over twenty years of data have informed and modified practices and policies that support the education of children with disabilities. Civil rights legislation, court challenges and various laws and statutes also shaped special education services locally and nationally. The outcomes of various legal challenges and recent IDEA modifications have changed assessment procedures and special education service delivery. Greater emphasis is now on effective instruction and prevention of academic failure rather than the introduction of special education services. Decisions to request special education services are influenced by many individual, institutional and environmental factors yet similar assessment profiles can still result in different placements for many reasons. Restrictive variations of outcomes for the same profile limit opportunities for African American boys to avoid negative and restrictive school and life outcomes (Sen, 2006).

Changes in instructional practices can support positive change in outcomes for many minority students (National Center for Culturally Responsive Educational Systems, 2004). Research indicates that some instructional methods support academic progress for all students, and specific elements, when included in teacher training, provide academic gains for all students. Research to determine the effectiveness of *Schools Attuned* to improve teacher instruction and student achievement or to prevent referral to special education for all students or any sub-groups of students is just beginning. *Schools Attuned* has not been subjected to sufficient scientific scrutiny to determine its efficacy. If *Schools Attuned* is

shown to change student outcomes, it can contribute to the prevention of inappropriate referrals of African American boys for special education services.

CHAPTER III

METHODOLOGY

The five boroughs that comprise New York City have inhabitants who are diverse in language, culture, and ethnicity. New York City public schools provide an educational gateway for children from families, who are new arrivals from different regions of the country and different regions of the world. African American children in New York schools come from many cultures and languages. Some have recently arrived from their home nations, while others have long generational roots in this country. The public schools often provide a stabilizing educational force that helps the children of these families to realize their own personal American dream.

Setting

Graduation Rates for a Portion of the Nation's Children

The New York City public school system is one of the 10 largest school systems in the nation. This system educates a large percentage of the nation's public school students including at-risk and special needs students. Most minority students in the state of New York attend school in the city of New York (Advocates for Children, 2005). It enrolls two-thirds of the African American boys in the state, yet more than two-thirds of them do not graduate with their cohort (Schott, 2004). The New York City graduation gap between all African American and Caucasian students is among the highest in the nation. New York City's graduation rates for African American boys are extremely low. Less than 30% of African American boys graduate from high school across the state. In the year 2000, 5,565 African American students with IEPs exited high school. Of these students, only 11 received

Regent's diplomas, which in New York is required to attend a four-year state or New York City college. In 2000-2001, of 6,589 African American students exiting high school, 13 received Regent's diplomas. In 2001-2002, of 6,085 African American students exiting high school, eight received Regent's diplomas. In 2002-2003, of 5,208 African American students exiting high school, 11 received Regent's diplomas and one student received an Advanced Regent's diploma (Advocates for Children, 2005).

Methods

Sixty-four schools within the five geographic boroughs of New York City were included in this study. All were elementary schools in the communities that comprise the New York City school district. To ensure that at least five schools from each borough were represented, all schools that had a minimum of seven *Schools Attuned* trained teachers were included in the sample. The grades included in the research sample were from pre-k to eight. Special education initial referral data reflected four academic school years from 2004-2005 through the end of 2007-2008 and was obtained for the *Schools Attuned* (SA) and No *Schools Attuned* (NSA) schools. This time period represented two academic years before the availability of SA training by the New York City School District (2004-2005 and 2005-2006) and two academic years in which the SA training was available to the New York City School District teachers (2006-2007 and 2007-2008). Fidelity information was obtained from a survey questionnaire using a subset of the SA sample population. Course completers from five schools from the sample subset of the SA schools were surveyed using a questionnaire that covered eight key areas of implementation of SA.

Each 35-hour SA training course was lead by pairs of All Kinds of Minds trained instructors. In the SA instructional course content, delivery fidelity was supported by having

course participants sign an agreement to abide by a commitment not to train other individuals. Each SA trainer, in addition to having completed the practitioner's 35-hour SA course, was trained to instruct the teachers' courses given additional training and had obtained certification as SA trainers.

Each individual who received a certificate of completion from the SA training finished the entire 35-hour SA course and completed at least one demonstration of "Student Attunement." The Student Attunement completed by the trainee was reviewed and approved by the SA trainer who instructed the course. The instructor's evaluation assured that each SA completer had developed at least one complete student attunement process that met the standard of adequacy for SA certification.

The schools included in the sample were selected based on SA's identification of seven or more teachers who identified their school affiliation at the point of their registration for the SA training. Schools without SA trained teachers were included in the sample based on demographic similarity to specific schools that were indicated to have SA trained teachers. The demographic factors considered for No *Schools Attuned* (NSA) schools included in the sample were similar to SA schools regarding location in the same community school district, proximity to a specific school, percentage of students eligible for federal free and reduced price lunch, total student population, and percentage of African American students as part of the school's total population. The conditions for this study are *Schools Attuned* (SA) and No *Schools Attuned* (NSA). SA condition schools (N = 32) have a cohort of teachers trained in *Schools Attuned*. The NSA condition schools (N = 32) were selected for the sample because they do not have teachers trained in *Schools Attuned* (Nimkoff & Gilbert, 2008, personal communication), but met defined criteria for inclusion on categories

that were similar to the SA sample. To have some level of representation from each of the five boroughs of the unified New York City School District, it was important, if possible, for each borough to have at least five SA schools included in the sample.

Research Design

A quasi-experimental research design using a convenience sample of schools was developed. All schools were within the five geographic boroughs of The Bronx, Brooklyn, Manhattan, Queens, and Staten Island which comprise the New York City Public School System under the jurisdiction of the New York City Department of Education. The NYCDOE is a unified school district that includes 32 semi autonomous community school districts. Schools where teacher participated in SA training and schools where no teachers participated by SA were used. Only elementary schools (k-5 or k-8) were selected. Aggregated data for the number of teachers who completed SA training, and their school affiliation at the time of training were collected from All Kinds of Minds Research Department (Nimkoff & Gilbert, 2008 personal communication). Data about some SA services provided to schools in the New York City school districts were obtained from New York City AKOM managing director M. Dahm (2008). Additional information about SA services and training in the schools was obtained from program evaluative reports about SA (Harman, 2007; Watts-English, 2007). Initial special education referral data from the schools were obtained from the NYCDOE Office of Research and Accountability (NYCDOE, 2008). The collected data included the number of special education referrals by school, race, and gender of the students referred. The data were obtained for the following academic years from September to June: 2004-2005, 2005-2006, 2006-2007, and 2007-2008.

Schools were grouped into two conditions based on the number of *Schools Attuned* teachers assigned to the schools. The schools included in the SA condition (N = 32) have seven or more teachers trained in *Schools Attuned* using AKOM disaggregated data. Schools included in the NSA condition (N = 32) were selected because they have no teachers trained in *Schools Attuned* in AKOM disaggregated data (Nimkoff & Gilbert, 2008). A school was considered for inclusion as an NSA school if it was located in the same geographic community school district as an SA school. Geographic proximity to an SA school was also considered. Similarity of federal free and reduced price lunch eligibility, total student population, and percentage of African American students in the school's total student population were also considered for each NSA school.

Procedures

Schools with complete data from *Schools Attuned* and the New York City Board of Education across all of the academic school years from September 2004 through June 2008 were used. All are public schools located in the geographic areas that were part of New York City. Data for the number of teachers trained by *Schools Attuned* was obtained from the *Schools Attuned* oversight organization, All Kinds of Minds. The All Kinds of Minds data for teacher training were aggregated data obtained by spreadsheet. No personal information was obtained. The individuals trained were identified by school affiliation (Nimkoff & Gilbert, 2008).

Names and site numbers of New York City public schools in the sample obtained from *Schools Attuned* were verified by information obtained from the New York City schools data websites, which have a web page for each school in the school district. School information verified included the name, number, and school addresses. Other data

concerning each school on the NYCDOE website included the school's number, borough location, district location, total student population, academic grades (pre k-12), racial and ethnicity, the student population, number of initial special education referrals, and percentages of eligibility free and reduced price lunch.

The numbers of special education referrals were disaggregated by race and gender. The special education referral data from the academic years (September through June) 2004-2005 and 2005-2006 served as baseline data. The number of special education referrals of African American boys from the two 2006-2007 and 2007-2008 academic years were used to determine if SA affected the number of referrals of African American boys. The special education referrals of 32 schools with SA trained teachers were compared to the referrals of 32 schools without SA trained teachers. A two-way (one between, one within) repeated measures analysis of variance (ANOVA) was used to determine if there was a difference between special education referrals for African American boys in schools with SA trained teachers when compared to the base years for each condition in the study. By comparing the number of special education referrals for African American boys in schools with SA to schools without SA, the research examined the effects of SA on the number of special education referrals initiated for African American boys.

Data Collection

In August 2008, data concerning teachers trained in SA were collected from AKOM. The data were categorized with individual identification numbers for each participant. The data showed school affiliation for each completer by name or number. The number of completers for each elementary school was totaled and included in the sample only if the school's location by borough and district could be verified by the New York City school

district's official website. If seven or more individuals from the school were listed as SA completers and the data for special education referrals for each of the years of the inquiry were available, the school was included in the sample.

Archival data from the number of special education referrals for each school in the sample was obtained from the New York City School District Office of Assessment and Accountability (August, 2008). The disaggregated data identified the official number for each school in New York City, as well as the borough and community where the school is located. The schools were included in the sample if complete special education referral data information for each of the years from September 2003 through June 2008 were available. The number of special education referrals for each school was divided into groups of students using the following racial identification categories: African American or Black, White, Asian or Pacific Islander, Native American, and Other. The number of referrals for each racial category was subdivided into males and females.

A school with similar student statistics but no SA trained teachers was identified for each school in the sample that had a cohort of SA trained teachers. This information was obtained by using the school district's website. Paired schools (N=32) were included in the sample in the NSA condition. Demographic information pertaining to the student racial and ethnic population, free or reduced price school lunch eligibility, and geographic location was also considered when identifying schools in the NSA condition.

Schools Attuned has its own internal system to insure the program is used with fidelity. Each person who completes SA training is required to complete an attuning plan with a student with whom they are familiar. The plan must be approved by one of the two trainers of their cohort-training group. This internal review requirement serves to assure the

trainee understands the significant process, philosophy, and methods. In addition, fidelity was measured by questionnaire. A survey (Nimkoff, 2007) was used to determine the level of implementation of SA in sixteen representative schools from the sample. When permission from superintendents and principals was obtained to distribute the survey, an equal number of surveys to match the reported number of SA teachers were sent to selected schools. Surveys were sent to all SA trained teachers in each of sixteen schools. Each school that was distributed the survey included 10 or more SA trained teachers. A total of 180 surveys were distributed to schools.

Summary

This study was conducted in a major urban school district, one that educates a substantial percentage of African American boys. The school district provided special education referral data for four consecutive years. *Schools Attuned* provided *Schools Attuned* training information. Schools were designated *Schools Attuned* or No *Schools Attuned* by the number of teachers in the school that completed *Schools Attuned* training. Special education referrals for African American boys from thirty-two schools with *Schools Attuned* trained teachers and thirty-two schools with no *Schools Attuned* trained teachers were compared. Two years of referral information for African American boys served as baseline data and was compared to referral data collected after a substantial number of teachers completed *Schools Attuned* training. The goal of the research was to determine if referrals for African American boys significantly decreased in *School Attuned* schools when compared to schools with no *Schools Attuned* trained teachers.

CHAPTER IV

ANAYLSIS OF DATA

As previously stated, New York City is made up of five geographic boroughs. There are 1,940,269 inhabitants in New York City who are under 18 years of age representing almost one-fourth of the city's total population. The racial and ethnic distribution of New York City's citizens under 18 is 38% Hispanic, 35% Black or African American, 15% White or Caucasian, and 12% Asian (NYC Department of Planning, 2005). The New York City public school system is one of the largest in the nation, with an enrollment of 1,098,832 students attending 1,200 schools (Department of City Planning, 2005).

In 2008, the New York City public schools consisted of 693 elementary schools, 220 intermediate schools, and 230 high schools, with 32 separate school districts. These districts are served by 10 instructional divisions that provide consultation for curriculum matters and 10 learning support organizations that provide leadership and training in data driven instruction (New York City Department of Education [NYCDOE] Website, 2008). The racial and ethnic distribution of the population of all of New York City's public school students as reported by school districts is found in Table 2. Most referrals for special education in New York City are initiated in elementary schools (NYCDOE, 2004). Thus, the schools included in this research were limited to elementary schools (PS) in the New York City School District.

Table 2

Ethnicity of Student Population by Borough (Numbers Equal Percentage of Students)

	New York Five Boroughs	The Bronx	Brooklyn	Queens	Staten Island	Manhattan
White	15	5	16	16	60	10
Black	35	33	49	27	16	29
Hispanic	38	58	26	34	16	49
Asian	12	3	8	23	7	11
Total	100	99	99	100	99	99

Note. Some boroughs do not sum to 100% because of missing or non-reported data. The total, five-borough data does sum to 100% because the NYCDOE reports the percentage of reported data only.

This research used a convenience sample of 64 elementary schools located in the five geographic boroughs of the New York City school district. These schools served students from kindergarten through grade eight. Each borough had a minimum of five schools included in the sample. All elementary schools for which complete student enrollment data, AKOM data, and special education referral data were available were included in the research. School and student demographic data were obtained from the NYCDOE website (June 2008). Special education referral data were obtained from the NYCDOE Office of Assessment Accountability and Research (OAAR) (New York City, 2008).

The All Kinds of Minds research department provided the school affiliation of the SA participants and course completion information (Nimkoff, 2008, personal communication). All collected data were devoid of any personal information about training participants. The sample of SA schools were selected from the intensive SA training initiative offered by the NYCDOE. A purposive sample technique was used to identify the SA designated schools (N = 32). Schools were designated SA if they had a minimum number of seven teachers trained in *Schools Attuned*. The number seven, while arbitrary, assured that at least five SA schools from each borough were included in the sample. In other words seven was the smallest number of trained teachers in any school such that at least five schools could be selected from every borough. The 32 NSA designated schools were selected based on matching the following characteristics with SA designated schools:

- 1. Location in the same geographic borough;
- 2. Geographic proximity in the same school district;
- 3. Comparable grades within the school, i.e., k-8;
- 4. Comparable total student population;

- 5. Comparable percentage of population ethnicity; and,
- 6. Comparable percentage of students' free or reduced lunch status.

While the purposive sample was not a random selection, it provided a comparison set of schools to SA schools. Table 3 shows the number of schools that were included in the sample from each geographic borough and by research designation of the SA or NSA.

Table 3

Number of Schools in Each Condition by Borough

Borough	Bronx	Brooklyn	Queens	Manhattan	Staten Island	Total for all Boroughs
Number of SA Schools	6	8	7	5	6	32
Number of NSA Schools	6	8	7	5	6	32
Total Number Of Schools Per Borough	12	16	14	10	12	64

Special Education Referral Data

The New York City Office of Accountability Assessment and Research (OAAR) (2008) provided special education referral data for all schools identified by race or ethnic group and gender for the academic school years of 2004-2005, 2005-2006, 2006-2007, and 2007-2008. Additionally, this information, as well as the total number of students in a school, was provided at the aggregate level from the website of the NYCDOE. The data for the school years of 2004-2006 reflected the status of schools in the sample before the full implementation of SA (<Schools@nyc.gov>). The data for 2006-2008 reflected the status of the sample schools after the implementation of SA (Harman, 2006).

The following data were collected for each of the schools for the four years of the research:

- 1. The number of students enrolled in each school;
- 2. The total percentage of school enrollment that is African American;
- 3. The total percentage of school enrollment that is male;
- 4. The number of African American boys referred for special education.

The primary concern of the research addressed the percentage of special education referrals of African American boys. While data were available on the actual number of African American boys who were referred to special education, each school consisted of different sized student populations and different numbers of African American boys. The information needed to test the hypotheses was not directly present in the available archival data obtained; this demonstrates one of the difficulties associated with the use of archival data for research.

To address this deficiency in the archival data, an approximation of the percentage of African American boys referred to special education was calculated through a series of transformations. The available data included the following:

A – School Enrollment;

B – Percentage of African American students enrolled in the school;

C – Percentage of boys enrolled in the school;

D – Number of African American boys referred to special education in each year of the study.

The percentage of African American students in the school, the percentage of boys in the school, and the size of the school were very consistent from year-to-year within each school. Therefore, the base for calculating the percentage of African American boys referred to special education was calculated once for each school as follows:

Number of African American Boys in a School = A * B * C

The actual number of African American boys referred to special education (D) for the two years prior to implementation of the SA treatment was averaged to obtain D (Pre) and the data for the two years immediately after implementation of the SA treatment was averaged to obtain D (Post).

The percentage of African American boys who were referred to special education was calculated as:

Percentage Prior to treatment = D(pre)/(A*B*C)

Percentage After treatment = D(post)/(A*B*C)

Finally, since percentages are not normally distributed, the data were then transformed to z scores to meet the assumptions of the statistical tests used. The z scores

allowed comparisons of the results of special education referrals from time period one to those from time two for both NSA and SA groups. The special education referrals for the two designated periods were compared among and between the two groups over each time.

Fidelity

All SA trainees were required to attend every session to obtain a certificate for the course (Harman, 2006). Participants were trained by certified AKOM trainers and required to sign an agreement not to train other individuals or groups. To complete the SA course, participants were required to submit a Student Attunement plan designed for a specific student. An SA trainer needed to approve the plan before a certificate of completion was granted. This requirement assured a minimum level of mastery before teachers are expected to use SA methods. The requirement of an SA mastery task contributed to the likelihood that SA methods were practiced with fidelity.

Harman (2006) produced a report of SA use by teachers in ten New York City schools. The report was an initial evaluation of the impact of SA on New York City Public Schools. Ten schools that selected to use SA as a primary intervention were included in the report. Teachers and administrators from the schools used in the Harman report participated in observations, interviews, and completed surveys regarding SA in their school. Fifty-one SA course completers answered the *Schools Attuned* Implementation survey. Some of the survey respondents also participated in follow-up telephone interviews. Harman's report concluded that *Schools Attuned* had an impact on teacher and school personnel knowledge of students strengths, and that SA provided teachers with a better understanding of how student strengths and weaknesses support and impact academic successes.

The survey results of the *Schools Attuned* Implementation Survey used in the Harman report yielded limited question-by-question information because of the unusual way the data were compiled. The survey results combined the percentages of the two most frequent responses to each question and reported the combined percentage rather than separate percentage for individual questions. It should be noted that the SA sample for this research included five schools that also participated in the Harman report and survey.

To determine fidelity of SA use by teachers in this research sample, the same *Schools Attuned* Implementation Survey used by Harman's study was distributed. One hundred sixty SA surveys were distributed to 16 SA schools. The 16 schools were selected by examining the referral data of pre-and post-SA implementation information. Eight schools that showed the greatest percentage of reduction of referrals for African American boys from pre- to post-implementation years and eight schools that showed the least reduction, no reduction, or a rise in the referrals for African American boys from pre- to post-years were selected to receive the surveys.

It was necessary to obtain written approval to distribute the surveys from the city school district, local superintendents and principals before they could be distributed to teachers. District superintendents and principals were contacted weekly by e-mail and phone from February 2008 through April 2008. When all levels of permission were granted the surveys were mailed to the schools to be completed by SA trained staff. The surveys were returned to the researcher in a self-addressed, stamped envelope. Weekly e-mail and reminder telephone calls were made to each school's principal and to the corresponding superintendents. A total of 160 surveys were distributed to SA schools for this research.

Despite outreach, only 31 surveys from 5 schools were returned. Overall fidelity for the

research sample was not established because of the limited number of schools and individuals that returned the surveys.

Survey respondents were from five schools located in two of the five boroughs of the city (Brooklyn and Queens). Of the five schools that returned surveys, four were from schools that showed the least amount of referral change from pre- to post-years of the research. One of the schools that returned surveys reduced referrals of African American boys from pre- to post-years of the research.

The survey section "Schools Attuned At My School" includes teachers' impressions of how SA was perceived in their school. The survey responses to these questions are notable since prior research (Jackson, 2001) reported that teachers' perception of their school's acceptance of their training as well as their belief that they will get sufficient administrative and material support persuades teachers to use skills learned in training (Yoon, 2007). When teachers believe they have sufficient support, they are more likely to incorporate their training into their general teaching practices and consistently use them (Gutskey, 2009).

Fifty-one percent of respondents stated they did not have time available to plan and reflect on SA practice; 51.6% of respondents strongly disagreed that SA was a part of the pre-referral practices in their school and 61% strongly disagreed that their school had groups that met regularly to discuss and support each other's use of SA (e.g., peer study groups). Over fifty-eight percent (58.1%) disagreed that they used SA on-line support resources to support their implementation. Sixty-four percent of respondents disagreed with the statement that SA places a burden on their school's resources. Additionally, 58.1% of the respondents stated they agreed that the teachers in their school were committed to the success of SA. The

same percentage reported they agreed they worked with other teachers who were committed to the success of SA, and 54.8% agreed that SA was aligned with the curriculum at their schools.

Results of Research

The question posed by this research was: Will schools with *Schools Attuned* teachers have fewer special education referrals for African American boys than schools that do not have teachers trained in *Schools Attuned?* To test the hypothesis, a two way (one between, one within) repeated measure analysis of variance (ANOVA) was employed. This design incorporated one within variable (time: pre and post) and one between variable (SA vs. No-SA).

Table 4 presents the means and standard deviation for the percentage of referrals for the pre and post implementation years. Comparing the two-year period prior to implementation of *Schools Attuned* to the two-year period after SA implementation, the percentage of referrals for both the SA and NSA groups decreased. Pre implementation SA means = .0108, post implementation SA means = .0081. Pre implementation NSA means = .0116, post implementation NSA mean = .00821. Table 5 presents the results of the ANOVA with transformed referral data by treatment. Table 6 contains the summary statistics for the repeated measures analysis of variance.

The analysis of variance resulted in an F value for the within factor, (time, of 4.201, (df = 1, 62, p = .045)). This was significant at the .05 level, which indicated that for the combined SA and NSA group there was a significant decrease in the number of referrals of African American boys from pre treatment to post treatment. This was true regardless of whether the schools were SA or NSA. The analysis of variance for the between subject

Table 4

Mean and Standard Deviation of Percentage Referrals by Treatment

Treatment	Pre Implementation $N = 32$		Post Implementation $N = 32$	Total N = 64	
	Mean	Standard Deviation	Standard Mean Deviation M	Standard Iean Deviation	
No SA	.0116	.01075	.0082 .00821 .0	.00902	
SA	.0108	.01106	.0081 .00800 .0	0094 .00925	
Total	.0112	.01083	.0081 .00804		

Table 5

Mean and Standard Deviation of Transformed Data on Referrals by Treatment

	Pre Implementation		Post Implementation		
Treatment	Mean	Standard Deviation	Mean	Standard Deviation	
Non SA N = 32	-1.6378	.85864	-1.9725	1.36312	
SA N = 32	-1.4600	.76464	-1.7672	1.03620	
Total N = 64	-1.5489	.81148	-1.8698	1.2055	

Table 6
Summary Statistics for Repeated Measures Analysis of Variance

Source	Degrees of Freedom	Mean Square	F	p
Within Factor (Time)) 1	1.3296	4.201	.045
Between Factor (SA-	NSA) 1	1.174	.875	.353
Interaction	1	.006	.008	.93
Error	62			

variable (treatment) resulted in an F value of .875 (df = 1, 62), which was not significant (p = .353). The F value for the interaction is .006 which was not found to be statistically significant (p = .930, df = 1, 62). Based on these findings, the null hypothesis is accepted and it cannot be concluded that the treatment had an impact on the referrals of African American Boys. The results of this research found that schools with teachers trained in SA did not initiate significantly fewer referrals for African American boys when compared to schools without *Schools Attuned* trained teachers.

While SA training reflected aspects of effective teacher training and classroom practices, in this research, the use of SA did not reduce the number of special education referrals initiated when compared to schools that did not have SA training.

Summary

Special education data from September 2004 through June 2008 from 64 public schools in the New York City School district was collected for this research. Two consecutive years of special education referral data, from September 2004 through June 2006 reflected referrals before SA was implemented and constituted baseline data. September 2006 through June 2008 reflected years of SA implementation. Fidelity of the use of *Schools Attuned* by trained teachers could not be established due to limited responses to a survey. The comparison of the means and standard deviation of the data of the two designated time frames showed no significant difference in special education referrals when the referrals of African American boys in SA schools were compared to the referrals of African American boys in NSA school. The data showed a significant decrease in special education referrals for

African American boys in both the SA and NSA groups from the pre SA implementation years (September, 2004-June, 2006), to the SA implementation years (September, 2006-June, 2008).

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMENDATIONS

The purpose of this research was to determine if schools with *Schools Attuned* trained teachers initiated fewer special education referrals for African American boys than schools that did not have *Schools Attuned* teachers. *Schools Attuned* was initiated in the New York City public schools as part of an effort to improve student achievement. Federally reported statistics for NYCDOE (Advocates for Children, 2005; Holzman, 2004), indicated African American boys were more likely to be in special education placements and in the most restrictive environments available in special education. These students were less likely to complete high school with a diploma. As part of the Children's First Initiative (New York City, 2004), *Schools Attuned* was introduced as an option to improve student achievement (Harman, 2006; NYCDOE, 2003). Based on the literature review (AKOM, 2004; Gravois & Rosenfield, 2006; Hocutt, 1996; Jackson, 2001), this researcher hypothesized schools with *Schools Attuned* trained teachers would initiate fewer special education referrals for African American boys than schools without *Schools Attuned* trained teachers.

Discussion

The researcher's hypothesis was based on the following factors:

1. Hocutt's (1996) research outlined curricula and characteristics of effective practices used with special education students. *Schools Attuned* integrated structure, curriculum, and content were similar to Hocutt's recommended effective practices for students who are at risk for academic failure. Therefore, it was hypothesized that schools

with *Schools Attuned* trained teachers would initiate fewer special education referrals for African American boys.

2. Teachers who completed *Schools Attuned* training reported they felt more capable of teaching students with a wide variety of learning skills and behaviors (Watts-English, 2007). *Schools Attuned* recommended teaching strategies extended the teacher's ability to work with students with a wide range of learning skills (AKOM, 2007), thus decreasing the teacher's need to initiate referrals to special education for African American boys.

However, this research did not support the hypothesis. This research determined there was no significant difference between special education referrals for African American boys educated in schools with *Schools Attuned* trained teachers and schools that did not have *Schools Attuned* trained teachers. In fact, the rate for referrals for special education for African American boys decreased in both *Schools Attuned* and non-*Schools Attuned* schools. The results of this research did not support the hypothesis that schools with *Schools Attuned* trained teachers, thus teachers who used *Schools Attuned* interventions and strategies, reduced the percentage of referrals of African American boys to special education.

A fidelity study was completed as part of this research, and an earlier implementation survey completed by Harman (2006) was reviewed. The survey questions used were common to both inquiries. Five of the school used in the Harman survey and report were included in this research. The number of responses received for the fidelity study completed as part of this research was not adequate to make assumptions that *Schools Attuned* strategies were provided with fidelity. However, the *Schools Attuned* Implementation Survey of 2006 completed by Harman (2006) obtained responses from 51 survey completers. Harman's evaluation results were similar to the survey results obtained in this research. In both sets of

data, large percentages of respondents stated they used *Schools Attuned* methods to help their students. Many of the respondents in both studies reported they modified their classroom techniques to match the students' strengths and weaknesses.

Conclusions

The results of this research showed there was no significant difference in the percentage of special education referrals for African American boys in schools with *Schools Attuned* trained teachers when compared to the number of special education referrals in schools with no-*Schools Attuned* trained teachers. The statistical results showed no significant decrease of referrals across the time intervals for both the *Schools Attuned* and no-*Schools Attuned* groups in the pre- and post-implementation period. It is important to note that although the percentage of special education referrals for African American boys in *Schools Attuned* schools decreased over time, the amount of special education referrals for these boys remained higher in *Schools Attuned* schools when compared to no-*Schools Attuned* schools.

The lack of response to the fidelity study prevented determination of use of *Schools Attuned* with fidelity and regularly as intended. However, *Schools Attuned* trained teachers who completed surveys reported they modified their instructional techniques. It is possible that trained teachers who did not respond to the survey also modified their instruction using *Schools Attuned* or that teachers who did not complete the survey did not use *Schools Attuned* interventions.

Previous *Schools Attuned* program evaluation reports (Fiore 2006; Harman, 2006; Watts-English, 2007) concluded that teachers who completed the *Schools Attuned* training felt better prepared to work with students with different levels of academic skills than they

did before completing the *Schools Attuned* training. *Schools Attuned* training may help teachers feel that they have the skills to work with students who have larger variations of academic and behavioral abilities. Teachers may believe *Schools Attuned* training improved their efficacy and lowered their need to refer to special education while helping the teachers develop different methods of instruction to meet students' needs.

It is possible that *Schools Attuned* trained teachers did not follow through with implementing *Schools Attuned* interventions because of other curricular and teaching responsibilities. While the teachers were being trained in *Schools Attuned*, they also were encouraged to learn and implement an Orton Gilligham Reading Program that is time intensive and required more record keeping than prior reading programs. Teachers were further required to improve students' standardized tests scores in other ways including frequent ability drills, assessments, or practice tests. Teachers had to establish priorities based on the needs of their classrooms and schools. Some teachers may have chosen to concentrate on developing more focused reading strategies without using *Schools Attuned* strategies effectively or at all.

Teachers may not have been provided with enough administrative, personnel, or other necessary supports to implement the *Schools Attuned* interventions. Sparks and Loucks-Horsley (1989) and Pianta (2008) found certain specific factors provided as a part of teacher training that would enhance the use of the newly acquired skills in the classroom. The factors in their research included an opportunity to train with a cohort who teaches the same subject or area or grade, to receive feedback from trainers to assist teachers in adjusting and improving their newly acquired skills and to provide teachers with time to practice newly acquired skills. The National Staff Development Council (2009) also emphasizes the skills

previously mentioned. Indeed, administrative support was determined to be one of the most important factors in the successful implementation of new programs (Jackson, 2001). The reality that most of the principals of the sample schools with *Schools Attuned* trained teachers refused permission to hand out the fidelity studies suggests a lack of administrative support for the program. Finally, it is possible that *Schools Attuned* may not be an effective intervention for preventing the referral of African American boys for special education or it may not be an effective practice in preventing special education referrals for any students.

Research completed by Harry and Klingner (2006) indicated that factors other than limited academic or intellectual skills, disability, or emotional skills influenced the disproportionate special education referrals for African American boys. Thus, some *Schools Attuned* trained teachers may not believe African American boys can benefit from the *Schools Attuned* methods and tools.

As mentioned before, the percentage of special education referrals for African American boys' schools decreased over the time span of this research in both *Schools Attuned* and no-*Schools Attuned* schools. The data for this research were collected for the years 2004-2008. In the district where the research was conducted, the period of the data collection coincided with a major period of rapid, significant administrative and instructional changes that might have influenced the outcome of the research. Many of the district changes were a result of the implementation of *No Child Left Behind* (NCLB) initiatives and Individuals with Disabilities Education Improvement Act (IDEIA, 2004) regulations. NCLB requires specific targets of academic progress for schools, districts, and subgroups of children who may be at risk for academic failure (Office of Special Education Programs, 2007). It also mandates academic support to students who are at risk. IDEIA's economic support for

early identification and the provision of academic intervention services for at risk learners may help prevent special education referrals by providing services before special education referrals are necessary (Bloomfield, 2007).

Another district change included the school district's mandatory transformation from community-based administration to a centralized administrative system initiated to provide system uniformity and improve student academic progress measured by higher scores on state and nationally required reading mathematics, and other academic skills tests. A uniform curriculum was instituted in all schools. The school day was lengthened to provide additional academic instruction and tutorial time for students who were at risk of academic failure, including students who had not passed state assessments for their grade.

In many schools, established test preparation companies (NYCDOE, 2007) provided student academic support services. Students who did not performed well on standardized tests or were in jeopardy of academic failure were encouraged to attend after school programs and required to attend summer school. Simultaneously, the district also provided extensive teacher training to improve their instructional ability to teach basic reading and mathematics. Thus, schools and principals were urged to provide students with multiple classroom supports using special education referrals as a last resort.

These simultaneous national policy and local school district regulatory occurrences, as well as the possible effects of *Schools Attuned* interventions and other curricular and program changes, may have contributed to the total decrease in special education referrals, as well as the decrease in special education referrals for African American boys.

Recommendations for Further Research

In this research, the null hypothesis was accepted. This research was unable to show that schools with Schools Attuned trained teachers initiated fewer special education referrals for African American boys than schools without Schools Attuned trained teachers. However, teachers who completed the fidelity study indicated they were more aware of students' strengths and weaknesses. Survey responders also reported that upon completing the Schools Attuned training, they were more likely to approach individual students and their entire classroom with an awareness of variability of skills. Despite teacher's reports that they felt more capable of working with students with different abilities, Schools Attuned schools did not decrease the special education referrals for African American boys. Schools Attuned may have simply provided teachers with a common framework and language to discuss academic needs but ultimately referrals for special education were unchanged and there was no significant reduction, in the number of referrals that could be attributed to Schools Attuned. This conclusion stands despite Schools Attuned's use of training techniques determined effective by Yoon, Duncan, and Wen-Yu-Lee (2007), who found that professional development factors, such as direct staff development rather than train-the-trainer presentations, sustained professional development of 14 hours or more, and professional development training that included study or follow-up sessions were effective in changing instructional practices and student achievement.

The district may want to initiate or expand research on *Schools Attuned*'s effect on the academic progress of students. As stated before, while *Schools Attuned* seems to include instructional practices showed effective for all children. Watts-English's (2007), research found that for the group studied, no significant differences were the result of the use of

Schools Attuned. The lack of findings may be the result of an inadequate research design, the inability to establish fidelity of program implementation and/or other undetermined reasons. Further research building upon this attempt may help to address these unanswered questions.

Additional factors that were not addressed in this study should be explored. These factors include socio-cultural differences, teacher efficacy, effects of gender, and racial stereotypes, teachers' academic and behavioral expectations and teachers' beliefs about the ability of African American boys to modify their academic skills, change behavior, and benefit from instructional modification.

The effectiveness of *Schools Attuned* strategies and interventions may be measured by comparing the referral rate of African American boys by pairing comparable *Schools Attuned* and no *Schools Attuned* classes in a single school or grade within a school. A treatment-no treatment model for comparable districts could be used, or a comparison of districts within the same borough might also yield results that may be generalized to other populations. With this model, a one-to-one matched assignment of no *Schools Attuned* and *Schools Attuned* schools would be used. In a single school model, the classrooms should be demographically matched with the only difference being trained *Schools Attuned* or no *Schools Attuned* teachers. The resulting number of referrals of African American boys from class-to-class would be measured to determine if there was a difference in referrals over time or if there was a correlation in the use of *Schools Attuned* and the rate of referrals of African American boys.

A similar model might be used by developing a number of *Schools Attuned* trained individuals in a school that would be defined as a "critical mass" of teachers for which their training would influence the referral culture of the entire school (Harry, 2007). Critical mass

is often defined as a percentage of a school's teachers whose training or academic practices influence the life or culture of the entire school. A school with a determined critical mass of *Schools Attuned* trained teachers could be compared to a school with no *Schools Attuned* trained teachers. Further research in this area should insure that schools in the sample are demographically matched by student factors such as ethnicity, free or reduced price lunch eligibility, and student population. The number of teachers in sample schools should also be matched. Additionally, when the efficacy and use of *Schools Attuned*, is measured, the years of experience and advanced degrees or training of teachers included in the sample should be considered.

A research survey to determine high, medium, and low implementation of *Schools Attuned* by trained teachers could be used to measure if differences in special education referrals for African American boys are related to different levels of *Schools Attuned* implementation. Different levels of *Schools Attuned* implementation schools would be compared to schools without *Schools Attuned*, or to schools with the same level of *Schools Attuned* implementation. Such research could also add valuable information on *Schools Attuned*'s effectiveness in special education referral prevention for African American boys.

To compare special education referrals, this research design used the school as the sample rather than individual classes with *Schools Attuned* trained teachers. In this regard, the global nature of the sample may have prevented the research from accurately determining if *Schools Attuned* was effective in the reduction of special education referrals for African American boys. A comparison of special education referrals from classes with *Schools Attuned* trained teachers to matched classes with teachers without *Schools Attuned* training may have yielded different results.

Another area that might yield results in determining *Schools Attuned* training is the relationship of *Schools Attuned* training to teacher efficacy. Many *Schools Attuned* completers stated that after the training they felt able to work with students exhibiting wide ranges of skills. Their responses suggest the value of *Schools Attuned* training may be in its sanction of teachers' beliefs concerning their own ability rather than its direct impact on improving student outcomes. Since surveys may only report what individuals say and may not reflect actual practices, ethnographic research, which records the amount of time teachers use *Schools Attuned* methods and compares use of *Schools Attuned* to other measures of student academic progress is also recommended.

All educational systems seek effective ways to improve teaching skills quickly and efficiently. This research has implications and relevance to these concerns. New York City schools, as one of many urban districts that educate a substantial percentage of African American boys, did not find *Schools Attuned* effective in producing significant changes in referrals. There is no research to indicate if it is effective for other groups of students or improves academic progress for students at risk. Districts that chose to use *Schools Attuned* may not show measurable academic improvement in any student who needs help, slowing or preventing the LEA's ability to reach the regulated federal benchmarks and goals leaving children further behind and with fewer resources.

Schools Attuned did not show measurable progress for students nor that it improved outcomes within the research timeframe. Lack of empirical evidence implies that Schools Attuned training may not be an efficient method to improve teacher effectiveness that translates into academic skill improvement for any students, or that it prevents special education referrals, especially for students at risk. Schools Attuned's inability to demonstrate

effectiveness limits its usefulness as a proven intervention that translates into measurable student achievement.

Urban school districts need interventions that are effective and can change student outcomes to comply with federal and local regulations. School districts that work with a great percentage of minority students and other underserved populations often have limited dollars to produce change and need concrete information to determine effective programs.

School psychologists have a role to play in supporting school-wide academic achievement and they constantly need to reshape their responsibilities and knowledge base. In the current paradigm, as school psychologists spend less time in assessment, they can spend more time helping to address the academic needs of the entire school. Schools psychologists may be called upon to share their knowledge of effective academic and social programs that are suited for the entire school environment and for specific subgroups. They will therefore need to know which programs are not appropriate for their population and which programs will help LEA's meet the needs of all students including specific subgroups or at risk students.

This research will assist school psychologists in becoming part of the solution for schools to improve student achievement and meet educational goals. Knowledge of effective methods and programs that advance learning and improve instruction make school psychologists valuable members of the school. They can recommend programs to create an environment where academic progress is made and the needs of all learners are addressed and respected.

Summary

In a diverse, densely populated multi-cultural and multi-ethnic school system, this research attempted to determine if the teacher-training program of *Schools Attuned* effected the special education referrals for African American boys. Public schools in all boroughs of the City of New York were included in the research sample. Using four years of archival data, the statistical results of the research accepted the null hypothesis. The data showed that there was no significant difference in the special education referrals for African American boys in schools with *Schools Attuned* trained teachers than in schools without *Schools Attuned* trained teachers, and the use of *Schools Attuned* did not change the number of referrals for African American boys. Design flaws, a limited sample, and the inability to determine fidelity of SA use by teachers likely contributed to limiting the predictive finding from the results. The data showed that *Schools Attuned* was not an effective school intervention in reducing special education referrals for African American boys.

This research did not show that *Schools Attuned* strategies and interventions lowered the special education referrals for African American boys. Future research using different models and configurations should address the effectiveness of *Schools Attuned* and other teacher training methods and practices.

Providing the most appropriate and least restrictive education possible for each struggling student is the ultimate goal. Preventing unnecessary and inappropriate referrals to special education is an important step toward that goal. School psychologists have many opportunities to assist teachers in the development and provision of effective instructional modifications academic supports, and behavioral interventions to make the curriculum more accessible to struggling students. Continuing research will provide alternative instructional

tools and measures that support student learning, and contribute to appropriate instruction while preventing disproportionate or inappropriate special education referrals. There is no "magic bullet," but there are many tools and practices that will lead to better outcomes for all children.

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APPENDICES

APPENDIX A

Department of Educational and School Psychology

Department Review Board

Approval Form

Department of Educational and School Psychology Department Review Board

DRB APPROVAL FORM

Date: July 14, 2008	
Dear Andrea	
protocol and has approved it with no revis protocol to the IRB for review at their nex Dissertation Committee Chair or Faculty	as reviewed your Institutional Review Board (IRB) sions. The DRB chairperson will submit your at meeting. Please share this information with your Supervisor. Feel free to contact the DRB ood luck with the next stage of the approval
Sincerely,	
Dr. Lynanne Black Chair	Dr. Edward Levinson Member
Dr. Joseph Kovaleski Member	

APPENDIX B

School of Graduate Studies and Research

Research Topic Approval

March 3, 2008

Andrea Rodriguez 438 State Street Brooklyn, NY 11217

Dear Ms. Rodriguez:

I recently received your Research Topic Approval Form requesting approval for your dissertation topic entitled, "Effects of Schools Attuned on the Special Education Referral Rate of African American Boys."

After a careful review of your project summary, I feel that your research may require human subjects review. Please complete the enclosed Human Subjects Review Protocol, and return it to my office as soon as possible. The form is also available on our website at http://www.iup.edu/page.aspz?id=6587.

Also enclosed is a memorandum explaining the process of the Institutional Review Board for the Protection of Human Subjects Committee and the instructions for completing the forms. Failure to complete the forms as directed will delay the process, so please follow the instructions carefully. If you have any further questions, please call my office at (724) 357-7730.

Sincerely,

Michele S. Schwietz, PhD Assistant Dean for Research

MS:bjo/req-irb

Enclosure

Xc: Dr. Mark Staszkiewicz, Committee Chairperson

APPENDIX C

School of Graduate Studies and Research

Institutional Review Board for the Protection of Human Subjects

Research Approval

August 5, 2008

Andrea Benn Rodriguez 438 State Street Brooklyn, New York 11217

Dear Ms. Rodriguez:

Your proposed research project, "Effects of Schools Attuned on the Special Education Referral Rate of African American Boys," (Log No. 08-174) has been reviewed by the IRB andis approved as an expedited review for the period of August 5, 2008 to August 5, 2009. I will report this to the Board. Should you need to continue your research beyond August 5, 2009 you will need to file additional information for continuing review. Please contact my office at (724) 357-7730 or come to Room 113, Stright Hall for further information.

Please note that Federal Policy requires that you notify the IRB promptly regarding: (1) any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented), (2) any events that affect the safety or well-being of subjects, and (3) any modifications of your study or other responses that are necessitated by any events reported in (2).

Although your human subjects review process is complete, please note that you cannot begin your research until you have received a letter from me granting approval of your Research Topic Approval Form.

I wish you success as you pursue this important endeavor.

Sincerely,

Michele S. Schwietz, PhD Chairperson Institutional Review Board for the Protection of Human Subjects

MSS:jeb

cc: Dr. Mark Staszkiewicz, Dissertation Advisor

Ms. Beverly Obitz, Thesis and Dissertation Secretary

APPENDIX D

School of Graduate Studies and Research

Institutional Review Board for the Protection of Human Subjects

Research Modification Approval

January 27, 2009

Andrea Benn Rodriguez 438 State Street Brooklyn, New York 11217

Dear Ms. Rodriguez

Your proposed modifications to your previously approved research project, "Effects of *Schools Attuned* on the Special Education Referral Rate of African American Boys, (Log No. 08-174) have been reviewed by the IRB and are approved as an expedited review for the period of January 27, 2009 to August 5, 2009. I will report this to the Board.

As you know, Federal Policy requires that you notify the IRB promptly regarding: (1) any additions or changes in procedures you might wish for your study (additions or changes must be approved by the IRB before they are implemented), (2) any events that affect the safety or well-being of subjects, and (3) any modifications of your study or other responses that are necessitated by any events reported in (2).

This completes the human subjects review process for your project. You may continue with your research. Should you need to continue your research beyond August 5, 2009 you will need to file additional information for continuing review. Please contact my office at (724) 357-7730 or come to Room 113 Stright Hall for further information.

I wish you success as you pursue this important endeavor.

Sincerely,

Michele S. Schwietz, PhD Chairperson Institutional Review Board for the Protection of Human Subjects

MSS:jeb

cc: Dr. Mark Staszkiewicz, Dissertation Advisor

APPENDIX E

Informed Consent Form

<u>Informed Consent Form</u>

VOLUNTARY CONSENT FORM:

I have read and understand the information on the form and I consent to volunteer to complete the survey for this study. I understand that my responses are completely confidential and that I have the right to withdraw at any time. I have received an unsigned copy of this informed Consent Form to keep in my possession.

Name (PLEASE PRIN	T)
Signature	
Date	
Phone number, locatio	n, or e-mail where you can be reached
Best days and times to	reach you
benefits, and possible	plained to the above individual the nature and purpose, the potential risks associated with participating in this research study, have s that have been raised, and have witnessed the above signature.
Date	Andrea B. Rodriguez

APPENDIX F

Informed Consent Form Request Letter

Informed Consent Form

Hello,

My name is Andrea Rodriguez. I am a doctoral candidate in the School Psychology Department at Indiana University of Pennsylvania.

I am conducting a study of the impact of the Schools Attuned Program and I invite you to participate in this research study. I share the following with you to provide you with enough information to make an informed decision. If you have any questions, however, please do not hesitate to ask. Information from all participants will be held in strict confidence and will have no bearing on you. The information I collect will be summarized only in the aggregate, as a complete group. All information is completely confidential.

The purpose of this study is to examine the effect of Schools Attuned on the Special Education Referral rate of African American boys. You are eligible to participate because you have completed a schools Attuned Course. You will be asked to complete a survey indicating how you use Your Schools Attuned methods and materials in your classrooms and with students. The questionnaire you will be asked to complete is designed to find out how teaches use Schools Attuned in the classroom.

Completion of this survey will require approximately 5 minutes of your time. Participation or non-participation will not effect your employment or other conditions of your work.

Your participation in this study is <u>voluntary</u>. You are free to decide not to participate in this study or to withdraw at any time without adverse affects. Your decision will not result in any loss of benefits to which you are otherwise entitled. If you choose to participate, please complete the questionnaire that you have been given. If you chose not to participate, you do not need to complete the questionnaire.

The information obtained in the study may be published in professional journals or presented at professional meetings but your identity will be kept strictly confidential.

If you are willing to participate in this study, please sign the statement below and deposit it the designated box by the door. Take the extra unsigned copy with you. If you choose not to participate, deposit the unsigned copies in the designated by the door.

Project Director: Andrea Rodriguez Doctoral Candidate. Educational and School Psychology Department Indiana University of Pennsylvania, Indiana PA 15705 438 State Street Brooklyn New York 11217 Phone: 917 862 – 5457

GQL@iup.edu

Dr. Mark Staszkeiwicz, Professor & Faculty Sponsor Educational and School Psychology Department Room 253 Stouffer Hall Indiana University of Pennsylvania, Indiana PA 15705 mjstat@iup.edu

Phone: 724/357-2299

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).

APPENDIX G

Schools Attuned Program

Schools Attuned Implementation Survey

Schools Attuned Program™ Schools Attuned Implementation Survey

By completing this survey you can help All Kinds of Minds better understand how teachers use the knowledge and skills provided through the Schools Attuned program in their day-to-day teaching practices. Your feedback is very valuable to us as we seek to make our Schools Attuned program as useful and responsive as possible to the needs of teachers like you. Thank you for taking the time to complete this survey!

Section I. Working with Individual Students

First, we would like to know how you use what you learned in your Schools Attuned training when you are **working with individual students** who struggle with learning.

Please indicate how typically you use what you learned in your Schools Attuned training when you **gather information** about an individual student.

I use Schools Attuned	Not Typical	Somewhat Typical	Very Typical	Typical	Not Applicable
to notice the student's neurodevelopmental (ND) strengths and weaknesses in terms of specific, observable, behaviors.					
to consider how the demands of certain tasks or assignments may impact the student's performance.					
to analyze the student's work samples.					
to seek input from <u>other teachers</u> about the student's strengths, weaknesses, and affinities.					
to seek input from <u>parents</u> about the student's ND strengths and weaknesses.					
to seek input from the <u>student</u> about his or her ND strengths and weaknesses.					
Please indicate how typically you use what y and implement strategies to help individual		your Schools A	Attuned train	ing when yo	u develop
I use Schools Attuned	Not Typical	Somewhat Typical	Very Typical	Typical	Not Applicable
to identify accommodations and interventions to help the student.					
to implement strategies that target the student's weaknesses. to provide specific opportunities					
for the student to strengthen his or					

her strengths.								
to implement strategies that leverage the student's affinities.								
to use teachable moments to reinforce key ideas about the student's strengths, weaknesses and affinities.			_					
to monitor the impact of strategies I implement and modify the accordingly.								
Section I. Working with Individual Students (Continued)								
Please indicate how typically you use what yo communicate about a student's learning:	oulearned in	your Schools A	attuned traini	ng when yo	u			
I use Schools Attuned	Not Typical	Somewhat Typical	Very Typical	Typical	Not Applicable			
to talk with the student about his or her strengths, weaknesses, and how they affect school performance.								
to help parents understand the student's learning and school performance.								
to help other educators understand the student's learning and school performance.								
Section II. Use of Schools Attuned	Fools and	Processes						
In this section we would like to ask you about Please indicate how many times you have use 12 months.					s in the past			
		Have Not Used	1 or 2 Times	3 or 4 Times	5 or More Times			
Table of ND Constructs (Placemat)								
Glossary of ND Terms								
Teacher's View								
Parent's Vies								
Student's View								
		Have Not Used	1 or 2 Times	3 or 4 Times	5 or More Times			
Consolidation and Summary Forms								

Student Management Plan		
Demystification with Student Only		
Demystification with Parents Only		
Demystification with Parents and Students Together		
SA Management Resources Binder		
SA Online		
Other (Please specify):		

Section III. Use of Schools Attuned with the Whole Class

In this section we would like to know how you use what you learned in your Schools Attuned training when you work with **all the students in your class**.

For each of the following statements, please indicate yow typically you use what you learned in your Schools Attuned training:

I use Schools Attuned	Not Typical	Somewhat Typical	Very Typical	Typical	Not Applicable
to implement strategies that have the potential to benefit all students.					
to offer all students options for completing assignments based on their strengths, weaknesses, and affinities.					
to represent lessons in a variety of ways based on an understanding of student's strengths, weaknesses, and affinities.					
to promote students'acceptance of others' strengths and weaknesses to create a safe classroom climate.					
to teach lessons about specific neurodevelopmental constructs (e.g., memory, higher order cognition, etc.).					0
to embed "learning about learning" within academic tasks.					

to provide aprtnets of students in my class with resources and opportunities to learn about Schools Attuned concepts and strategies.					_
Section IV. Changes in Overall Prac	ctice				
In this section we would like to know how you	ır Schools At	tuned training	has impacted	l vour teachir	ng practic

In this section we would like to know how your Schools Attuned training has impacted your teaching practice. Please indicate to what degree, if at all, you experienced a change in the following **as a result of Schools Attuned**:

	No Change	Slight Increase	Moderate Increase	Great Increase
Overall understanding of how student's learn.				
Belief that students with learning challenges can succeed.				
Confidence in working with students with learning challenges.				
Ability to address the learning needs of students.				
Ability to create educational plans and select strategies to improve academic achievement.				
Likelihood to work with students with learning challenges before referring them for outside services.				
Ability to create a classroom climate that protects students from humiliation.				
Ability to work with families to better understand students and support their learning.				
Ability to help students understand their own learning.				
Ability to form an alliance with student and/or parent as partners in student's learning.				
Ability to infuse optimism in students regarding their ability to succeed.				
Ability to help students understand that all learners have strengths and weaknesses.				
Ability to communicate effectively with <u>colleagues</u> about student learning.				

Ability to communicate effectively with parents about student learning.									
Section V. Student Impacts and Outcomes									
In this section we would like to know how result of your Schools Attuned training					that are the				
For each of the following statements, plea	se mark the	most appropr	iate response:						
	Not an Issue	Unsure	Has Worsened	No Change	Has Improved				
Disruptive or other negative classroom behavior.									
On-task behavior.									
Motivation to learn.									
Engagement in the learning process.									
Awareness of their learning profiles.									
Coping with their own learning difficulties.									
Class grades.									
State and city standardized test scores.									
Attendance.									
Academic self-esteem.									
Section VI. Schools Attuned At	My Schoo	ol							
In this section we would like to ask you se school. Please rate your agreement with the follows:	_		Schools Attuned	works in you	r whole				
riease rate your agreement with the follow	wing stateme	ents.							
		Strongly Disagree		Agree	Strongly Agree				
My principal is knowledgeable about and involved with Schools Attuned at my school.									
My principal provides leadership for the use of Schools Attuned at my									

school.

A staff member other than the principal (e.g. assistant principal, staff development specialist, lead teacher) provides leadership for the use of schools Attuned at my school.		_
There is someone at my school whom I can go to for help with my use of Schools Attuned.		
My district is committed to success of Schools Attuned at my school.		
I have time available to plan and reflect on my Schools Attuned practice.		
My school has sufficient resources (e.g. internet access) for my use of Schools Attuned.		
There are other requirements in my school or district that make it hard to implement Schools Attuned.		
Schools Attuned fits well with the educational goals and mission of my school.		
Schools Attuned is aligned with the curriculum at my school.		
I work with other teachers who are trained in Schools Attuned.		
The teachers at my school are committed to the success of Schools Attuned.		
My school has groups that meet regularly to discuss and support each other's use of Schools Attuned (e.g. peer study groups).		
Schools Attuned is part of the pre-referral process at my school.		
My knowledge of Schools Attuned has made me a valuable resource to other teachers/colleagues at my school.		
Schools Attuned places a burden on my school's resources.		
The parents of students in my school are involved and easy to contact so that they may be involved in SA in needed.		

I use Schools Attuned online resources to support my implementation.		
I am able to ask my Schools Attuned course facilitator for assistance with problems, feedback, etc.		
My Schools Attuned course facilitator has served as a valuable resource for me in my use of Schools Attuned at my school.		

APPENDIX H

The New York City Department of Education

Office of Accountability Proposal Review

Committee Request for Data

THE NEW YORK CITY DEPARTMENT OF EDUCATION JOEL I. KLEIN, Chancellor

OFFICE OF ACCOUNTABILITY - 52 CHAMBERS STREET, ROOM 309 - NEW YORK, NY 10007

JENNIFER BELL-ELLWANGER EXECUTIVE DIRECTOR TELEPHONE: (212) 374-3990

FAX: (212) 374-5908

March 3, 2008

Ms. Andrea B. Rodriguez 438 State Street Brooklyn, NY 11217

Dear Ms. Rodriguez:

The Proposal Review Committee (PRC) discussed your proposal, "Effects of Schools Attuned on the Special Education Referral Rate of African American Boys," at their meeting last week. One request was raised which must be addressed before the Committee can grant approval for your proposal.

• Please write up a request for the data that you will you need for your study.

Please send your reply and any additional requested materials to Dr. Thomas Gold, Chair of the Proposal Review Committee, at 52 Chambers Street, Room 309, New York NY 10007, or faxed to 212-374-5592. If you have questions, please contact Dr. Gold at 212-374-3913, or e-mail: TGold@schools.nyc.gov.

Sincerely,

Jennifer Bell-Ellwanger Executive Director

c: Dr. Thomas Gold

APPENDIX I

The New York City Department of Education

Office of Accountability Proposal Review Committee

Request for Data Submission

TO: THE PROPOSAL REVIEW COMMITTEE OF THE NEW YORK

CITY DEPARTMENT OF EDUCATION

FROM: ANDREA B. RODRIGUEZ, DOCTORAL CANDIDATE; INDIANA

UNIVERSITY OF PENNSYLVANIA

SUBJECT: REQUEST FOR DATA NEEDED FOR STUDY: EFFECTS OF

SCHOOLS ATTUNED ON THE SPECIAL EDUCATION REFERRAL

RATE OF AFRICAN AMERICAN BOYS

DATE: 3/14/2008

For the proposed study, *Effects of Schools Attuned on the Special Education Referral Rate of African American Boys*, I am requesting the following information for each school:

The annual **number** of special education referrals for each school disaggregated by sex and race for each individual academic year from September 1999 through June 2008.

The **number** of teachers in each school who received Schools Attuned training in the academic years from September 2003 to June 2008 as this training was administered by the contractual agreement between the by the New York City Department of Education and *All Kinds of Minds*

I thank you for your consideration of this request.

APPENDIX J

The New York City Department of Education

Office of Accountability Proposal Review Committee

Approval to Conduct Research

July 7, 2008

Ms. Andrea Rodriguez 1150 Washington Street Indiana, PA 15701

Dear Ms. Rodriguez:

I am happy to inform you that your research study, "Effects of Schools Attuned on the Special Education Referral Rate of African American Boys," has been approved by the Proposal Review Committee, the IRB of the New York City Department of Education. However, in order to begin the research you must meet the following conditions:

1. Approval by this office does not guarantee access to any particular school or individual. It is your responsibility to make appropriate contacts and get the required permissions and consent before initiating the study. Participation in your research must be strictly voluntary.

When requesting permission to conduct research, submit the Approval to Conduct Research form, a copy of the Proposal Summary form, and this letter to the principal and/or superintendent.

Please be aware that this approval is in effect for one year. Any continuation of your study after a year requires re-approval from the Proposal Review Committee.

The following written consents are required:

- A. Each principal and superintendent agreeing to participate must sign the enclosed Approval to Conduct Research form. A completed and signed form for every school included in your research must be returned to this office prior to beginning your research. **Please use the enclosed return stamped envelope.**
- B. In addition to the above written consent, all participants (e.g., administrators, teachers, parents, and students) must be informed that they are not required to participate in this study, and that there are no consequences for non-participation or withdrawal.
- C. Before involving any child in your study or collecting student data, written parental consent is required.

Your report of the study should not include the identification of the superintendency, district, any school, student, or staff member. A coding system should be used if necessary.

2. Please be aware that all researchers visiting schools will need to have their fingerprints on file at the Department of Education prior to the start of field work. This rule includes all research in schools conducted with students and/or staff. The cost is \$115.00. See attached fingerprinting materials.

Please remember when requesting permission to conduct research to submit an Approval to Conduct Research form for each participating school/region, a copy of the Proposal Summary form, and this letter to the superintendent and/or principal. *The Approval to Conduct Research forms must be returned to the Division of Assessment and Accountability in order for you to begin your research.*

Please send us a copy of your final report as we are most interested in the results of your research.

Moreover, we require a study abstract which includes all study findings for our records. Pleasesend an electronic copy of the documentation of your research to DAAResearch@schools.nyc.gov or send a printed copy to: DAAResearch, Proposal Review Committee, NYC Department of Education, 52 Chambers Street, Room 310, New York, NY 10007.

If you have any questions about implementing your research, please contact: Dr. Thomas Gold at (212) 374-3913, or by e-mail TGold@schools.nyc.gov.

Sincerely,

Jennifer Bell-Ellwanger Executive Director

c: Dr. Thomas Gold Dr. John Humins Barbara Dworkowitz

APPENDIX K

Support for Research

January 3, 2008

Re: Andrea Rodriguez

To whom it may concern:

This letter is to certify that Andrea Rodriguez is a doctoral student in School Psychology at the Indiana University f Pennsylvania. As part of her doctoral studies, Ms. Rodriguez is required to complete a dissertation. We understand that she would like to conduct this study in the New York City public schools.

The study involves a program evaluation of the effectiveness of the Schools Attuned program. In addition to fulfilling Ms. Rodriguez's doctoral requirements, this study has potential benefits to the New York City Board of Education regarding the effectiveness of the Schools Attuned program and on its ability to prevent referrals for special education for minority students. This research will also contribute to the overall body of research regarding the use of scientifically based practices in the schools.

It is my understanding that Ms. Rodriguez's proposed study will have no associated costs for the Board of Education. She intends to use archival data, and will not involve students as active subjects. It is not anticipated that this study will disrupt instructional time for teachers.

I hope that this information is helpful If you have further questions about this matter, please do not hesitate to contact me.

Sincerely,

Joseph F. Kovaleski, D.Ed. Director, Graduate Programs in School Psychology

APPENDIX L

Permission to Use Schools Attuned

Implementation Survey

Subj: **RE:** need your assistance

Date: 11/10/2008 9:11:34 AM Eastern Standard Time

From: <u>TNimkoff@allkindsofminds.org</u>

To: <u>ARod423@aol.com</u>

Hello Andrea,

Yes, you are welcome to use the implementation survey. You can simply cite the origin of the survey. There have not been any validity studies related to the survey, is that something that could be a part of your study?

~Tamara

TNimkoff@allkindsofminds.org

----Original Message-----

From: ARod423@aol.com [mailto:ARod423@aol.com]

Sent: Sunday, November 09,2008 11:59 AM

To: Tamara.Nimkoff

Subject: need your assistance

Hi

This is Andrea Rodriguez. We interacted earlier this year around data for Schools Attuned training which is part of my dissertation research. I hope that you and yours are well. I'm am most grateful for the information that I received from you as it is helping my research proceed.

As soon as there is more to tell, I will share it with you.

The Harman study, which specifically reviews the NYC School Attuned project has a great implementation survey.

I would like to be able to use it in my work. I am asking permission to use the survey as it currently is in the Harman review (Appendix A). I would also like to know if there have been any validity studies related to the survey. I am attaching the report which has the survey at the end.

Let me know what I need to do next. If you need to contact me by phone, Please call me at 917 862-5457.

Thanks for all of your help.

Andrea Rodriguez

Doctoral Candidate

Indiana University of Pennsylvania

AOL Search: Your one stop for directions, recipes and all other Holiday needs. Search Now.

APPENDIX M

Schools Attuned Program Overview

all kinds of minds A NON-PROFIT INSTITUTE FOR THE UNDERSTANDING OF DIFFERENCES IN LEARNING

Schools Attuned: The Program: Content

Prior

Knowledge Content Process Skills

& Abilities

Content, skills, and process are interwoven throughout the Core Course. The content of Schools Attuned includes eight Neurodevelopmental Constructs (Temporal-Sequential Ordering, Spatial Ordering, Memory, Language, Higher-order cognition, Neuromotor, Social Cognition, Attention).

Attention: A network of three highly interactive control systems that regulate the follow of cognitive energy (Mental Energy Control), Intake of Information (Processing Control) and output (Production Control).

Temporal Sequential Ordering: A system that provides the intrastructure to interpret, remember and create information that needs to be in a specific order or sequence.

Spatial Ordering: A system that provides the infrastructure to interpret, remember and create information that comes in or goes out as a simultaneously presented set of stimuli.

Memory: The mind's storage system that includes short-term memory (briefly registering new information that is used, stored, or forgotten), active working memory (mentally suspending information while using or manipulating it) and long-term memory (storing and retrieving information, including knowledge, skills and experiences).

Language: The critical system that facilitates the receipt, understanding, and expression of ideas, feelings and information.

Neuromotor Functions: The connections and interactions between the brain and the various groups of muscles that move our skeletons, including gross motor function (using the body's large muscles in a coordinated, effective manner), fine motor function (demonstrating effective manual dexterity) and graphomotor function (maneuvering a utensil to produce handwriting).

Social Cognition: Functions necessary for verbal pragmatic abilities (using and understanding language within social contexts) and social behaviors (acting in a way that fosters optimal relationships with others).

Higher Order Cognition: A set of interrelated processes that facilitates grappling with intellectually sophisticated challenges, form concepts, solve problems and think creatively.

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http://allkindsofminds.org/sa/schoolsAttuned_Program_Content.aspx

8/9/2004

PROGRAM OVERVIEW

Process

SCHOOLS ATTUNED GOALS

PRIOR KNOWLEDGE & ABILITIES

PRINCIPALS CONTENT PROCESS

The processes learned in the Schools Attuned Program includes Attuning a Student and the Student Learning Partnership protocol. Attuning a Student is a process taught in both the Generalist and Subject Specialist tracks of the Schools Attuned Program. Attuning a Student is a comprehensive process that builds greater expertise in using neurodevelopmental knowledge to make sound, professional judgements about addressing an individual's learning profile. This explicit, data-driven process results in a hypothesis needed to help struggling students learn. The process supports a commitment among students, educators, and parents to address the full range of neurodevelopmental profiles and academic abilities possessed by students.

Through this systematic process, educators, students, and parents work collaboratively to understand a student's learning profile and make evidence-based decisions regarding the best plan for managing that profile in areas of school performance. The process of Attuning a Student provides tools to empower teachers to be careful observers, accurately describing students' strengths and concerns rather than relying on diagnostic labels. The process also considers students' personal accounts of their experiences as learners and acknowledges the value of parents' observations and impressions of their children's learning. These multiple perspectives enable teachers to search for recurring themes that can provide insight into students' learning.

The Student Learning Partnership protocol is another technique for implementing The Schools Attuned Program with individual students. Part of the Subject Specialist Path curriculum, this protocol helps teachers work with individual students in ways that are authentic to the secondary school environment. Secondary educators often teach large numbers of students in relatively short blocks of time. These conditions do not allow many opportunities for secondary educators to spend significant time getting to know individual students and their learning profiles deeply.

The Student Learning Partnership supports teachers in using their knowledge of the neurodevelopmental Constructs, their knowledge of the demands of their subject, and their observations of a struggling student in their class to initiate a conversation with the student about his or her learning. Teacher and student work together to develop an idea about the neurodevelopmental constructs or functions that might be causing the difficulty in a particular subject area or with a particular course objective, assignment, or assessment.

Using the Student Learning Partnership protocol, the teacher facilitates a series of conversations with a student through which they determine how they want to work together,

decide what academic success will look like, and identify strategies to support the student in achieving greater academic success. Through the use of the protocol and supporting tools, evidence is gathered and themes identified to support a plan of action. As a result, students receive the one-on-one attention they need to succeed in school, acquire strategies to support them as learners, and build the self-advocacy skills that prepare them for success in other school subjects and in life. Implementation of this protocol may also reveal the need for a more comprehensive assessment of the student as a learner, such as the Attuning a Student process.

http://www.allkindsofminds.org/sa/schoolsAttuned_ProgramProcess.aspx?mode=print

6/25/2005

Schools Attuned

Program Overview

Registration Course Locations Implementation

Evaluation and Research

Contact

Student Success Program

Research

PROGRAM OVERVIEW

Program Process

Attuning a Student

Attuning a Student consists of seven major stages, briefly described below, experiences with the process, They recognize that some of these stages over to be revisited. Attuning a Student is a cyclical process in Which new inform constantly considered and incorporated Into the different stages.

Noticing a Student Library

Calendars **Data Collection**

Conferences and Events Data Analysis

Products Profile Building

Implementation Linking the

Profile with School

Performance

Password:

Demystification Management Submit? Password Plan

Not a Member? Sign up

here

Login:

DR. LEVINE

Register Now!

VIEW OUR MONTHLY NEWSLETTER

CAST YOUR VOTE

- 1 **NOTICING A STUDENT:** The teacher notices a student who is struggling with aspects of learning. The teachers lists strengths, as well as concerns relative student's learning and cites specific observable examples or evidence of strengths and Concerns. The teacher then talks with the student and his parents to encourage their involvement in the attuning process.
- **2 DATA COLLECTION:** The teacher uses Schools Attuned tools to gather data about the student's Learning in school and at home from multiple . . . the student and his parents. Data from student work samples are also . . . stage.
- **3 DATA ANALYSIS:** Using additional Schools Attuned tools, the teacher then analyzes the information gathered to uncover the student's

possible neurodevelopmental strengths and concerns as revealed by each source.

4 PROFILE BUILDING: The teacher conducts a search for recurring themes

http://www.allkindsofminds.org/sa/schoolsAttuned_ProgramAttuning.aspx 6/18/2005

*Experience the Schools Attuned Program

The Schools Attuned® Program addresses eight neurodevelopmental constructs and provides in-class practice through these three components:

- >A self-paced set of tasks to prepare for the Core Course
- >35 hours of Core Course instruction using the Schools Attuned® program curriculum
- >10 hours of follow-up activities

The preparatory tasks orient the participant to the objectives of the Schools Attuned® Program curriculum. Educators assemble data and information either on an individual student who is struggling in the classroom or on critical lessons about the subject they teach.

The Schools Attuned® Program is delivered by experienced faculty trained and evaluated by All Kinds of Minds in a consecutive five-day course or as a series of weekly or weekend seminars. Both formats offer year-round follow-up consisting of guided study group seminars focused on program application, as well as online learning resources.

Attend a Schools Attuned® Program Near You!

All Kinds of Minds delivers the Schools Attuned® Program through a variety of contractual agreements:

- >Professional Development Providers
- >On-Demand Programs
- >State Initiatives
- >District Initiatives

Each delivery method offers the Schools Attuned® Program with the following elements:

- >Videos based on the work of Dr. Mel Levine showing the use of neurodevelopmental knowledge and the Schools Attuned® Program processes in classrooms.
- >Reading from books and articles by Dr. Levine and others.
- >Small group work to provide opportunities for the active assimilation of content and practice of skills.
- >Case studies to help participants understand and use the neurodevelopmental constructs to analyze students' unique learning profiles and curriculum demands.

- >Demonstration and practice of the tools and processes of the Schools Attuned® Program to put information into use in the classroom and with individual students.
- >Preparation for implementing the Schools Attuned® Program in the school setting, including lesson analysis, developing personalized learning plans for identified students and making a variety of classroom accommodations.
- >Practicum experiences are offered during the school year in which participants meet on a regular basis with Schools Attunded® colleagues in their geographic or subject area and receive online support for implementation and other complex issues.
- >Upon completing all aspects of the Schools Attuned® Program, participants receive a certificate of completion.

*REGISTER NOW!

TO SIGN UP FOR A SCHOOLS ATTUNED PROGRAM OR TO FIND A LOCATION NEW YOUR, VIST OUR WEB SITE AT: www.allkindsofminds.org