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**SPECIAL EDUCATION AND MASSACHUSETTS CHARTER SCHOOLS:  
EXAMINING ISSUES AND PRACTICES ASSOCIATED WITH  
ENROLLMENT, PLACEMENT AND COMPLIANCE**

A Dissertation Presented

by

JENNIFER BARIBEAU

Submitted to the Graduate School of the  
University of Massachusetts Amherst in partial fulfillment  
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2017

College of Education



**SPECIAL EDUCATION AND MASSACHUSETTS CHARTER SCHOOLS:  
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Approved as to style and content by:

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Michael Krezmien, Chair

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John Carey, Member

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Dania Francis, Member

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Joseph B. Berger, Senior Associate Dean  
College of Education

## **DEDICATION**

I dedicate this to the two inspirational women who stuck this out with me. This is to the laughs, the love and support that brought new meaning to “getting by with a little help from my friends”. I also dedicate this to my two unforgettable Bulldogs and the countless “bonies” they chewed through and while keeping me company on those long nights of writing and editing

## **ACKNOWLEDGEMENTS**

From the onset, I knew the task of completing a doctorate degree would require personal sacrifice and commitment. I also knew I would need the support of others to finish this long and often challenging process. I have been fortunate to have support and guidance from colleagues, family, friends and professors throughout this journey. No list of acknowledgements can capture the number of times someone was there with words of encouragement to lift me up and motivate me to continue this work. However, there are a few people I would like to thank for their support along this journey.

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Second, I want to thank my family for their unwavering support. I have worked hard to figure out my career path and they have supported me finding a field that is fulfilling, satisfying and one I thoroughly enjoy being part of. Lastly, I want to express my gratitude to my cohort group for making this a positive experience. Specifically, I want to thank Lyndsey Nunes for her unwavering support and humor. Thank you for always being there every step of the way. I also want to thank Jen McIntyre for her words of encouragement throughout this journey.

## **ABSTRACT**

### **SPECIAL EDUCATION AND MASSACHUSETTS CHARTER SCHOOLS: EXAMINING ISSUES AND PRACTICES ASSOCIATED WITH ENROLLMENT, PLACEMENT AND COMPLIANCE**

MAY 2017

JENNIFER C. BARIBEAU B.S., WESTFIELD STATE UNIVERSITY

M.Ed., UNIVERSITY OF MASSACHUSETTS AMHERST

Ed.S., UNIVERSITY OF MASSACHUSETTS AMHERST

Ph.D., UNIVERSITY OF MASSACHUSETTS AMHERST

Directed by: Professor Michael Krezmien

Over the last ten years, charter schools have become a viable choice for parent's seeking an alternative to traditional public schools. However, research shows this is not the case for students with disabilities. The purpose of this dissertation was to examine special education in charter schools and traditional public schools located in Massachusetts. I examined three key areas specific to special education; enrollment, placement and compliance, to determine if differences exist between charter schools and traditional public schools located in the state. Logistic regression analyses were conducted to examine differences between Massachusetts charter schools and public schools with respect to enrollment for each disability category. Multiple regression was used to examine differences in placement for special education students. Lastly, descriptive statistics were used to analyze the Massachusetts Department of Elementary and Secondary Education Coordinated Program Review (CPR) reports to determine if charter schools are compliant with state and federal regulations under the Individuals with Disabilities Education Act (IDEA). Findings revealed charter schools

disproportionately under-enrolled students with disabilities, specifically severe disabilities, and placed students in full inclusion placements more frequently than public schools throughout the state. Charter schools also struggled to comply with state and federal regulations under the IDEA, specifically in areas related to direct services and supports to students with disabilities.



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# **CHAPTER I**

## **INTRODUCTION**

Federal and state laws prohibit the exclusion of students with disabilities from charter schools, yet charter schools disproportionately enroll students with disabilities in the state of Massachusetts. While many families seek the innovative models that charter schools are predicated on, parents of students with disabilities do not always experience those same outcomes. Providing all students access to a quality public education is the cornerstone upon which the Individuals with Disabilities Education Act (IDEA) was developed. Therefore, in accordance with both federal and state regulations, students with disabilities, regardless of disability category, should have the same access and equitable treatment in charter schools as typically developing peers. Despite the IDEA, charter schools continue to offer limited programming for students with disabilities who cannot demonstrate success in inclusive settings (Estes, 2009; Rhim, Ahearn, Lange, 2007; COPAA, 2012; GAO Report, 2012; Blackwell, 2012; Wilkens, 2009).

To date, limited research regarding the efficacy of charter schools for students with disabilities exists. There are three studies that specifically examine charter enrollment for students with disabilities in the state of Massachusetts (Wilkens, 2009; Blackwell, 2012; Setren, 2015). Two of these studies were completed over five years ago (Wilkens, 2009; Blackwell, 2012), while the charter movement has continued to evolve and gain momentum in the last five years. Massachusetts recently provided guidance on charter school enrollment regarding access and equity and how charter and traditional public schools can collaborate to support students with disabilities. These efforts show progress towards making charter schools an equitable choice for parents of students with

disabilities.

Charter schools have continued to gain support as alternatives to traditional public schools in large part because some districts are reaching enrollment or funding caps for charter school expansion. Recent legislation to lift the charter cap in Massachusetts is currently under debate, however this new legislation lacks clarity on how much progress has been made with regards to access and equity for students with disabilities. The current research on charter schools conducted in other states suggest limited access and equity for students with disabilities, with most studies pointing towards the marginalization of this subgroup of students (Blackwell, 2012; Drame, 2010; Estes, 2000, Estes, 2006, Estes, 2009; Kelly & Loveless, 2012; Rhim & McLaughlin, 2007; Stern, Clonan, Jaffee & Lee, 2015; Swanson, 2008; Wilkens, 2009).

Thus, charter schools face challenges gaining support for expansion with limited information on comprehensive programs offered to meet the needs of specific student populations. A review of the current literature and analysis of enrollment and placement of students with disabilities in Massachusetts will provide an opportunity to examine how charter schools in one state are serving this subgroup of students. Additionally, an analysis of potential factors contributing to differences in special education enrollment, placement and compliance with state and federal laws will provide guidance on state policies to assist charter schools in supporting all students with disabilities.

### **Purpose**

The purpose of this study was to examine enrollment and placement of students with disabilities in Massachusetts' charter schools compared to traditional public schools. The population of students with disabilities enrolled in charter schools' matters, as

disproportionate enrollment and placement represents inequitable access for students with disabilities in the public education sector (Wilkins, 2009). This study examined charter schools' enrollment, placement of students with disabilities, and compliance with state and federal regulations for special education in Massachusetts over the last six years. Additionally, it provides focus for policymakers and stakeholders in supporting charter schools' development of comprehensive special education programming in compliance with state and federal regulations.

This study is a partial replication of two studies conducted in Massachusetts by Blackwell (2012) and Wilkins (2009) to examine if charter schools have increased access for students with disabilities to the same level as traditional public schools. Both studies were completed over five years ago, therefore, it is critical to examine how charter schools are serving this population currently. Additionally, this study provides an in-depth analysis of the potential factors that may contribute to students' limited access and how charter schools can develop the supports necessary to serve a wider range of students with disabilities. Data collected by the Massachusetts Department of Elementary and Secondary Education (MADESE) on enrollment, placement and compliance were used as the basis for this study. Massachusetts was selected specifically since the MADESE has developed a comprehensive data collection system on students with disabilities attending public schools in the state. In addition, Massachusetts is one of few states that has developed accountability measures and guidance for recruitment and retention of students with disabilities in charter schools over the last five years.

## **Research Questions**

*Research Question 1:* Are there differences between Massachusetts charter schools and charter schools associated local education agencies (LEA) with respect to disability category under the IDEA?

*Research Question 2:* Have the differences in enrollment of students by disability category changed over time in charter schools compared to traditional public schools?

*Research Question 3:* Are there differences between Massachusetts charter schools and charter schools associated local education agencies (LEA) with respect to the placement of students with disabilities in special education programs?

*Research Question 4:* Have the differences in placement of students with disabilities changed over time in charter schools compared to traditional public schools?

*Research Question 5:* Are Massachusetts charter schools compliant with state and federal regulations under the Individuals with Disabilities Education Act (IDEA) (as determined through the state's Coordinated Program Review process for special education)?

## **Definition of Legal Terms**

The following definitions have been included to provide readers with a background of the legal terms applicable to special education at both the state and federal level.

- A. *Definition of Disability.* IDEA (2004) defines a child with a disability “as having mental retardation, a hearing impairment (including deafness), a speech or language impairment, a visual impairment (including blindness), a serious emotional disturbance, an orthopedic impairment, autism, traumatic brain injury, a other health impairment, a specific learning disability, deaf-



blindness, or multiple disabilities, and who, by reason thereof, needs special education or related services” (IDEA, 2004, 300.8).

*B. Definition of Individuals with Disabilities Education Act (IDEA).* The IDEA was enacted in 1975 and authorizes federal funding for special education and related services. For states that accept IDEA funding, the statute sets out detailed requirements regarding the provision of special education, including the requirement that children with disabilities receive a free appropriate public education (FAPE). In addition, under IDEA, states must ensure that an Individualized Education Program (IEP) is developed and implemented for each student with a disability. The IEP process creates an opportunity for teachers, parents, school administrators, related services personnel, and students (when appropriate) to work together to improve educational results for children with disabilities. These requirements apply in public charter schools just as they do in traditional public schools. IDEA provides funding and assigns responsibility for complying with requirements to states, and through the states, to local educational agencies (LEAs). In ensuring that IDEA requirements are met for students with disabilities attending charter schools, states may retain responsibility or assign it to the charter school LEA, the larger LEA to which the charter school belongs, or some other public entity (GAO Report, 2012).

*C. Definition of Section 504 of the Rehabilitation Act.* enacted in 1973, is a civil rights statute that prohibits discrimination against an otherwise qualified individual with a disability solely by reason of disability in any program or

activity receiving federal financial assistance or under any program or activity conducted by an executive agency. Education's Section 504 regulation states that no qualified person with a disability shall, on the basis of disability, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activities which receive federal financial assistance. Subpart D of Education's regulation contains specific requirements regarding elementary and secondary education, including the provision of a free appropriate public education (FAPE) to each qualified person with a disability in the recipient's jurisdiction, regardless of the severity of the person's disability. Even if a state declines IDEA funds, the state must comply with Section 504 if it receives other federal financial assistance. Education's Office for Civil Rights (OCR) enforces Section 504 for the department's programs through investigation of complaints and compliance reviews that are initiated by the department (GAO Report, 2012).

*D. Least Restrictive Environment (LRE).* To the maximum extent appropriate, children with disabilities, including children in public or private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling, or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily (IDEA, 2004).

- E. Free, Appropriate Public Education (FAPE).* The law defines FAPE as special education and related services that (A) are provided at public expense, under public supervision and direction, and without charge, (B) meet standards of the State educational agency. (C) include an appropriate preschool, elementary, or secondary school education in the state involved, and (D) are provided in conformity with the individualized education program (IDEA, 20 U.S.C. § 1401 [a][18]).
- F. Zero Reject.* According to the zero-reject principle, all students with disabilities eligible for services under IDEA are entitled to a free appropriate public education regardless of severity of the disability (Yell, 2012).
- G. Definition of charter school.* Charter schools are public schools operating under a “charter”, essentially a contract entered between the school and its authorizing agency. In addition to allowing the school to open, the charter allows the school significant operational autonomy to pursue specific education objectives. The autonomy granted under the charter agreement allows the school considerable decision-making authority over key matters of curriculum, personnel, and budget. Charter schools are often not part of states’ current districts and, therefore, have few, if any, zoning limitations. Therefore, students attend charter schools by choice of their parents or guardians rather than by assignment to a school district (National Charter School Resource Center).
- H. Definition of Local Educational Agency (LEA).* As defined in the Elementary and Secondary Act (ESEA), a public board of education or other public

authority legally constituted within a State for either administrative control or direction of, or to perform a service function for, public elementary or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for a combination of school districts or counties that is recognized in a State as an administrative agency for its public elementary or secondary schools (U.S. Department of Education).

### **Disability Definitions Under 603 CMR 28.00**

- A. *Communication Impairment.* The capacity to use expressive and/or receptive language is significantly limited, impaired, or delayed and is exhibited by difficulties in one or more of the following areas: speech, such as articulation and/or voice; conveying, understanding, or using spoken, written or symbolic language. The term may include a student with impaired articulation, stuttering, language impairment, or voice impairment if such impairment adversely affects the student's educational performance.
- B. *Specific Learning Disability.* The term means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations.
- C. *Emotional Impairment.* The student exhibits one or more of the following characteristics over a long period of time and to a marked degree that adversely affects educational performance: an inability to learn that cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers or teachers;

inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems. The determination of disability shall not be made solely because the student's behavior violates the school's discipline code, because the student is involved with a state court or social service agency, or because the student is socially maladjusted, unless the Team determines that the student has a serious emotional disturbance.

*D. Health Impairment.* A chronic or acute health problem such that the physiological capacity to function is significantly limited or impaired and results in one or more of the following: limited strength, vitality, or alertness including a heightened alertness to environmental stimuli resulting in limited alertness with respect to the educational environment. The team shall include health impairments due to asthma, attention deficit disorder or attention deficit with hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia, if such health impairment adversely affects a student's educational performance.

*E. Developmental Delay.* The learning capacity of a young child (3-9 years old) is significantly limited, impaired, or delayed and is exhibited by difficulties in one or more of the following areas: receptive and/or expressive language; cognitive abilities; physical functioning; social, emotional, or adaptive functioning; and/or self-help skills.

*F. Intellectual Impairment.* The permanent capacity for performing cognitive tasks, functions, or problem solving is significantly limited or impaired and is exhibited by more than one of the following: a slower rate of learning; disorganized patterns of learning; difficulty with adaptive behavior; and/or difficulty with understanding abstract concepts. Such term shall include students with mental retardation.

*G. Autism.* A developmental disability significantly affecting verbal and nonverbal communication and social interaction. The term shall have the meaning given it in federal law at 34 CFR §300.8 (c) (1).

*Federal Definition.*(i) Autism means a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age 3, that adversely affects a child's educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. The term does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance.

*H. Neurological Impairment.* The capacity of the nervous system is limited or impaired with difficulties exhibited in one or more of the following areas: the use of memory, the control and use of cognitive functioning, sensory and motor skills, speech, language, organized skills, information processing, affect, social skills, or basic life functions. The term includes students who

have received a traumatic brain injury.

- I. *Physical Impairment.* The physical capacity to move, coordinate actions, or perform physical activities is significantly limited, impaired, or delayed and is exhibited by difficulties in one or more of the following areas: physical and motor tasks; independent movement; performing basic life functions. The term shall include severe orthopedic impairments or impairments caused by congenital anomaly, cerebral palsy, amputations, and fractures if such impairment adversely affects a student's educational performance.
- J. *Hearing Impairment.* The capacity to hear, with amplification, is limited, impaired, or absent and results in one or more of the following: reduced performance in hearing acuity tasks; difficulty with oral communication; and/or difficulty in understanding auditorally-presented information in the education environment. The term includes students who are deaf and students who are hard-of-hearing.
- K. *Vision Impairment.* The capacity to see, after correction, is limited, impaired, or absent and results in one or more of the following: reduced performance in visual acuity tasks; difficulty with written communication; and/or difficulty with understanding information presented visually in the education environment. The term includes students who are blind and students with limited vision.
- L. *Deaf-Blind.* Concomitant hearing and visual impairments, the combination of which causes severe communication and other developmental and educational needs.

## CHAPTER 2

### LITERATURE

This literature review focused on current policy and practices for special education monitoring for charter schools. A specific focus on Massachusetts' charter schools, and the legal foundations for charter schools including student enrollment, placement, academic achievement and special education services was conducted. The sources for the literature review were identified using the following methods: (a) searches of electronic databases including: Educational Resources Information Center, Academic Search Premier, and JSTOR, (b) Internet searches of state databases and Google Scholar, (c) review of the bibliographies found in studies identified through the methods listed above, and (d) internet searches of education monitoring and guidance by specific departments including the Office of Civil Rights (OCR), Office of Special Education Programs (OSEP), U.S. Department of Education, General Accountability Office (GAO), Council of Parent Attorneys and Advocates (COPAA), the Center for Research on Education Outcomes (CREDO), and the National Charter School Resource Center. In addition, documents from the Massachusetts Department of Elementary and Secondary Education were reviewed to provide background on charter authorization, monitoring, operation and current enrollment. The terms used for electronic searches were *charter schools, students with disabilities, severe disabilities, low-incidence disabilities, achievement rates, special education, compliance, disproportionate enrollment, inclusion, exclusion, counseling out, placement, mainstreaming.*

While a current civil rights lawsuit looms in support of charter school expansion in Massachusetts, questions continue to remain regarding access and equity for students



with disabilities currently attending charter schools. There is a scarcity of research regarding the quality of education students with disabilities receive in charter schools and limited data to substantiate similar achievement levels for this subgroup in comparison to their general education peers (Blackwell, 2012; Wilkens, 2009; Rhim, Ahearn & Lange, 2007). If charter schools are, as many proponents of charter schools claim, a continuation of the *Brown v. Board of Education* decision, ensuring access and equity to a quality public education for all children becomes a critical question for charter schools (Stern, Clonan, Jaffee, Lee, 2015). The following literature review outlines the charter movement from a broader lens and narrows its focus on the charter movement as it relates to the state of Massachusetts. This will allow for a sense of how charter schools operate throughout the country and specifically, how charter schools operate in Massachusetts, to understand how charter schools have traditionally served students with disabilities.

### **Development of Charter Schools - Policy and Practice**

The charter movement grew out of economists' predictions America's current education system reduced the likelihood of future generations' ability to compete in the global marketplace (Swanson, 2008). Charter schools are a form of public schooling created through a specific agreement with a state, school district or other public entity (Swanson, 2008). Charter schools were created to assist teacher-led, governed, and operated school systems that could run alongside public schools to meet the needs of students systematically excluded from a quality education through innovative education models (Stern, et al., 2015). Charter schools operate from a "charter" or written document that outlines the school's mission, program, goals, grades served, methods of assessment

and ways to measure success (Swanson, 2008). Most charter schools are granted a three- to five- year charter, during which time they must meet the goals outlined in the charter to avoid revocation (U.S. Charter Schools 2000a).

As of this writing, 42 states have passed legislation establishing charter schools (U.S. Department of Education, National Center for Education Statistics, 2015). Charter schools are continuing to expand across the country with more than 6,500 schools in operation serving over 2.5 million students. Between 1999 and 2009, charter school enrollment more than tripled and the number of charter schools grew from two percent to five percent of all public schools (COPAA, 2012). This growth can be attributed to parents' and educational leaders' desire for schools that reflect their vision of public education and federal incentives that encourage growth for high performing schools (GAO Report, 2012).

Charter schools were conceptualized as a means of expanding parental choice within America's current system of public education by giving all students the opportunity to attend (Swanson, 2008). Charter schools have increased autonomy in school management in exchange for agreeing to improve student achievement, however charter schools do not have the authority to waive federal statutory requirements related to education (GAO Report, 2012). Students are typically admitted to a charter school through an application process by the parent. If the school has more applicants than slots available, a random lottery process is conducted to determine which students are admitted. Students that are not selected during the lottery process are placed on waitlists for acceptance into the school. From 2008-09 through 2013-14, the number of students on waitlists to attend charter schools increased approximately 186% (National Alliance

for Public Charter Schools, 2016). Current estimates show over 1 million students are currently on waitlists to attend charter schools across the country (National Alliance for Public Charter Schools, 2016).

Students with disabilities represent a large percentage of students attending charter schools (Swanson, 2008). Therefore, while charter schools are granted waivers from some or all state requirements and are often described as “autonomous” or “free from rules and regulations” such characterizations are misleading (Ahern, 1999). Charter schools are required under Part B of the Individuals with Disabilities Education Act (IDEA) to provide a free and appropriate public education (FAPE) in the least restrictive environment (LRE) consistent with a child’s individualized education program (IEP) (Ahern, 1999; Blackwell, 2012). The right to a FAPE allows students with disabilities the opportunity to meet the same rigorous academic standards set for all students and to progress in the general curriculum (COPAA, 2012). Under regulations for FAPE and LRE, every charter school has an obligation to ensure students with disabilities are educated in the least restrictive environment to the maximum extent appropriate and must develop a “continuum of placements” available to meet the individualized needs of students (COPAA, 2012; Blackwell, 2012; Wilkens, 2009; Rhim et al., 2007).

The primary body of research on students with disabilities in charter schools has been focused on policy, enrollment, financial implications for charter schools, service delivery models and compliance with both state and federal regulations regarding students with disabilities. Legislation protecting the rights of both students with disabilities and their parents is outlined in the Individuals with Disabilities Education Act (IDEA, 2004). The IDEA mandates a free and appropriate public education in the least

restrictive environment for all students with disabilities, regardless of educational setting.

To ensure compliance with state and federal regulations, special education programs are monitored by state educational agencies (SEA) as each state is the recipient of federal IDEA grant funds (COPAA, 2012; GAO Report, 2012). The SEA retains responsibility for ensuring the requirements of IDEA are met by each publicly funded educational program in the state (COPAA, 2012; Ahern, 1999; GAO Report, 2012). The purpose of the SEA's oversight is to hold public schools, including charter schools, accountable for making sure they are not only accessible to students with disabilities, but also prepared to educate these students (Rhim et al., 2007). Therefore, the SEA retains responsibility for monitoring and evaluating special education programs, in both traditional school districts and charter schools, to ensure requirements under the IDEA are fulfilled (U.S. Department of Education).

States also define how charter schools will be structured and they do so in a variety of ways (GAO Report, 2012). With respect to special education, two common practices are (1) the states define a charter school as part of a larger local educational agency (LEA), with the responsibility of providing special education services to charter school students remaining with that LEA and, (2) when charter schools act as their own LEA, and the state makes the charter school responsible for providing these services independently (GAO Report, 2012). Students with disabilities are entitled to the same supports and services offered in traditional school systems regardless of LEA designation or increased autonomy afforded to charter schools, (Ahern, 1999; COPAA, 2012; Rhim et al., 2007). The challenge arises as most charter schools operate as independent LEAs, making them independent of the traditional public school district. When a charter school

is defined as an independent LEA, the charter school is responsible for providing specialized instruction and related services necessary to meet the individualized needs of students enrolled with disabilities (COPAA, 2012; GAO Report, 2012). In comparison to traditional school districts which draw upon district resources to provide an array of services and a continuum of placements; charter schools must use their own resources or contractual agreements to ensure a free appropriate public education (FAPE) is provided (Blackwell 2012; COPAA, 2012; Wilkens, 2009; Rhim et al., 2007).

Naturally, this translates into charter schools facing significant financial challenges when designing special education programs and a continuum of alternative placements (Blackwell, 2012; Wilkens, 2009; COPAA, 2012; Rhim et al., 2007). Under IDEA a one-size-fits-all inclusion program is not permitted, therefore, an independent LEA must be able to offer students with disabilities a continuum of services to meet their needs (COPAA, 2012). Most charter schools offer a full inclusion model for students with disabilities, regardless of the severity of the disability (GAO Report, 2012). However, little empirical evidence exists on students' progress in this environment and whether it is truly inclusive or if charter schools simply lack the resources to provide a continuum of services for students with disabilities, including partial inclusion and substantially separate placements.

Based on the financial constraints of charter schools that operate as independent LEAs, educational researchers have identified the relationship between the charter school and associated LEA the charter school resides in, as the most important factor affecting a charter school's compliance with providing special education and related services (COPAA, 2012). Although charter schools are granted flexibility from some state

requirements for general education students and operate with significant autonomy, charter schools are still subject to federal civil rights laws (Ahern, 1999). Therefore, if the charter school receives federal funding they must abide by federal requirements when serving students with disabilities, including the IDEA and Section 504 (Ahern, 1999; COPAA, 2012). Furthermore, all educational entities must abide by federal regulations under Title II of the Americans with Disabilities Act of 1990, regardless of whether they receive federal funding (Ahearn, 1999; COPAA, 2012).

Typically, the SEA will provide evidence of oversight and monitoring done at the state level to support LEAs in special education programming and mandate corrective action when violations to IDEA and Section 504 are uncovered at the LEA level.

One case in Louisiana, led by the Southern Poverty Law Center, resulted in a federal class action lawsuit under IDEA, Section 504, and the ADA on behalf of approximately 4,500 eligible students with disabilities in New Orleans. This lawsuit alleged systemic violations occurred of students' rights by at least 30 separate charter and traditional schools within the Recovery School District (COPAA, 2012). In this landmark case, because of the State defendants' abdication of their general supervisory responsibilities to provide effective oversight, monitoring, and supervision, the complaint alleged students were discriminated against based on their disability and denied access to "school choice" (COPAA, 2012). Specifically charter schools were cited for not providing supportive services and necessary accommodations for students with disabilities to succeed; counseling out enrollees once their disabilities were manifest; lacking policies and procedures to identify, locate and refer students in need of special education; lacking highly qualified special education personnel who were trained to provide effective special

education instruction; and denying students the range of specialized and related services necessary in preparing them to meet post-secondary education goals (COPAA, 2012).

Despite these types of lawsuits, support for charter schools is maintained by discourse that promotes them as “better” than “traditional” public schools, with “better” most often narrowly defined by student test scores (Stern et al., 2015). This argument has little empirical backing considering normative assessments of charters provide little evidence of their efficacy (Stern et. al., 2015). Those who argue that charter schools provide a superior education cite benefits such as greater levels of parent satisfaction, small class size, improved test scores, dedicated teachers and inclusion of all students (Swanson, 2008; Fiore, Harwell, Blackorby & Finnigan, 2000; Ahern, 2001). Charter opponents argue the opposite, claiming students with disabilities are denied services that charter schools are mandated to provide (Swanson 2008; Fiore, et. al., 2000). Based on these divergent views, a close examination of special education programs at the state level is critical to ensure all state and federal regulations are being met at the local level.

To further compound the challenges for charter schools serving students with disabilities, two studies found state laws regarding charter schools contained few specific references to students with disabilities, except for protections against discrimination, with few provisions under the law referencing the delivery of special education in charter schools (Ahern, 2001; Rhim et al., 2007). An in-depth analysis of case law documented the challenges policy leaders faced when establishing guidelines for charter schools’ responsibilities related to special education (Rhim et al., 2007). One of two studies examined whether charter school laws in 41 states contained language to address seven issues related to special education: (a) anti-discrimination, (b) section 504 of the

Rehabilitation Act, (c) a plan for the provision of special education services, (d) school mission as it relates to enrollment, (e) definition of the charter school's legal status for purposes of special education, (f) flow of special education dollars to charter schools, and, (g) accountability requirements (Rhim et al., 2007).

The results of this study indicated all 41 state laws contained specific language regarding anti-discrimination of students with disabilities enrolling in charter schools (Rhim et al., 2007). However, in eight states (i.e. Georgia, Hawaii, Kansas, Michigan, Mississippi, New Mexico, Texas and Wisconsin) the anti-discrimination clause was the only specific reference made to students with disabilities (Rhim et al., 2007). Only two states (i.e. District of Columbia and Maryland) specifically referenced federal regulations regarding Section 504 (Rhim et al., 2007). Furthermore, out of 41 states included in the sample, twenty-nine state charter laws did not explicitly require charter applicants to include a plan for how special education programs and services would be provided to students with disabilities (Rhim, et al., 2007).

Fourteen states specified charter schools should emphasize educating students who are "at-risk" or "academically low achieving", including students with disabilities (Rhim et al., 2007). However, there were no clear definitions of who these students were or what qualified a student as "at-risk" (Rhim et al., 2007). In 10 states, the charter school law did not reference special education funding to charter schools (Rhim et al., 2007). Two states, Massachusetts and New Jersey, have charter laws that limited the financial responsibility of charter schools and assigned fiscal responsibility to the associated LEA for students who required out of district or residential placements (Rhim et al., 2007). Regardless of whether it is specified in state laws, charter schools are prohibited from



accepting or rejecting students based on their ability to fit the charter school's unique or specific mission (e.g., arts-based, college preparatory, Montessori curriculum, etc.) or funding constraints (Rhim et al., 2007).

Only five state charter school laws (i.e., California, District of Columbia, Massachusetts, New Jersey, and Ohio) went beyond accountability requirements outside state and federal regulations for students with disabilities (Rhim et al., 2007). However, since charter schools operate autonomously, accountability for student enrollment, placement and achievement of students with disabilities should go beyond basic requirements under the IDEA (Rhim et al., 2007). Rhim et al. (2007) indicated a lack of specificity in charter school laws existed for several states. Since charter schools are allowed significant flexibility, states should provide explicit mandates to ensure students with disabilities are; (a) accessing charter schools, (b) receiving a free appropriate public education (FAPE) in the least restrictive environment (LRE), and (c) experiencing academic success in charter schools (Rhim, et al., 2007).

The second study reviewed policy documents, outside state laws, with regards to students with disabilities in charter schools (Ahearn, 2001). A survey was conducted with State Directors of Special Education to review any policy-related materials concerning students with disabilities in charter schools (Ahearn, 2001). A review of the documents suggested states created documents to provide information to developers and the general public on charter school laws (Ahearn, 2001). However, approximately half of the sample reported having no written policy documents relating to students with disabilities in charter schools (Ahearn, 2001). Overall, a review of charter school legislation and any relevant documents indicated little thought was given to conflicts between charter school

statutes and special education regulations (Ahearn, 2001). As charter schools rapidly expanded, lawmakers appeared to have neglected to address the limitations of granting waivers from federal and state laws as they pertained to special education (Ahearn, 2001). Based on a review of the current literature, policy issues requiring further clarification included: (1) LEA status of the charter school in supporting special education, (2) funding, (3) admissions policies, (4) and compliance monitoring (Ahearn, 2001).

### **Summary of Literature - Policy and Practice**

A review of current research and case law documents indicated state and district policy leaders struggled to establish how charter schools' responsibilities interface with special education as outlined by the IDEA (Rhim et al., 2007). The IDEA clearly mandates federal regulations for all public schools. In addition to mandates for LRE and FAPE, the IDEA also mandates the "zero reject" policy, which requires all schools, including charter schools, to serve students with disabilities (Yell, 2012). The lack of clarity in state charter school laws, particularly under "zero reject", presents potential challenges for charter schools that defined themselves in terms of their mission, and in staying true to that mission, overtly or covertly discouraged students with disabilities from attending (Estes, 2009). As charter schools continue to expand, the importance of planning at the state level is critical to ensure charter schools are not only accessible to all students but are prepared to effectively educate all students, including those with significant disabilities (COPAA, 2012). Two studies critiqued state charter legislation and documented variability between state policies. These two studies stressed the need for stronger guidance for charter schools to support students with disabilities in developing

special education programming (Ahearn, 2001; Rhim et al., 2007).

### **Funding Special Education in Charter Schools**

Funding for special education in charter schools differed from state to state and was a controversial topic among charter school critics. Local education agencies (LEAs) pay for special education using a combination of federal, state and local monies (Rhim et al., 2007). Part B of the IDEA provides an allocation of federal funds to each state based on a standard formula with funds flowing from the state to the district level (Rhim et al., 2007). Each state uses their own funding formula for special education at the district level and each district assumes responsibility for costs beyond what is allocated from the state (Rhim et al., 2007). As of December 2014, the Center for Education Reform (CER) reported charter schools were funded, on average, \$7,131 per pupil compared to \$11,184 per pupil in traditional public schools (Center for Education Reform, 2016).

Each eligible charter school operating as an independent LEA under the SEA can apply to the state for federal IDEA funds. To qualify for these funds, charter schools must meet all federal and state eligibility requirements of a local district (Ahern, 1999). Since many charter schools operate as their own local district or LEA, funding for special education can become challenging if students with severe needs enroll or the population of students with disabilities becomes too high (Rhim et al., 2007; Rhim & McLaughlin, 2007). Typically, the additional revenues that LEAs receive from both state and federal sources did not cover the additional costs of providing special education services to students with severe needs (Arsen & Ray, 2004). Therefore, a school's incentive to enroll students with disabilities depended on the difference between the additional revenues it received versus the additional costs for serving these students (Arsen & Ray, 2004).

Qualitative evidence suggested some charter schools discouraged students with disabilities from enrolling and denied admission to students with more severe disabilities because services were too costly (GAO Report, 2012; Arsen & Ray, 2004; Garcy, 2011; Stern, et. al., 2015). As part of the 1997 amendments to IDEA, federal special education statutes require that a state “serves children with disabilities attending those schools in the same manner as it serves students with disabilities in other schools” and “provides funds to those schools in the same manner it provides funds to its other schools” [Sec 613 § 613(a)(5)]. Given charter schools operate autonomously there is limited capacity to absorb unanticipated expenses and charter schools could close due to financial challenges (Ahearns, 1999; Garcy, 2011). Funding is one reason charter schools are hesitant to accept students with severe needs and struggle to offer a continuum of programs in comparison to traditional public schools (Ahearns, 1999; Garcy, 2011).

Funding for charter schools and special education programs varied between states. Most states required charter schools to absorb all costs for special education (Rhim et al., 2007; Ahearn, 1999). Massachusetts is one of few states that required the charter school’s associated LEA to pay for private and residential special education placements (Ahern, 1999). Massachusetts regulations allow charter schools to recommend a private or residential placement for a student, however, the public school district in which the charter school is located must budget for the cost of this placement. In the event charter schools were unable to sustain funding or were non-renewed, students attending that charter school are automatically re-admitted to their associated LEA district schools. This is also the case for students who were withdrawn or expelled from charter schools. Typically, students who were expelled from charter schools engaged in egregious

behaviors that led to their expulsion and traditional public schools must accept these students into the district to provide appropriate supports and services to ensure students receive a FAPE.

To promote collaboration between charter schools and traditional public schools the Massachusetts Department of Elementary and Secondary Education (DESE) issued guidance to the state in August 2014 for out-of-district placements. State guidance clearly outlined the process for charter schools determining an out-of-district placement for students with disabilities. As part of this process, the state recommended charter schools collaborate with the associated LEA to determine appropriate supports for the student. If the student did not make progress with these interventions, the charter school must notify and invite a representative from the associated LEA to a placement meeting for the student. The charter school cannot unilaterally place a student in an out-of-district program without collaborating with a representative from the associated LEA. However, if it is determined the charter school cannot support the student, the associated LEA must offer an in-district or out-of-district program and accept both programmatic and fiscal responsibility for the student (DESE, 2016). While this guidance provided clarity at the district level, it still requires the associated LEA to absorb the cost, not the charter school. Private placements could range anywhere from \$30,000 to \$100,000 or more, depending on the placement and severity of the student's needs.

While Massachusetts is an outlier with regards to fiscal responsibility for private placements, states varied with regards to charter school funding overall. This may be attributed to variations at the state and district level for special education enrollment in charter schools, which correlate with state reimbursement rates for special education

(Arsen & Ray, 2004). Per a report released by COPAA (2012), various studies suggested charter schools tend to enroll more students with mild disabilities (i.e. learning disabilities and communication disabilities), who are less expensive to accommodate and under-enroll students with severe needs who are more significant and expensive to educate (e.g. intellectual impairments and autism spectrum disorders). Currently, there is no comprehensive data to determine the extent to which charter schools discouraged students with low-incidence disabilities from enrolling based on funding constraints (GAO Report, 2012; Arsen & Ray, 2004; Garcy, 2011).

### **Special Education Programs in Charter Schools**

A qualitative study funded by the U.S. Department of Education was conducted to examine how charter schools were supporting students with disabilities (Fiore, Hartwell, Blackorby, & Finnigan, 2000). Over the course of the study, 32 charter schools across 15 states were visited, however, the sampling strategy did not allow the researchers to generalize results to the total population of charter schools (Fiore, et. al., 2000).

Additionally, a large majority of special education students in the study were individuals with learning disabilities, behavior disorders, or mild cognitive disabilities. Therefore, the sample of students focused mainly on students with mild disabilities and could not be generalized to students with more significant needs (Fiore, et. al., 2000).

Based on the survey results, charter schools included in the sample had smaller class sizes and lower student-teacher ratios than found in traditional public schools (Fiore, et. al., 2000). However, teacher and other staff qualifications were varied, as many states did not require charter school staff to meet state certification requirements (Fiore, et. al., 2000). This meant charter schools were not required to hire highly qualified

teachers. Per the No Child Left Behind Act (NCLB), a highly-qualified teacher must have; 1) a bachelor's degree, 2) full state certification or licensure, and 3) prove they know the subject area they will teach. Therefore, allowing teachers who are not highly qualified to support special education students may impact enrollment and achievement as students with disabilities require highly specialized instruction.

Only a few schools in the sample had pre-admission orientation or counseling process specifically for parents considering enrolling a child with a disability (Fiore, et. al., 2000). However, whether a pre-admission orientation was conducted, administrators at approximately a fourth of the schools visited stated they were unable to serve certain types of disabilities and they discouraged parents of some students with disabilities from enrolling their child in the charter school (Fiore, et al., 2000). Most administrators saw “counseling out” as a process that was in the student’s best interest (Fiore, et. al., 2000).

This study presented qualitative evidence that charter schools regularly discouraged students with disabilities from enrolling based on the charter’s mission (e.g. college preparatory) and the charter’s ability to meet the educational needs of the child (Fiore, et. al., 2000). Despite qualitative evidence that suggested charter schools counseled out students with disabilities, parents included in the sample, did not see it this way (Fiore, et. al., 2000). Parents noted a variety of reasons for enrolling their students with disabilities in charter schools (Fiore, et. al., 2000). Many parents in this study enrolled their child in a charter school for two reasons; (1) positive characteristics of the charter school and, (2) negative experiences with the previous traditional public school (Fiore, et. al., 2000). Dissatisfaction with the traditional public school in general or with the special education program specifically were cited more frequently than any other

reason for transferring a student to a charter school (Fiore, et. al., 2000). Most students interviewed from charter schools in the sample said they wanted to transfer out of their traditional public school, with most students feeling it would increase their chances of academic success (Fiore, et. al., 2000).

Regardless of parents' dissatisfaction with traditional public schools, a 2004 report produced by the National Association of State Directors of Special Education indicated inadequate implementation of services and programming for students with disabilities attending charter schools (Estes, 2009). This may be attributed to charter schools lacking the necessary funds to meet the needs of students with disabilities, especially students with low-incidence disabilities (Garcy, 2011). Even if students were accepted to the charter school based on parents' dissatisfaction with traditional public schools, qualitative evidence indicated students with disabilities did not always receive the services in their IEP (Fiore, et. al., 2000; Swanson, 2008). Staff at some charter schools reported they did not develop a special education program until their second or third year based on; (1) difficulties starting the school in general; (2) confusion about the charter school's responsibilities for students with disabilities, or (3) negative attitudes toward special education (Fiore, et. al., 2000). However, most schools included in this study did have a special education program in place when the school opened (Fiore, et. al., 2000).

One study examined whether schools from an anonymous major urban school district "pushed out" low achieving students (Zimmer & Guarino, 2013). Three reasons were suggested as to why charter schools feel pressure to exclude certain students. First, charter schools are schools of choice and feel market pressure to recruit students, usually



through the academic reputation of the school (Zimmer & Guarino, 2013). Second, low-performing students are more expensive to educate and funding for charter schools may not always be adequate to support these students (Zimmer & Guarino, 2013). Third, charter schools feel strong accountability pressures to demonstrate adequate yearly progress (AYP), so their charter is renewed (Zimmer & Guarino, 2013). Charter schools are under significant pressure to demonstrate academic gains for all students and these reasons provide strong incentives for charters to overtly or covertly discourage students with significant needs from enrolling. However, the results of this study indicated no empirical evidence to support the claim that charter schools, in one large urban district, pushed out students who were underperforming (Zimmer & Guarino, 2013).

While the previous study found no empirical evidence to support the notion low-achieving students were counseled out from one large urban school district, several studies provided qualitative evidence charter schools pushed out low achieving students or students with significant disabilities. Researchers reported students with disabilities were counseled out due to several reasons; (1) they did not fit the mission of the school (i.e. college preparatory), (2) the charter could not support the student's level of need, (3) the charter did not have the funding to provide the necessary special education program, (4) the student presented with behavioral challenges and did not comply with the charter's code of conduct, (5) the student could not access the curriculum used by the school (i.e. arts-based, Montessori themed, project-based learning, etc.). Most of the qualitative evidence was provided through parent or staff interviews or via case law, with documented legal cases that showed students with disabilities were pushed out of charter schools based on the reasons listed above (Swanson, 2008; Rhim, Ahearn & Lange, 2007;

Rhim & McLaughlin, 2007; Blackwell, 2012; Wilkens, 2009; COPAA, 2012; Stern, et. al., 2015; Ahearn, 2001; Estes, 2000; Estes, 2009 Arsen & Ray, 2004, Chou & Boundy, 2013).

Furthermore, instructional challenges in supporting students with disabilities led to counseling out students since the curriculum or instructional approaches weren't necessarily designed to meet the needs of students with disabilities, especially students with severe disabilities (Swanson, 2008). The charter model assumes students should fit a specific approach (Swanson, 2008). Charter schools are created by people who have a vision for a school and invite people who share their vision to join, however, the process of determining fit may exclude students with disabilities (Swanson, 2008; COPAA, 2012). Therefore, the need for upfront planning and strong understanding of special education requirements and procedures will help charter schools create a plan to support these students as part of the overall vision (Swanson, 2008; Estes, 2000; Rhim, Ahearn & Lange, 2007; Estes, 2009; Rhim & McLaughlin, 2007; Ahearn, 2001).

Drame (2010) surveyed 45 administrators of charter schools in Wisconsin to determine if charter school operators had the capacity to create environments and service delivery models to effectively address the needs of students with disabilities (Drame, 2011). As part of the survey process, respondents had to rate the level of evidence in their charter application for the following five areas: (1) assurance of non-discrimination in enrollment against any individual, (2) assurance of non-discrimination in enrollment against individuals with disabilities, (3) consideration of necessary levels of special education funding in the school budget, (4) commitment of educating diverse learners in mission and vision statements, and (5) consideration of strategies and methods for

addressing the learning and behavioral needs of students with disabilities (Drame, 2011).

Results indicated charter school applicants only vaguely addressed special education (Drame, 2011). Most charter applicants included proposed budgets but made little to no mention regarding how state and federal special education monies would be allocated (Drame, 2011). Furthermore, most applicants failed to clearly identify who was responsible for administering special education services and had limited plans for professional development to increase the effectiveness of instruction for students with disabilities (Drame, 2011).

Charter schools must be prepared when they open to fulfill their legal, ethical, and educational responsibilities for students with disabilities (Drame, 2011). However, it is clear from current research some charter school operators, particularly independent LEAs, experienced difficulties fulfilling their obligations for students with disabilities (Drame, 2011). Many of the challenges experienced by charter school operators at start-up continue even after they are established, including: (a) hiring qualified staff, (b) understanding rules governing special education finance, (c) securing adequate funds to support students with disabilities, and (d) understanding and implementing laws regarding due process and discipline procedures (Drame, 2011).

Regardless of the charter school's mission and preparedness to accept students with disabilities, or parents' dissatisfaction with traditional public schools, counseling out students is illegal per the federal IDEA (Swanson, 2008; Fiore, et. al., 2000). Charters have been revoked for counseling out students or not appropriately serving students with disabilities (Swanson, 2008). Edison Schools in San Francisco had their charter revoked in 2001 based on evidence of encouraging low-achieving students to transfer to other

schools and decreasing the number of students with disabilities enrolled (Swanson, 2008). In another case, Arizona's charter schools significantly underrepresented students with disabilities, resulting in three complaints to the SEA and the Office of Civil Rights, for failure to provide services in students' IEPs (Swanson, 2008). As charter schools continue to expand across the country, charter authorizers and operators must address the needs of all learners in their planning, including the quality and capacity of the staff they hire, and the physical resources they procure (Drame, 2011).

### **Challenges for Charter Schools Providing Special Education Services**

Research suggested charter schools in operation more than five years faced challenges supporting students with disabilities. An informal survey was conducted with charter school directors in northern Texas to examine service delivery for students with disabilities, particularly students with emotional/behavioral disorders (Estes, 2001). Of the 30 surveys mailed, 16 were returned, representing 17 schools and 3,700 students (Estes, 2001). Six schools reported they had no certified special education teachers on staff, however, out of 16 respondents, 14 reported they felt prepared to meet the needs of students with disabilities (Estes, 2001).

With regards to types of disabilities served, learning disabilities, speech/language impairments, emotional/behavioral disorders, mild intellectual impairments, orthopedic disabilities, and other health impairments were reported from respondents (Estes, 2001). One school reported no full-time special education teacher despite having enrolled 20 students with learning disabilities, 2 students with emotional/behavioral disorders, 6 students with other health impairments and 3 students with speech/language impairments (Estes, 2001). A second school with no certified special educators reported 20-25

students with disabilities were enrolled in the school (Estes, 2001). All schools included in the sample operated as a “full inclusion” schools, with no pull-out services for students (Estes, 2001).

Furthermore, when administrators were asked about the components of assessment and the IEP process, only one administrator had a thorough understanding of the pre-referral process (Estes, 2001). Three other administrators stated the pre-referral process had been explained to teachers, but it was seldom implemented and two other administrators did not understand the pre-referral process for special education under the IDEA (Estes, 2001). Only one administrator from the sample did not understand the process for assessment related to determining eligibility for students with disabilities (Estes, 2001). While the results of this study indicated a lack of clarity regarding the special education process in charter schools, they should be interpreted with caution considering the small sample of schools surveyed and the fact the survey instrument used was not field tested by the researcher (Estes, 2001).

Five years later, Estes (2006) conducted another study in Texas to follow up on the quality of special education in charter schools throughout the state. During school years 1999-2000 it was unclear how many students with disabilities were served in charter schools throughout the state (Estes, 2006; Estes, 2009). From state data pieced together it was determined 8.6% of students enrolled in Texas charter schools had a disability compared to 12.3% in the state’s traditional public schools (Estes, 2006; Estes, 2009). However, during the 2004-2005 school year, it was reported charter schools were serving an average of 14.43% of students with disabilities (Estes, 2006; Estes, 2009). The researcher returned to some of the schools in the first study, however, none of original

subjects participated in the follow-up survey as they were no longer employed at the same school and some charter schools had closed during that time (Estes, 2001; Estes, 2006; Estes, 2009).

Overall, the respondents in the follow-up study demonstrated greater understanding of the IDEA and IEP process than noted in the previous study (Estes, 2001; Estes, 2009). Continued concerns were cited at schools with regards to pre-referral intervention, sending students back to their associated LEA if they did not comply with the charter's code of conduct, and meeting the needs of students with more severe disabilities (Estes, 2006; Estes, 2009). However, overall the author observed improvements in charter leaders' understanding of special education from 1999-2000 compared to 2004-2005 (Estes, 2006; Estes 2009).

### **Summary of Special Education Funding and Service Delivery**

Current research indicated significant variability at the state and district level regarding how students with disabilities in charter schools are served. It appears charter schools struggle not only during the startup phase, but years into their operation. Administrators struggled to understand special education rules and regulations as they relate to the IEP process and the continuum of services they are mandated to provide. Qualitative evidence suggested charter schools counseled out the most severe students, but no empirical evidence currently supports this claim. A lack of understanding regarding the IEP process and ability to counsel out students, result in significant ramifications for students with disabilities attending charter schools.

## **Student Achievement in Charter Schools**

Research showed parents cited several positive reasons for enrolling their child in a charter school, however, it is challenging to determine if students with disabilities are making academic progress and meeting state standards. This is largely due to charter schools' smaller student enrollment and operation as independent LEAs. Given smaller enrollment numbers and state regulations for reporting disaggregated subgroup data, charter schools frequently do not report standardized test scores for students with disabilities, as it would breach student confidentiality (Estes, 2009). Therefore, it becomes difficult to determine if students with disabilities, as a subgroup, are meeting state standards and making progress at the same rate as their typically developing peers. Student achievement in charter schools is a widely-debated topic with limited research to support students with disabilities attending charter schools are making significant academic gains (Estes, 2006; Estes, 2009).

### **CREDO Studies on Student Achievement in Charter Schools**

Three large scale studies on charter schools were conducted by the Center for Research on Education Outcomes (CREDO) over the last decade (CREDO, 2009; CREDO 2013; CREDO, 2015). These studies are frequently cited for claiming charter school students made greater gains in reading and math than traditional public school students. While these studies indicated greater academic gains for charter school students, several methodological flaws exist within these studies. First, all three studies use a non-experimental method based on how successfully charter school students were matched with comparable students in traditional public schools (Betts & Tang, 2011). This was done using a virtual control record (VCR) method, which matched charter school

students with non-charter school students based on a set of characteristics and test scores from the charter school student sample, which could bias the results (Betts & Tang, 2011). Since the test scores were based on internal outcomes from the charter school population, it is difficult to determine if the CREDO sample is representative of the general population since unexplained differences in the highest risk students could not be determined (Betts & Tang, 2011).

A second concern with the CREDO studies is they focused on unrepresentative charter schools that showed higher achievement scores than other charter schools (Betts & Tang, 2011). This was done using a comparison student that was an average of several students (Betts & Tang, 2011). In this analysis, regression controlled for a “lagged” score (Betts & Tang, 2011). Due to the lagged score, the charter created student will be biased downward because there will be more measurement error in the individual charter school student’s lagged score than in the mean lagged score for the student’s control group (Betts & Tang, 2011). Based on these methodological concerns, it is difficult to determine if the CREDO studies provided an accurate comparison of students attending charter schools to students attending traditional public schools.

The first study in 2009 examined charter school effects on student learning across 15 states. The student learning gains of charter students were compared to those of similar students in traditional public schools using both aggregated and disaggregated data for national, state and district level measures (CREDO, 2009). The researchers used the virtual control record (VCR) method to create a “virtual twin” constructed for each charter student using the available records from traditional public school students with identical traits and similar prior test scores (CREDO, 2009; CREDO, 2013; CREDO,



2015). Charter students grew .01 standard deviations less than traditional public school students in reading (CREDO, 2009). In addition to lower reading gains, charter students gained significantly less in math than traditional public school students, at .03 standard deviations (CREDO, 2009). For both reading and math the absolute size of the effect is small and negligible in reporting education statistics. Therefore, this data indicated charter schools and traditional public schools performed roughly the same with regards to reading and math performance (CREDO, 2009; Loveless, 2013).

When data were disaggregated for special education students, states differed widely in how well they served this subgroup (CREDO, 2009). Analysis of the data indicated students with disabilities, on average, performed the same in reading and math regardless of whether they attended a charter or traditional public school (CREDO, 2009). However, in Arizona and California charter schools, special education students performed better in math when compared to traditional public schools (CREDO, 2009). Overall, special education students experienced smaller gains at both types of schools when compared to general education peers (CREDO, 2009).

A follow up study conducted by the CREDO (2013) included 10 more states in addition to the original 15 that participated in the 2009 study. In the aggregate, both reading and math results showed improvement compared to results in the 2009 study (CREDO, 2013; CREDO, 2009). The analysis included 25 participating states, which comprised 95% of students educated in charter schools (CREDO, 2013). The results of this study indicated significant gains for charter school students in reading, equivalent to seven additional days of learning, when compared to traditional public schools (CREDO, 2013). Learning gains in math for charter school students were reported as comparable to

traditional public school students (CREDO, 2013). The CREDO (2013) authors noted an upwards trend in academic achievement for charter schools from 2009 to 2013. Results also indicated Black students, students in poverty and English language learners made greater academic gains from attending charter schools (CREDO, 2013). However, results were reported using aggregated data and charter school performance was uneven across states and districts. This indicated there were pockets of success, as opposed to all charter schools showing significant academic gains for all students (CREDO, 2013).

### **Critique of the CREDO Findings**

With regards to special education students, the CREDO researchers compared results from the 2009 study to data collected over the course of four years. In reading, results indicated special education students at charter schools had 14 additional days of learning when compared to traditional public school students (CREDO, 2013). However, further analysis suggested results were statistically significant for “continuing” charter schools only, meaning the charter school was in operation for at least three years.

Students at new charter schools had similar gains in reading as traditional public schools (CREDO, 2013). This is an interesting finding and lends more credibility to concerns regarding start-up charters and their ability to serve special education students at the onset (Drame, 2011; Kelly & Loveless, 2012; Estes, 2009). Likewise, in math, results indicated special education students learn significantly more in continuing charter schools than in traditional public schools, but not in new charter schools (CREDO, 2013).

Overall, the CREDO studies suggested charter schools were outperforming traditional public schools in reading but scored similar to traditional public schools in math (Loveless, 2013). These studies were used as evidence that charter schools were

performing “better” than traditional public schools, however, Loveless (2013) examined whether the CREDO results were significant given the large sample size (approximately 1.5 million students), which typically produces statistically significant effects that may make insignificant findings appear more meaningful than they are (Loveless, 2013).

In his critique, Loveless (2013) analyzed the findings from both CREDO reports conducted in 2009 and 2013. In 2009, 17% of charter schools performed better than traditional public schools in math, 46% performed about the same, and 37% were weaker (Loveless, 2013). In 2013, 29% of charter schools performed better, 40% scored about the same and 31% scored weaker (Loveless, 2013). Loveless (2013) found the CREDO studies magnified tiny student-level differences. A closer examination of the data revealed charter schools and traditional public schools performed about the same in both studies (Loveless, 2013). Loveless (2013) also noted readers should be cautious when interpreting the results of the CREDO studies as the results make small differences between charter schools and traditional public schools appear much larger than they really are.

Most recently, the CREDO (2015) conducted a study of charter schools’ performance in urban areas. The sample for this study consisted of 22 states and 41 urban areas spanning school years 2006-07 through 2011-12 (CREDO, 2015). The goal was to examine if academic achievement gains were greater for students in a charter school compared to a virtual matched peer in a traditional public school in the same location over the course of a year (CREDO, 2015). The findings from this study indicated urban charter schools, in the aggregate, provided significantly higher levels of annual growth in both math and reading compared to peers at traditional public schools (CREDO, 2015).

In this study, learning gains for charter school students were reported to be significantly larger for Black, Hispanic, low-income, and special education students in both math and reading, with gains amounting to months of additional learning per year (CREDO, 2015). It was reported students who are both low-income and Black or Hispanic or are both Hispanic and English Language Learners, especially benefitted from attending charter schools (CREDO, 2015). The results of this study indicated 41 urban charter districts had more schools that outperformed traditional public schools and fewer underperforming charter schools (CREDO, 2015). However, despite the positive results for most urban charter schools in the sample, there were urban communities in which many charter schools underperformed traditional public schools, some to “distressingly large degrees” (CREDO, 2015). As previously discussed, the same methodological concerns apply to this study; (1) the VCR method is subject to creating a bias sample and, (2) the large sample size made small differences in student performance appear statistically significant (Loveless, 2013). This variability is further evidenced by additional CREDO studies of individual states that provided evidence of variability through histograms of effect sizes for individual schools (Betts & Tang, 2011).

To add to the complexity of the charter school argument, one study used a growth-model to examine students’ achievement in reading and math at four urban charter schools (Drame, 2010). The sample for this study included students with and without disabilities, as few researchers specifically examine the achievement of students with disabilities at the individual or aggregate level (Drame, 2010). Reading and math test data were analyzed from four charter schools for a cohort of students tested in fourth grade and again in fifth grade (Drame, 2010). The sample included 51 students with

disabilities and 360 students without disabilities (Drame, 2011). Results indicated, on average, students with and without disabilities experienced a reduction in achievement in both reading and math at these four charter schools (Drame, 2010). Therefore, as a group, there were no significant differences in reading achievement over the course of one year, however, students with disabilities experienced significantly less growth in math compared to students without disabilities (Drame, 2010). The findings from this study counter claims students with disabilities were achieving at higher rates in charter schools, although it was a small-scale study and the disability category for the sample of students was not clearly defined by the author. Without knowing disability type for students in the sample these results cannot be generalized or replicated with a similar sample of students.

Additionally, a large meta-analysis was conducted to review literature that used either experimental (lottery) or student-level growth-based methods to determine causal impacts of attending charter schools on student performance (Betts & Tang, 2011). The overall results were variable and showed charter schools were outperforming traditional public schools in terms of reading and math achievement, but in other cases were performing similarly or worse (Betts & Tang, 2011). One of the critical findings from this meta-analysis was the heterogeneity in effect sizes across studies examined (Betts & Tang, 2011). Specifically, more than 90% or more of the variation across studies reflected true variation rather than statistical noise (Betts & Tang, 2011). This analysis led to some clues regarding the variation in the effects of charter schools (Betts & Tang, 2011). Charter high schools were not performing as well as charter schools at lower grades and urban schools suggested larger effect sizes than for all charter schools in most cases (Betts & Tang, 2011). Boston's middle and high school charters and New York

City's charter schools produced achievement gains much larger than charter schools in most areas, which requires further investigation (Betts & Tang, 2011).

### **Summary of Student Achievement in Charter Schools**

Five studies substantiated significant variability exists between schools, districts and states with regards to student achievement in charter schools compared to traditional public schools (CREDO, 2009; CREDO, 2013; CREDO, 2015; Betts & Tang, 2011; Drame, 2010). While some charter schools demonstrated significant gains, some charter schools underperformed traditional public schools, or performed at the same rate as traditional public schools. Loveless (2013) reported 71% of charter schools in the CREDO studies performed equal to or worse than traditional public schools, which does not show charter schools are doing a better job educating students. Similarly, with traditional public schools, there are pockets of success, and significant variability between states and districts. There are many factors to consider and examine when claiming charter school enrollment equated to greater academic performance. A bigger picture lies behind student achievement in charter schools, specifically, students with disabilities and other subgroups these results are applicable to.

Findings regarding student achievement warrant further investigation, specifically as charter schools were created as models of innovation for traditional public schools. As Wilkens (2009) noted:

The charter school experiment will be valid only if charter schools serve the same student populations as do traditional public schools. Educators have known for some time that schools can produce educational success if they simply decline to admit students who are costly or more difficult to serve and there is no need to

create a new type of public or private school to demonstrate the obvious yet again.  
(p. 3).

Given these varied results, it is too soon to suggest charter schools serve students with or without disabilities better than traditional public schools. If charter schools are intended to be innovative and progressive, then successes must be identified, studied rigorously and replicated in other settings (Betts & Tang, 2011; GAO, 2012; Rhim et al., 2007).

### **Enrollment Gaps in Special Education**

Since the charter school movement has rapidly expanded over the last decade there has been criticism for the population of students' charter schools serve (Winters, 2013; Winters, 2014). A report conducted by the Government Accountability Office (GAO, 2012) showed in 2009-10, enrollment of students with disabilities at traditional public schools was 11%, compared to charter schools, where it was an estimated eight percent (GAO Report, 2012). The special education enrollment gap has caused considerable concern among charter school opponents given the discrepancy in enrollment (COPAA, 2012; Winters 2013).

A more recent report issued in 2015 by the National Center for Special Education in Charter Schools, showed in 2011-12, enrollment for students with disabilities in traditional public schools was 12.55%, compared to 10.42% in charter schools. These data indicated the gap in enrollment for students with disabilities in charter schools is closing. Despite evidence charter schools enrolled fewer students with disabilities, research shows parents want to enroll their children in charter schools, citing dissatisfaction with the traditional public school system (Estes, 2009; Fiore, et. al., 2000). To date, there has been little research on the extant factors contributing to student

enrollment in charter schools. However, anecdotal reports pointed to “pushing out” low-achieving students or students with disabilities in charter schools (Zimmer & Guarino, 2013; Winters, 2013). Therefore, while charter schools may be enrolling larger percentages of students with disabilities whether these students remain in charter schools for their academic career is subject to debate.

Some studies suggested students with disabilities, particularly severe disabilities, represented liabilities to a charter schools because they are more expensive to educate and less likely to make adequate yearly progress on statewide exams, (Stern, et. al., 2015; Rhim et al., 2007; Rhim & McLaughlin, 2007; Garcy, 2011; COPAA, 2012; Estes, 2009). Data indicated students enrolled in charter schools are more likely to have milder disabilities (Stern, et. al., 2015; Blackwell, 2012; Wilkens, 2009; Garcy, 2011). For example, approximately 8% of Los Angeles students with disabilities are enrolled in charter schools, however, students requiring extensive special education services were one fourth as likely to be enrolled in a charter school in Los Angeles (Setren, et. al., 2015).

Two recent studies conducted in New York and Denver (Winters, 2013; Winters, 2014) suggested the enrollment gap exists primarily due to students with disabilities being less likely to apply to charter schools altogether (Winters 2013; Winters 2014). In New York City, the gap in special education enrollment grew as students progressed from kindergarten through third grade (Winters, 2013). This was largely because charter schools were less likely to find students eligible for special education services or found them ineligible for services during their reevaluation (Winters, 2013). It was also discovered parents were less likely to enroll their students in a charter school because



they believed charter schools could not serve students with disabilities (Winters, 2013; Winters, 2014).

Winters (2013) suggested charter schools in New York City had greater proportions of general education students enroll in charter schools, which reduced the total proportion of special education students (Winters, 2013). Furthermore, it was reported the gap was attributed to more subjective categories of student disabilities, specifically emotional impairments and specific learning disabilities, as charter schools are less likely to classify and often declassify students under these disability labels altogether (Winters, 2013). In comparison, less subjective disabilities, including autism, speech and language impairments, or intellectual impairments, maintained similar enrollment numbers over time at both charter and traditional public schools (Winters, 2013).

The results of a study in Denver indicated similar findings with regards to the special education enrollment gap (Winters, 2014). In the case of Denver charter schools, the special education gap was evidenced before kindergarten and continued to increase through 8th grade, however, the gap was attributed to a drop in the percentage of students found eligible for special education services compared to traditional public schools (Winters, 2014). Winters (2014) suggested school choice and eligibility determinations as reasons for disproportionate enrollment of special education students in charter schools compared to traditional public schools. However, Winters (2014) did not disprove counseling out is not occurring at charter schools. To do this, further investigation into why parents removed their child from a charter school would need to be conducted to substantiate claims counseling out is not occurring (Winters, 2013; Winters, 2014).

Furthermore, parents in New York City and Denver reported they did not know students with disabilities could attend charter schools and that charter schools were mandated to provide special education services (Winters, 2014). While this does not indicate students with disabilities are counseled out of charter schools, it does create questions regarding which populations charter schools recruit. These results are applicable to only two states, New York City and Denver, but suggested the special education enrollment gap occurred because of inaccurate parent perceptions on charter schools and students with disabilities.

An article published in the New York Times two years after the Winters (2013) study revealed counseling out students in one large charter school network was happened (Taylor, 2015). The article highlighted several incidents of students pushed out of Success Academy charter schools in Brooklyn and Harlem, largely for behavioral reasons (Taylor, 2015). Evidence was obtained through documents and interviews with 10 current and former Success Academy employees at five schools. It was reported some administrators in the network singled out children they wanted to leave and repeatedly suspended or required parents pick to up their child during the school day (Taylor, 2015). One administrator created a list of 16 students titled “Got to Go”, with nine of the 16 students eventually withdrawing from the school (Taylor, 2015). Four of the nine parents reported the school administrator explicitly told them their child was “not the right fit” for the school (Taylor, 2015).

A spokeswoman for the network of charter schools said Success school leaders did not push students out but helped parents find the right environment for their child (Taylor, 2015). Some students left because they required a special education environment

that Success Academy “could not offer them” (Taylor, 2015). This comment raised concerns regarding charter schools’ inability to provide the full continuum of special education services required by traditional public schools. If charter schools are only serving certain types of students, or mild disabilities (i.e. specific learning disabilities, communication impairments) and traditional public schools serve the neediest population of special education students, then charter schools are serving the students whose disability fits the mission of the school. Charter schools’ academic performance should be interpreted with caution if they only keep students that fit their mission. This means claims students that are attending charter schools experience greater academic gains are spurious. Traditional public schools cannot counsel out their neediest students, which may lead to disproportionately high percentages of special education students compared to charter schools.

### **Inclusion of Students with Disabilities**

Not only do charter schools serve a greater percentage of students with mild disabilities they also serve students in inclusive settings more frequently than traditional public schools (Rhim, Gumz & Henderson, 2015; COPAA, 2012; Blackwell, 2012; Wilkens, 2009; Stern et. al., 2015; Rhim et al., 2007; Swanson, 2008; Rhim & McLaughlin, 2007). Most students with disabilities are placed in one of three settings; (1) full inclusion, 80% or more of the school day is spent in the general education setting, (2) partial inclusion, between 40% and 79% of the day is spent in the general education classroom, and (3) substantially separate, 39% or less of the day is spent in the general education setting (Rhim et al., 2015).

Recent data showed 84% of students with disabilities in charter schools were fully

included in the general education classroom for 80% or more of the day (Rhim et al., 2015). In comparison, only 67% of students in traditional public school settings were fully included in the general education setting for 80% or more of the day (Rhim, et al., 2015). Ten percent of students with disabilities in charter schools were partially included in the general education setting, compared to 19% of students with disabilities in traditional public schools (Rhim et al., 2015). With regards to substantially separate placements, four percent of students with disabilities in charter schools spent 39% or less of their day in the general education setting, compared to 12% of students with disabilities in traditional public schools nationwide (Rhim et al., 2015). When students are not participating in the general education classroom, they are removed to smaller classes with special education teachers, where instruction is chunked and modified to their individual level. This level of support is more specialized and often costlier as it requires specific training of staff and represents the neediest population of special education students.

### **Summary of the National Literature**

The current body of research regarding charter schools is mixed and varied across the country. While there are pockets of successful charter schools serving students with disabilities, there remain questions of access and equity for all students. Overall, studies indicated a positive trend for charter schools and their ability to serve students with disabilities (Abdulkadiroglu, et. al., 2009; Betts & Tang, 2011; CREDO, 2015; CREDO, 2013; CREDO, 2009; Setren, 2015). However, as referenced earlier, opponents of charter schools and current case law showed charter schools are not always supporting students with disabilities in a manner that is conducive to students' individualized needs. It is

unclear why charter schools nationwide enrolled fewer students with disabilities, educated these students in full inclusion settings more frequently and struggled to create special education programs from their inception. As the charter school movement continues to gain momentum, it is critical to understand how charter schools and special education interface with one another to ensure charter schools are an equitable option for students with disabilities.

### **Charter Schools in Massachusetts - Research, Policy and Practice**

In the Commonwealth of Massachusetts, charter schools have operated since 1995 and currently educate almost 40,000 students, with over 41,000 students on wait lists for acceptance (Massachusetts Charter Schools Association, 2016). Per the Massachusetts Charter School Association, charter schools were founded by parents and community leaders who believe district schools are not meeting children's educational needs and to promote models of innovation in education for public school districts.

The Commonwealth of Massachusetts first authorized the creation of charter schools in the Education Reform Act of 1993, which stated the goal of charter schools was the 'development of innovative programs', 'opportunities for innovative learning and assessments', and 'models for replication in other public schools' (Wilkins, 2009). This was based on the premise charter schools would operate under increased autonomy in exchange for increased accountability for student achievement. Since the first charter school opened in Massachusetts, charter schools have expanded across the state (Blackwell, 2012). Due to this rapid expansion, on January 18, 2010, Massachusetts Governor, Deval Patrick, signed an education reform bill that increased the number of students attending charter schools in Massachusetts. From this expansion, the number of

new operating charter schools and student enrollment in existing charter schools increased consistently throughout the state (Blackwell, 2012).

In 1995, there were 15 charter schools in Massachusetts, with a total enrollment of 2,613. The most recent data show there are currently 25 charter schools operating in the city of Boston alone, 36 in urban districts, not including Boston, 14 in suburban districts, and five in rural districts (Department of Elementary and Secondary Education Charter School Fact Sheet, 2016). The current maximum enrollment allowed by authorized charters is 49,044 with approximately 3.9% of the public school population currently enrolled in charter schools throughout the state. Students are admitted to charter schools through a lottery process. If more students apply for admission than can be accepted, they are placed on a waiting lists for admittance.

In Massachusetts, charter schools are granted a five-year charter by the Massachusetts Board of Elementary and Secondary Education (BESE) and governed by a board of trustees, independent of a school committee (Massachusetts Primer on Special Education and Charter Schools, 2009). The Massachusetts charter school statute, G.L. c. 71, § 89 (d) lists the following purpose for charter schools:

“(1) to stimulate the development of innovative programs within public education; (2) to provide opportunities for innovative learning and assessments; (3) to provide parents and students with greater options in choosing schools within and outside their school districts; (4) to provide teachers with a vehicle for establishing schools with alternative, innovative methods of educational instruction and school structure and management; (5) to encourage performance-based educational programs; (6) to hold teachers and school administrators

accountable for students' educational outcomes; and (7) to provide models for replication in other public schools.”

Massachusetts authorizes charter schools differently than most states since it sanctions one authorizer for charter schools – the Board of Elementary and Secondary Education (BESE) (Massachusetts Primer on Charter Schools, 2009).

As the sole authorizer, the BESE makes decisions regarding approval, renewal and revocation of all charters. This is a unique model compared to most states where multiple entities are authorized to support the creation of charter schools, including state education agencies (SEA), universities, municipalities, and others (GAO Report, 2012; Rhim et al., 2007; Rhim & McLaughlin, 2007). Data from the Department of Elementary and Secondary Education (DESE) showed there are currently 80 operating charter schools in the state of Massachusetts as of 2014-2015. To renew a charter, the school must provide evidence of faithfulness to the charter, academic program success, and organizational viability. The BESE reserves the right to place charter schools on probation in several ways; impose conditions on their operation; or suspend or revoke charters for violations of laws or failure to make adequate yearly progress toward student achievement, failure to comply with their charters, or failure to remain viable (Massachusetts Department of Elementary and Secondary Education, 2016).

There are two types of charter school designations in the state, Commonwealth and Horace Mann. Of these 80 schools, 70 are Commonwealth charter schools and 10 are Horace Mann charter schools. All charter schools fall under one of two designations. Commonwealth charters operate as a local education agency (LEA), independent from a school committee and collective bargaining agent and are managed by a board of trustees

(Massachusetts Charter School Opening Procedures Handbook, 2016). Horace Mann charter schools are part of a public school district and operate under a charter approved by the local school committee and a local collective bargaining agent, regardless of the designation; each charter school operates as its own local education agency, with Commonwealth charters operating independently of the associated LEA and Horace Mann charters operating as a separate LEA in partnership with the associated LEA (Department of Elementary and Secondary Education, 2016). When charter schools act as a Commonwealth charter, federal and state funds flow directly to the charter from the state (Rhim et al., 2007; COPAA, 2012; GAO Report, 2012). However, Horace Mann charter schools receive their funds and special education services from the larger LEA they are partnered with (Rhim et al., 2007; COPAA, 2012; GAO Report, 2012).

Massachusetts currently places a cap on the number of operating charter schools within the state. Due to the charter cap in Massachusetts, more charters are found in urban school districts than rural or suburban areas. This is purposeful considering the Massachusetts charter school statute allows a higher charter cap in districts ranked in the lowest ten percent for state standardized test scores [MGL c.71, s.89(i)]. Per the BESE, the charter school cap is calculated using the two most recent years of the Massachusetts Comprehensive Assessment System (MCAS) scores, where schools are ranked based on student achievement. Additional charters are awarded to certain communities that are in the lowest ten percent of all districts in the state with applicants that qualify as Proven Providers. The state defines Proven Providers as:

- a. two or more persons who had primary or significant responsibility serving, for at least five years, in a leadership role in a school or similar program that



has a record of academic success and organizational viability.

- b. a non-profit education management organization or nonprofit management organization, in operation for at least five years, that has a record of success and organizational viability.
- c. the board of trustees of an existing charter school that has a record of academic success and organizational viability; or
- d. an education management organization, charter management organization, or school support organization that has a record of academic success and organizational viability in operating or starting public schools with which an applicant proposes to contract.

Proven Providers are required to submit evidence to demonstrate management or leadership at a school that is considered an academic success, a viable organization, and relevant to the proposed charter (Department of Elementary and Secondary Education 2914-2015)

The purpose behind granting more charters in the lowest performing school districts allows charter schools greater autonomy to operate outside of traditional school frameworks – an autonomy that is expected, in theory, to encourage innovation, higher achievement and competition (COPAA, 2012). In exchange for greater autonomy, charter schools have greater accountability measures for student performance and risk revocation or non-renewal of their charter if they cannot demonstrate student achievement (COPAA, 2012). The state introduced regulations for Proven Providers as an additional measure to ensure evidence of academic success and viability when opening charter schools in low-performing districts.

Despite these requirements, the charter movement in the state has been a controversial topic over the last five years. In April 2016, the Massachusetts state Senate passed a bill that would gradually lift the cap on charter schools in low-performing districts but would link the cap lift to an increase in funding for traditional public school districts (Schoenberg, 2016). Under the new bill, if the Legislature increases overall education spending, then the charter cap would be lifted in the lowest performing districts from 18 percent of school spending to 23 percent of school spending. The bill also sought to eliminate the cap for “charter schools that primarily serve the most “at-risk” students” (Schoenberg, 2016). In addition, the bill would change the funding formula for districts, allowing them to be reimbursed for charter school students, while at the same time, requiring charter schools to have increased transparency in finances and operations, as well as diversified representation, including parents and teachers, on charter school boards (Schoenberg, 2016). The bill is currently awaiting approval from the House, however, it is said the bill is likely to require more amendments to receive final approval from the Governor (Schoenberg, 2016). This bill represents a shift towards equitable practices and funding for charter schools and traditional public schools throughout the state. Since this bill would gradually lift the charter cap in urban districts, extensive scrutiny should be given to subgroup populations to ensure equitable enrollment practices are occurring in charter schools throughout the state.

### **Charter Schools, Special Education, and Accountability**

Despite state regulations for Proven Providers, minimal regulations exist regarding the enrollment and retention of students with disabilities. The state requires each charter to submit a Recruitment and Retention plan, which is the charter’s written

plan to recruit and retain diverse students (M.G.L. c. 71§ 89 and 603 CMR 1.00). For the purposes of the Recruitment and Retention plan, the state defines retention as the charter’s ability to maintain enrollment of its students with low turnover and attrition. However, the state does not define “diverse” students making it challenging for charter leaders to understand specifically, which students they should target as part of the Recruitment and Retention plan.

While the state definition of a “diverse” student lacks specificity, the Department of Elementary and Secondary Education (DESE) has made efforts to ensure students with disabilities are encouraged to enroll in charter schools. In the spring of 2013, the Department explicitly incorporated expectations regarding access and equity as part of charter schools’ accountability plan. The DESE also launched access and equity initiatives, which highlighted new policies and best practices for special education. This included the implementation a “mystery shopper” program, where staff from the Department call charter schools anonymously to inquire about their special education services to ensure charter schools are not discouraging parents from enrolling their child.

As part of this initiative, the state requires charter applicants develop a plan that “includes deliberate, specific strategies the school will use to attract, enroll and retain a student population that is demographically comparable to similar grades in schools from which the charter school enrolls students” (Massachusetts Department of Elementary and Secondary Education - Charter School Opening Procedures Handbook, 2016). To ensure these initiatives gained support, the DESE partnered with the Massachusetts Charter Public School Association (MCPSA) to implement a project to help all charter schools build capacity to develop programs focused on students with moderate to severe

disabilities and support students with significant behavioral challenges (Massachusetts Department of Elementary and Secondary Education, Charter School Enrollment Data Annual Report, 2016).

As noted above, in 2010, the charter school statute was amended to require charter schools to implement student recruitment and retention plans with specific strategies to attract a student population comparable the student population in schools from which the charter school enrolled students (Massachusetts Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015). As part of this new statute when the Commissioner and the BESE determine whether a charter school should be renewed, they consider the extent to which the school has fulfilled its obligations under their recruitment and retention plan, whether the school has “enhanced” its plan, and the annual attrition of students (Massachusetts Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015). However, “demographically comparable” is unspecified and might not be interpreted to equitably represent students with disabilities comparable to traditional public schools’ enrollment of students with disabilities.

In March 2014, the BESE voted to adopt amendments to charter school regulations that “require charter schools to provide written notice as part of the application and enrollment materials regarding the rights of children with diverse learning needs to attend charter schools and to receive accommodations and support services, including students who may have disabilities, require special education, or are English language learners” (Massachusetts Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015). Based on these

amendments, one of DESE's key strategic priorities with respect to charter schools is to "utilize enhanced tools and oversight processes to support and oversee compliance with these regulations" (Massachusetts Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015). Massachusetts was previously one of few states that put accountability measures in place for charter schools in serving students with disabilities (Rhim et al., 2007). These new amendments represent the state's intent to create greater accountability measures for charter schools serving students with disabilities, however these measures continue to rely on charter school self-monitoring, which may not always be reliable.

In addition to these initiatives to support students with disabilities in charter schools, the Commissioner of Elementary and Secondary Education submits a report on charter school enrollment to the Legislature pursuant to the requirement under G.L. c. 71, § 89(kk), which states:

The commissioner shall collect data on the racial, ethnic and socioeconomic makeup of the student enrollment of each charter school in the commonwealth. The commissioner shall also collect data on the number of students enrolled in each charter school who have individual education plans pursuant to chapter 71B and those requiring English language learners programs under chapter 71A. The commissioner shall file said data annually with the clerks of the house and senate and the joint committee on education no later than December 1.

This report provides an analysis of the most recent data available on charter schools in the state, which is compiled from the Department's Student Information Management System (SIMS). Massachusetts is one of only two states that specifically require charter

schools to report the number of students with disabilities who attend annually (Rhim et al., 2007). It is commendable the state tracks this data regularly to identify trends and inform policy to support students with disabilities in all public schools.

While Massachusetts is at the forefront of state charter laws, these initiatives may have been in response to the criticisms of charter schools in the state. Specifically, claims made by the Center for Law and Education (CLE), a national advocacy organization with offices in Boston and Washington, D.C. As part of their work, the CLE has represented students, with and without disabilities, who were enrolled in charter schools and subject to suspension/expulsion and any other “push-out” practices. In a letter to Associate Commissioner of the DESE in 2013, the CLE shared their concerns regarding students with disabilities enrolled in charter schools throughout the state.

The CLE letter expressed concerns regarding the under enrollment of students with disabilities in charter schools (Chou & Boundy, 2013). Specifically, enrolling only those students who can be “educated with limited specialized instruction and support services primarily in inclusive classrooms” (Chou & Boundy, 2013). This selectivity in admissions represents discriminatory practices to the extent that “charter schools are incapable of providing or fail to provide, the array of programming and support services necessary to meet the educational needs of students admitted to the school in violation of the Equal Educational Opportunity Act, 20 U.S.C. § 1703(f) and MGL c. 71A, or the right to a free and appropriate public education under the Individuals with Disabilities Education Act, 20 U.S.C. § 1412(a)(1)(A), MGL, c. 71B, and federal and state civil rights laws (Chou & Boundy, 2013).

The CLE attorneys wrote charter schools “directly discourage parents from

applying by planting seeds of doubt and fear that the charter school cannot meet their child’s specific needs” (Chou & Boundy, 2013). Based on anecdotal evidence, charter schools actively “encouraged” parents to remove their children from charter schools, often due to challenging behavior or low test scores (Chou & Boundy, 2013).

Additionally, charter schools often failed to refer students with possible disabilities for evaluation under Child Find regulations and discouraged parents from initiating the special education eligibility process (Chou & Boundy, 2013).

Charter schools that operate as stand-alone LEAs are required to provide a continuum of services ranging from least restrictive to most restrictive, meaning instruction in general education classes, special pull-out classes and substantially separate settings (Chou & Boundy, 2013). It is not adequate for charter schools to provide only inclusion placements with instruction in general education classes, as not all special education services can be provided in that setting (Chou & Boundy, 2013). Through the representation of CLE, attorneys noted many Boston based Commonwealth charter schools “misuse 603 CMR § 28.10(6) to remove students with special education needs whose disabilities present academic, and perhaps, behavioral challenges” from their charter school (Chou & Boundy, 2013).

In January 2016, the Charter School Enrollment Data Annual Report was submitted to the Legislature by the Commissioner of Elementary and Secondary Education. This report used the Charter Analysis and Review Tool (CHART), a tool created by the DESE, which provides multi-school, multi-year demographic comparison data for each charter school and comparison schools. The percentage of students with disabilities enrolled in charter schools is less than traditional public schools, but has

continued to steadily increase over the last five years (Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015). Data showed gaps remain for substantially separate placements in charter schools for students with disabilities at the secondary level (Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015).

With regards to attrition, wide variation of attrition rates among both charter and traditional public schools exists, particularly in urban school districts (Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015). However, the weighted attrition rate of Boston charter schools has remained lower than the weighted attrition rate of Boston district schools (Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015). The report from the DESE further highlights attrition in Gateway cities, which are cities that meet three qualifying criteria, (1) have a population greater than 35,000 but less than 250,000, (2) median household income is below the state average and, (3) educational attainment of a bachelor's degree or above is below the state average. The weighted attrition rate of charter schools in Gateway cities has remained lower than the weighted attrition rate of traditional public school districts in Gateway cities and has declined over time for charter schools (Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015).

Based on the state's 2014-2015 annual report supporting the argument of "choice, access and equity" for students with disabilities, empirical studies of student enrollment show charter schools have consistently served fewer students with disabilities than their associated LEA (Blackwell, 2012; Wilkens, 2009; Rhim et al., 2015, Winter, 2013;



Winters, 2015). This is especially true when considering students with severe or low-incidence disabilities in the state of Massachusetts (Blackwell, 2012). The most recent data show charter schools continued to enroll fewer students with disabilities (14%) in comparison to public school districts (16.3%) (Massachusetts Department of Elementary and Secondary Education - Charter School Fact Sheet, 2014-2015).

However, recent reports showed disproportionate enrollment levels are steadily decreasing and attrition rates are lower in charter schools for students with disabilities (Setren, 2015; Department of Elementary and Secondary Education - Charter School Enrollment Data Annual Report, 2014-2015). This raises questions regarding which special education students have access to charter schools in the state of Massachusetts. There have been few explanations provided for disproportionate enrollment of students with disabilities, not only in Massachusetts, but across all states (Blackwell, 2012; Wilkens, 2009; Setren, 2015; CREDO, 2009; CREDO, 2013).

Per one study conducted in Massachusetts, the discrepancy in enrollment is based on data charter schools reduced the likelihood of special needs classification, typically within one year following enrollment (Setren, 2015). Students in charter schools are also placed in more inclusive settings at a higher rate than traditional public schools and are less likely to be eligible for special education services altogether (Setren, 2015). Another study suggested parents did not report their child as having a disability to the charter school in hopes their child would have a fresh start without the disability label (Fiore, et al., 2000). In contrast, anecdotal reports suggested charter schools may counsel out or discouraged students with disabilities from attending that do not fit the mission of the school (COPAA, 2012; Fiore, et. al., 2000; Zimmer & Guarino, 2013; Rhim et al., 2007;

Rhim & McLaughlin, 2007). However, the limited studies to date, have been unable to substantiate charter schools regularly counseled out students with disabilities (Zimmer & Guarino, 2013; Winters, 2013; Winters, 2014).

While counseling out has not been substantiated, two studies conducted in Massachusetts indicated charter schools enrolled fewer students with disabilities in comparison to traditional public school districts (Blackwell 2012; Wilkens, 2009). However, a recent study on charter schools in Boston disputed this notion by presenting evidence the enrollment gap for students with disabilities is closing and student achievement gains, specifically for students with disabilities, were higher for students attending charter schools (Setren, 2015). While charter schools showed greater enrollment numbers for students with disabilities in the state, it was unclear which types of disability categories were being served in charter schools. Despite evidence charter schools enrolled more students with disabilities, rates of special education identification in the state varied substantially within and between school districts, including charter schools (Hehir, Grindal & Eidelman, 2012).

While boosts in achievement gains for students in Massachusetts charter schools were suggested in one study, little conclusive evidence exists on which charter school practices led to positive academic outcomes for special needs students (Setren, 2015). The purpose of charter schools is to share innovative practices with traditional school districts, therefore, not having a clear understanding of which school practices resulted in student gains, goes against the idea of charter schools becoming models of innovation. If charter schools are reporting significant achievement gains for special education students, best practices should be clearly identified and replicated to better serve this population of

students in all educational settings.

### **Massachusetts Compliance Monitoring for Special Education**

While outcomes for students with disabilities in charter schools had a scarcity of research, the Massachusetts Department of Elementary and Secondary (DESE) education had systems in place to monitor compliance with state and federal regulations for special education programs. To ensure compliance, DESE conducted a Coordinated Program Review (CPR) for all school districts. This included charter schools that operate as stand-alone LEAs. Each school district in the Commonwealth is scheduled to receive a CPR every six-years and a mid-cycle review, every three years, after the CPR to ensure corrective actions have been implemented. All districts follow a 6-year cycle in which selected special education criteria are evaluated by a panel of staff from the Department of Elementary and Secondary Education. The review included 59 indicators that fell into nine categories; 1) assessment of students, 2) student identification and program placement, 3) parent and community involvement, 4) curriculum and instruction, 5) student support services, 6) faculty, staff, and administration, 7) school facilities, 8) program plan and evaluation, 9) and record keeping.

More recently, the DESE moved to a web-based approach to special education monitoring. By the 2010-2011 school year, all school districts and charter schools were completing web-based monitoring for special education programs. The web-based monitoring system allowed districts and the DESE to submit, review, and exchange documents and information through the Department's security portal. The methods used in reviewing special education programs included a Self-Assessment Phase, which is completed a year prior to the on-site review. Second is the Desk Review Phase, where the

Monitoring Team Chairperson assigned to each district reviewed critical elements, procedures and practices for special education. Lastly, the Department completed the Onsite Verification Phase in which interviews of administrative, instructional and support staff occurred, as well as, student record reviews, surveys from parents and observations of classrooms and facilities.

Depending on the size of the school district and the number of programs under review, a team of two to eight Department staff members conducted onsite visits over a span of two to five days. Once the review was complete, a report of the findings was publicly published on the Department's website. This report outlined each of the 59 indicators referenced above and issued a rating under each indicator. The rating scale consisted of five possible ratings; "commendable", "implemented", "partially implemented", "not implemented" and "not applicable". Any indicator that received a "partially implemented" or "not implemented" rating required corrective action by the district.

The state evaluates the indicators that required corrective action three years later during the mid-cycle review. While special education procedures may seem burdensome, oversight and monitoring of special education programs is critical to prevent abuses and neglect on the part of the public school system (Rhim et al., 2007). Part of this study aimed to build on previous research done by Blackwell (2012) to examine if charter schools were meeting state and federal regulations under the IDEA. An analysis of special education CPR reports provided a better understanding of how charter schools are complying with special education laws and regulations throughout the state.

## **Literature Review of Charter Schools in Massachusetts**

There is a dearth of research on students with disabilities in charter schools for the state of Massachusetts. The limited amount of research makes it challenging to determine how students with disabilities fare in charter schools compared to traditional public schools. Most of the research indicated charter schools enroll fewer students with disabilities (Blackwell, 2012; Wilkens 2009; Stern, 2015; Clonan et al., 2015; Rhim et al., 2015). There was evidence charter schools enrolled students with mild to moderate disabilities, including communication disorders, learning disabilities or behavioral disorders, as opposed to students with severe needs (Blackwell, 2012; Wilkens, 2009).

As discussed earlier, Massachusetts regulations regarding fiscal and programmatic responsibility for private placements require the traditional public school district to maintain responsibility for these students, not the charter school. This means the associated LEA retains financial responsibility for students with severe needs that cannot be supported in charter schools. In September 2014, the Department of Elementary and Secondary Education issued a Technical Assistance Advisory (Technical Assistance Advisory SPED 2014-15) requiring charter schools to work with the school district of residence to determine if a cost share would be appropriate in these cases. While this opened the conversation for greater collaboration between charter schools and the associated LEA, there is minimal accountability at the state level to ensure charter schools are collaborating with traditional public school districts in these cases.

## **Student Achievement in Massachusetts Charter Schools**

Two studies looked specifically at the achievement of students in Boston charter schools compared to traditional public schools (Setren, 2015; Abdulkadiroglu, Angrist,

Cohodes, Dynarski, Fullerton, Kane & Pathak, 2009). One author claimed charter schools removed disability classifications and moved special education students into more inclusive settings at a rate over two times higher than traditional public schools (Setren, 2015). Despite the reduction in special education services in charter schools, it was reported charter schools increased special needs students' test scores, likelihood of meeting a high school graduation requirement and likelihood of earning a state merit scholarship (Setren, 2015). Based on these findings, the author claimed students with disabilities achieved greater gains in charter schools without the traditional set of special education services (Setren, 2015).

While studies have shown higher test scores for students with disabilities in inclusive settings, there are still several factors to consider when making these claims (Hehir, Grindal & Eidelman, 2012). The study conducted by Setren (2015) had several methodological flaws including conducting repeated univariate analyses of the same groups (i.e. race was analyzed, followed by socioeconomic status, followed by gender, then special education status, etc.). When univariate analyses are conducted on the same groups the findings may be overestimated and have a high likelihood of Type 1 error, or incorrect rejection of the null hypothesis (Gravetter & Wallnau, 2009).

Secondly, Setren (2015) used a lottery-based admissions model to estimate the effects of Boston's charter school enrollment on student achievement and classification of special needs students. While there are advantages to conducting lottery-based studies, this method is bias as it focused specifically on schools that exceeded their number of slots to compare lottery winners with lottery losers (Betts & Tang, 2011) Therefore, it would seem likely charters with large waitlists outperformed schools that do not (Betts &

Tang, 2011). There are currently 13,035 students on waitlists for charter schools in Boston (Department of Elementary and Secondary Education Charter School Enrollment Data Annual Report, 2014-2015) Given the comparison made between lottery winners to lottery losers used in the sample, threats to external validity exist since the results cannot be generalized to the overall population (Betts & Tang, 2011).

In addition to external validity threats, there are specific issues with the lottery-based model for charter school assessment (Betts & Tang, 2011). The first issue with lotteries is accounting for differential attrition, where results may show positive effects if attrition of lottery losers is not appropriately accounted for (Betts & Tang, 2011). Setren (2015) tested for selection bias by testing the impact of charter school offers on the probability that lottery applicants contributed to math and English exam scores and whether they had non-missing special needs status post-lottery. However, it is unclear if lottery winners, on average, resembled lottery losers at the time of the lottery to confirm the lottery was conducted fairly (Betts & Tang, 2011).

Based on the statistical tests conducted by Setren (2015) concerns for differential attrition were noted. Differential attrition for middle and high school lottery applicants with baseline special needs was not statistically significant, however, elementary school lotteries had some differential attrition which produced misleading results (Setren, 2015). Specifically, 21.2% of the non-offered special education elementary applicants attrited from the data sample, compared to none of those with offers (Setren, 2015). This means students could have accepted offers to other charter schools, not included in the analysis, or were placed in private/parochial schools by their parents. This difference was significant and substantial but was not large enough to fully explain the special education

classification effects, however this must be taken into consideration when interpreting the author's findings (Betts & Tang, 2011).

A third issue is lottery-based studies produce two distinct estimates: “intent to treat” and the impact of “treatment on the treated” (Betts & Tang, 2011). Setren (2015) considered intent to treat estimates determined that without accounting for lottery compliance, randomly assigned charter offers have a strong positive relation to test scores. However, it was unclear if the lottery winners represented lottery losers in this study since there are currently 13,035 students on waitlists for Boston charter schools. The comparison sample currently on waitlists was not clearly explained to the reader to generalize these results to the population in Boston Public Schools (Charter School Enrollment Data Annual Report, 2014-2015).

The impact of treatment provides an estimate of the impact on a student attending a charter school after winning a lottery (Betts & Tang, 2011). Setren (2015) did not discuss impact of treatment in her study. Consequently, the last two factors that must be considered in lottery-based models are dropout bias and substitution bias (Betts & Tang, 2011). Dropout bias is accounting for the fact that not all students who win a school choice lottery will attend and adjusting the impact of treatment accordingly (Betts & Tang, 2011), Substitution bias, or crossover bias, refers to a situation in which some students that are lotteried out of charters find a substitute school choice program (Betts & Tang, 2011).

Setren (2015) tested for selection bias, but not dropout or substitution bias, by testing the impact of charter offers on the probability that lottery applicants contributed to state math and English exam scores and whether they had a non-missing special needs



status post-lottery. This was based on the premise the sample of students with and without charter offers were similar at the time of the lottery. Setren (2015) indicated no statistical significance for middle and high school lottery applicants with baseline special needs and some differential attrition with elementary school lotteries.

Furthermore, additional factors must be considered when examining claims charter schools placing students with disabilities in full inclusion settings correlates to higher test scores. First, lottery applicants in the sample were less likely to have a special education status than Boston Public Schools students (Setren, 2015). Second, the charter applicant pool had a smaller proportion of substantially separate and full inclusion placements with similar rates of partial inclusion placements (Setren, 2015). Most students enrolled in charter schools in the state are placed in full inclusion settings, therefore the charter school special education sample is not representative of the Boston Public Schools population, which has significantly larger percentages of students placed in partial inclusion or substantially separate settings.

Substantially separate settings represent placements of the neediest special education students, which most charter schools do not serve. It was unclear if specific disability categories were accounted for and how the sample was demonstrative of the general population and comparable to traditional public school systems. Based on previous research conducted in the state, charter schools enrolled students with mild disabilities, not students with severe disabilities (Blackwell, 2012; Wilkens, 2009). Therefore, the charter school sample should mirror the traditional public school sample to make accurate claims, and the author should specifically identify which disability categories these findings apply to. Therefore, it is critical for Setren (2015) to clearly

identify the disabilities included in the sample otherwise it is impossible to determine if the sample used for comparison was appropriate.

A fourth issue regarding the claims made in this study is charter schools were excluded from the sample if they closed, declined to participate, had insufficient records, did not have any oversubscribed lotteries, or served alternative students (Setren, 2015). Therefore, the charter schools included in the sample were charter schools that were high performing, which would automatically equate to higher achievement scores for the students enrolled. It would be interesting to draw these comparisons with the highest performing traditional public schools in the state to determine if differences truly exist. Given the sample in the study excluded underperforming charter schools, it is impossible to determine the accuracy of the findings when making comparisons to traditional public schools, which were included in the sample irrespective if they met the criteria that excluded certain underperforming charter schools from the sample.

A final critical challenge not addressed by the author when examining charter schools is understanding they are ultimately schools of choice (Wilkins, 2009). A major concern with school choice is that it results in unequal opportunities for students and families, which cannot be accounted for in lottery-based studies (Betts & Tang, 2011). Specifically, there is a risk that families may choose schools differently, leading to increased segregation of students by socioeconomic status, race, English proficiency or disability status creating a challenge in finding a representative sample (Wilkins, 2009). In this case, the sample was selected was parents who chose to enroll their child with a disability in a charter school, whereas traditional public schools accept all students in their zoning limitations. If parents are not educated on charter schools and their processes

for enrollment, or perceive they do not accept students with disabilities, the sample may be biased towards a specific set of families and students.

Setren (2015) suggested students with disabilities in charter schools experience larger achievement gains, have a stronger likelihood of meeting graduation requirements and earning a state merit scholarship compared to BPS students (Setren, 2015). The author also indicated charter schools reduced the likelihood of special needs classification and moved special education students to more inclusive settings, including the most disadvantaged students (Setren, 2015). However, it was unclear how this was accounted for and what sample of special education students this was applicable to so these results should be interpreted with extreme caution as they appear misleading given the methodological flaws discussed previously.

The second study was not used as a basis for informing how students with disabilities performed in charter schools (Abdulkadiroglu, et. al., 2009). The authors of this study focused on student achievement in Boston charter schools, however, the observed control variables in the study disguise large differences in student groups, including students with disabilities and English Language Learners (Abdulkadiroglu, et. al., 2009). Specifically, authors noted special education students range from those needing intensive services to accommodations in the general education setting, and charter schools serve different proportions of this subgroup, making detailed breakdowns for this variable inconsistent or incomprehensible to be useful for this study (Abdulkadiroglu, et. al., 2009). Therefore, this study could not be used to support the argument that students with disabilities are performing better in Boston charter schools.

While both studies pointed to academic gains for this population of students,

methodological concerns were apparent within both studies. One feature of special education research that makes it more complex is the variability of the participants, including the ethnic and linguistic diversity of the sample selected due to overrepresentation of some minority groups (Odom, Brantlinger, Gersten, Horner, Thompson, Harris, 2005). This complexity leads to several implications for special education research. Specifically, researchers cannot simply state a charter school is more effective but should provide details for whom it is effective and in what context (Odom, et al., 2005). High quality research is designed in a way to rule out alternative explanations for both the results of the study and the conclusions that researchers draw (Odom, et al., 2005).

As discussed, Setren (2015) found the sample could not be clearly defined, as the participants of the study were lottery applicants. In the sample used the students were not randomly assigned, as students are in traditional public schools. Therefore, it was impossible to determine if the selected sample for the study is like the sample of students in traditional public schools used for comparison. Researchers need to provide a definition of the relevant disability(ies) and then include assessment results documenting the individuals included in study met the requirements of the definition (Gersten, Fuchs, Compton, Coyne, Greenwood, & Innocenti, 2005). As part of describing participants, group difference on salient characteristics must also be identified to allow enough information to identify the population of students to which the results may be generalized (Gersten, et al., 2005).

Second, there was no control for competing hypotheses as there was no reference to the fact that parents choose to enroll their students in charter schools, which meant the

heterogeneity of participant characteristics posed a significant challenge to the research design since equivalent groups could not be established (Gersten, et al., 2005). Per Setren (2015), little conclusive evidence exists on which school practices or settings led to positive academic outcomes for special needs students. If the sample of participants is not clearly defined, as in this case, and extraneous factors are not accounted for, it is impossible to purport students with disabilities experience greater academic gains in charter schools compared to students in traditional public schools because we do not know if we are drawing conclusions on the same sample of students.

If studies on student achievement in charter schools are accurate and free from bias, then specific practices should be identified and replicated for all schools, as was the original premise for the charter school movement. It is counterproductive to imply students with disabilities are achieving at higher rates in charter schools without identifying specifically how students do so. At a minimum, comparison groups should be examined by researchers to determine what instructional methods are occurring, which curricula are being used, and what professional development and support is provided to teachers, for these practices to be replicated (Gersten et al., 2005).

### **Enrollment, Placement and Compliance in Massachusetts Charter Schools**

Two other studies conducted in the state focused specifically on enrollment, placement or compliance with state and federal regulations (Wilkins, 2009; Blackwell, 2012). These studies suggested students with disabilities enrolled in charter schools typically had mild disabilities and enrollment of students with significant disabilities was less common in charter schools (Blackwell, 2012; Wilkins, 2009). Furthermore, students with disabilities in charter schools were typically educated in general education

classrooms, or assigned full inclusion placements, at higher rates than in public school districts (Blackwell, 2012).

Results from both studies indicated traditional school districts served more students with disabilities than charter schools (Blackwell, 2012; Wilkens, 2009). Traditional school districts were more likely to serve students diagnosed with autism, emotional impairments and intellectual impairments (Blackwell, 2012; Wilkens, 2009). For example, traditional school district rates for emotional impairment ranged 11.9% in 2005-2006 to 11.4% in 2009-2010, compared with charter schools that ranged from 5.4% to 6.5% over the same period (Blackwell, 2012). The disability categories for which charter schools had higher rates than traditional public schools were other health impairments, multiple disabilities, and neurological impairments (Blackwell, 2012, Wilkens, 2009). Overall, analyses found there were discrepancies between charter schools and school districts in the types of disabilities represented in their student populations (Blackwell, 2012; Wilkens, 2009). The disability categories more prevalent in public school districts (e.g. autism, emotional impairments, and intellectual impairments) are typically considered more severe disabilities (Blackwell, 2012; Wilkens, 2009). Additionally, charter schools in Massachusetts enrolled significantly fewer students who are less likely to be enrolled in general education classes (Wilkens, 2009).

A further analysis of state data indicated students receiving special education services in charter schools were educated in full inclusion settings at significantly higher levels than comparison school districts (Blackwell, 2012; Wilkens, 2009). Traditional school districts ranged from 44.9% to 50.8% with regards to placing students in full

inclusion settings, while charter schools ranged from 75.8% to 82.5% for full inclusion placements (Blackwell, 2012). In comparison, substantially separate placements were considerably lower in charter schools ranging from 1.0% in 2007-2008 to 2.0% in 2009-2010, whereas traditional school districts ranged from 29.6% in 2006-2007 to 28.1% in 2008-2009. These differences in student placement represented interesting trends in how students with disabilities were served in charter schools compared to traditional public schools.

A study conducted by Hehir, Grindal and Eidelman (2012), indicated the degree to which students with disabilities were fully included with general education peers was substantially related to MCAS performance when controlling for a host of variables such as, income, race, and English language proficiency. In this study charter schools were not included in the sample since they operate as their own district and including them would confound schools operating independently with districts (Hehir et al., 2012). Secondly, charter schools enrolled a substantially lower number of students with disabilities at the time this report was completed (Hehir et al., 2012). The achievement gains of students with disabilities on state standardized tests, as indicated in the Setren (2015) study, substantiated claims made by Hehir et al. (2012), regarding the benefits of including special education students in the general education classroom. Additional research regarding the benefits of fully including students with disabilities should be conducted and best practices shared if charter schools are showing significant success with using a full inclusion model for their special education programming.

In the areas of compliance, per the Coordinated Program Review conducted by the state and described earlier in this paper, charter schools in the state were no less likely

than public school districts to meet compliance requirements set by the state (Blackwell, 2012). However, when the results for charter schools were examined separate from traditional school districts, nine compliance criteria showed rates less than 60% (Blackwell, 2012). These nine criteria included; individualized education program (IEP) development and content (40.5%); required and optional assessments for initial eligibility determination and reevaluations by qualified personnel (48.6%); completion of progress reports which updated progress on students' goals and benchmarks listed in the IEP (51.3%); timeline determination for eligibility of special education services (52.6%); notice to parents for actions involving identification, evaluation, and/or educational placement (53.5%); review and revision of IEPs completed at least annually (56.8%); and determination of placement, with placement decisions based on the least restrictive environment, which included consideration of services required and location of services to be provided (Blackwell, 2012). These results indicated the need for further technical assistance to ensure students with disabilities are served appropriately in charter schools, which has been a focus of the DESE over the last few years.

### **Rationale for the Study**

This study was designed to add to the existing research on students with disabilities in charter schools. It has been five years since Blackwell (2012) presented his data on Massachusetts charter schools' enrollment, placement and compliance with special education regulations. Studies showed disproportionate enrollment for special education students in charter schools compared to traditional public schools. In the context of skeptical findings from the study conducted by Setren (2015), it is critical to examine which students with disabilities are served in charter schools.



Furthermore, full inclusion programs cannot be the only placement charter schools provide under the IDEA. An analysis of the disability categories served in charter schools is critical. Given the limited amount of research available an analysis of the disability categories served in charter schools and placement of students with disabilities is necessary (Blackwell, 2012; Wilkens, 2009). It is also important to reexamine the extent to which charter schools are satisfying both state and federal regulations as the DESE has been working to support charter schools in fulfilling these obligations with new initiatives to recruit students with disabilities to charter schools. A new and accurate analysis of special education enrollment and placement in the context of special education compliance is critical to inform the debate on whether charter schools are equitably serving students with disabilities.

### CHAPTER III

### METHODOLOGY

The purpose of this study was to expand and extend the work of Blackwell (2012) and Wilkens (2009) regarding representation of students with disabilities in charter schools. This study adds to the existing research by expanding what we know about enrollment, placement and special education compliance under the IDEA for students in Massachusetts' charter schools over the last five years. I extended the work of Blackwell in four ways. First, I conducted the analyses for the years 2010-2016, which were not included in Blackwell's (2012) study. Second, I analyzed the same state level descriptive data examined by Blackwell (2012), but also examined these data at the district level, by comparing enrollment for charter schools with enrollment in Boston Public Schools as the comparison group. Boston was selected since this district had the largest concentration of charter schools in the state and were equally likely to enroll students with disabilities when compared to Boston's traditional public schools. Third, I statistically tested the differences in enrollment and placement between charter schools and public schools. Fourth, I examined special education compliance in charter schools to identify areas of concern under the IDEA regulations. This study was guided by five research questions:

*Research Question 1:* Are there differences between Massachusetts charter schools and charter schools associated local education agencies (LEA) with respect to disability category under the IDEA?

*Research Question 2:* Have the differences in enrollment of students by disability category changed over time in charter schools compared to traditional public schools?

*Research Question 3:* Are there differences between Massachusetts charter schools and charter schools associated local education agencies (LEA) with respect to the placement of students with disabilities in special education programs?

*Research Question 4:* Have the differences in placement of students with disabilities changed over time in charter schools compared to traditional public schools?

*Research Question 5:* Are Massachusetts charter schools compliant with state and federal regulations under the Individuals with Disabilities Education Act (IDEA) (as determined through the state’s Coordinated Program Review process for special education)?

### **Research Design**

I employed two separate but integrated research designs. The first was a correlational study using extant data from the MA DESE “Information Services – Statistical Reports” systems. I created a database from existing data obtained from the DESE Information Services – Statistical Report site for enrollment and placement. For enrollment, logistic regression was used to examine differences in disability categories between charter schools and traditional public schools over six years. For placement, multiple regression was used to examine differences in mean percentages over four years for three separate placement categories, full inclusion, partial inclusion, and substantially separate. I used both descriptive and statistical analyses to examine the data for enrollment and placement over time. To answer research question 1, odds ratios were calculated to determine the likelihood of students with disabilities being enrolled in charter schools compared to traditional public schools for each of the thirteen disability categories. To answer research question 2, I examined the differences on odds ratios for

enrollment over six years. I compared the odds ratios for enrollment using descriptive comparisons only.

To answer question 3, I used multiple regression to examine differences in placement. School type (charter school or traditional public school) was the dichotomous variable and percent in placement was the dependent variable. Specifically, I examined mean percentages for each placement category by school type. I conducted three analyses for each year. The first analysis examined mean percentages for full inclusion placements by school type. The second analysis examined mean percentages for partial inclusion placements by school type. The third analysis examined mean percentages for substantially separate placements by school type. For each analysis, the predictor was school type (0 = public school, 1 = charter school). The criterion was percent of students in each placement (the percentage of students in full inclusion, partial inclusion, substantially separate). For each analysis, the number of students with disabilities in each school was used as a weight. Each percentage reflected the weighted percentage in each school. I used weights in questions 1 and 3 to make calculations on individuals as opposed to total counts because numbers of students were reported as aggregated counts by the state for each district.

I employed a descriptive quantitative design for question 5 to examine compliance with special education requirements under the IDEA in charter schools. A review of CPR reports was conducted and descriptive statistics used to calculate a percentage of compliance under the nine categories reviewed by the MADESE. This analysis included quantifying evaluation reports, creating categorical values for compliance criteria, and interpreting the findings through a descriptive comparison of

those categories across each charter school. Compliance ratings were divided into nine separate categories, as outlined by the MADESE. A percentage was calculated for each charter school in the nine categories included in the sample. These findings were then displayed in tables by percentile ranges, 90%-100; 80%-89%; 70%-79%; and <69%. I calculated the total number of charter schools that fell into each percentile range, to compute a total number of the sample that fell into a specific percentile range with regards to compliance.

### **Massachusetts Descriptive Statistics**

There are currently 80 active charter schools operating in the state of Massachusetts in 36 associated LEAs. Of the 36 associated LEAs, anywhere from 1 to 22 operating charter schools were located within that associated LEA. There were 22 charter schools located in Boston, 38 charter schools in urban areas (not Boston), 14 charter schools in suburban areas, and 4 charter schools in rural areas. Of the 80 active charter schools, approximately 58 have been open ten or more years. Of the 80 active charter schools, 70 are Commonwealth charter schools and 10 are Horace Mann. There are approximately 40,000 students enrolled in charter schools, which was approximately 4% of the public school population in the state. Overall, there were an estimated 980,000 students enrolled in traditional public schools within the state at the time of this study.

### **Sample**

The target population for this study included all charter schools in the Commonwealth of Massachusetts with data collected and maintained by the Massachusetts Department of Elementary and Secondary Education (MADESE) (n=79) and the school districts located in their host communities (n=36) from 2010-2011 up to

and including the 2015-2016 school year. I obtained a list of all charter schools and school districts in the state from the MADESE website (<http://www.doe.mass.edu/infoservices/reports/enroll/>) and the Massachusetts Charter Public School Association for cross reference. All charter schools and their associated traditional public school districts were included in the data set. Associated school districts were identified by determining the location of each charter school and the associated district from that city or town in which the charter school was located. The MADESE listed a total of 80 charter schools in the state, however, data on enrollment and placement were only available for 79 schools. Therefore, the final sample included 79 charter schools and their 36 associated LEA districts. The charter schools omitted from the sample were new charter schools that had not yet opened, therefore data was not yet available for these schools.

For the analysis of special education compliance monitoring, the sample included only charter schools that completed a Coordinated Program Review (CPR) by the MADESE. Since the CPR is completed on a six-year cycle, the most recent CPR report was selected for review. Through the CPR process, charter schools and districts were monitored in 59 areas of special education compliance under special education state and federal regulations (Blackwell, 2012). The monitoring was conducted by a team of people from the MADESE and consisted of a combination of document review, on-site inspections, and in-person interviews with school personnel (Blackwell, 2012). Only charter schools that had undergone the full CPR, as opposed to a mid-cycle review, were selected as part of this sample (n=64). The full CPR review consisted of 59 indicators, compared to the mid-cycle review, which only reviewed indicators that required

corrective action based on the previous full CPR review (Blackwell, 2012). Therefore, to have a representative sample of all state and federal regulations, charter schools that only had a mid-cycle review, or no CPR, were excluded from the sample.

### **Data Collection**

Data for enrollment and placement of students with disabilities were obtained from the Massachusetts Department of Elementary and Secondary Education's (MADESE) website (<http://www.doe.mass.edu/infoservices/reports/enroll/>). The MADESE reported special education data in Excel spreadsheets for each school year. The data used for analysis included the following: enrollment of students with disabilities by disability category and counts for educational placement (e.g. full inclusion, partial inclusion and substantially separate). For comparisons between the charter schools and the associated LEA, I established the associated LEA by identifying the location of the charter school and determining the geographically related LEA that included the charter school's address. In the case of regional school districts, the regional district was used as the associated LEA for the charter school using geographic location. I identified 79 charter schools and 36 associated LEAs for analysis in this sample. For the purposes of this study, only LEAs that had associated charter schools were included in any analyses. This ensured that LEAs without charter schools were not inappropriately included as comparisons to charter schools.

Data relative to enrollment by disability category and educational placement were copied from the MADESE and entered in a master excel spreadsheet. The data collected and maintained from the DESE website included school years ranging from 2010-2011 through 2015-2016 and included information on approximately 40,000 students in 79

charter schools and approximately 500,000 students in the 36 associated LEA districts. I examined the data in two distinct ways. First, I examined students by disability category (which is determined as one of the 13 special education disability categories under the IDEA). Disability categories were coded using 14 distinct categories, with 0 representing students without disabilities. I also coded students by special education status (disability, no disability), with 0 representing students without disabilities. I excluded students in public day, private and residential placements from the sample since these students have severe disabilities and are not served in charter or traditional public schools, therefore, drawing comparisons with this population of students would be inappropriate for the intent of this study. I coded LEAs by type (charter school LEA or public school LEA), with public school LEAs coded as 99 and charter schools coded as 1. Additionally, I created categories for educational placement. I used three distinct categories for placement (Full inclusion, Partial Inclusion, and Substantially Separate), with Full Inclusion coded as 0. Data from this spreadsheet were transferred into IBM SPSS statistics Version 19.0.

For the purposes of this study I divided each charter schools' compliance data from the CPR report into nine separate components based on the nine components outlined in the MADESE CPR report. Data were coded in an Excel spreadsheet. For example, in the city of Boston, there were eighteen charter schools with available CPR data, the data from each of these eighteen schools was divided into nine separate components aligned with the nine CPR components discussed earlier. For example, Component 1, Assessment of Students, had 14 indicators associated with it in the CPR. Each of these 14 indicators received a rating. If charter schools were "commendable" or



“implemented” for that indicator they were coded as 1. If charter schools were rated “partially implemented” or “not implemented” they were coded as 2 for that indicator. Once the indicator rating for each component was determined, a percentage was calculated for that specific component. This resulted in each of the 64 schools in the sample receiving a percentile rating for compliance in each of the nine categories. Commonwealth charter schools operate as an independent LEA and therefore provided a comparable analysis to how a traditional public school district operates for special education purposes. Data on special education compliance monitoring was collected from the CPR reports on the DESE website (<http://www.doe.mass.edu/pqa/review/cpr/reports/>).

### **Analyses**

To answer Research Question 1, I employed logistic regression analyses to examine differences in enrollment. My predictor variables were Disability Category for one set of analyses, and Special Education Status for the other set of analyses. I used the largest category as the reference category. For Disability category, No Disability was the reference category. All other categories were compared to the No Disability category. For Special Education Status, No Special Education was the reference category. The Special Education category was compared to the No Special Education category. Odds ratios were calculated for each of the thirteen disability categories over a six-year span. For sensory impairments (hearing, vision, deaf/blind), the category was collapsed into one category since the sample size was too small to be considered meaningful when looking at each disability category separately.

To answer Research Question 3, I employed multiple regression to compare mean

percentages of placements in charter schools and the associated LEA districts. My predictor variable was School Type and my criterion variable was Percent in Placement. Mean percentages for each placement were compared by school type for school years 2013 -2016. School years 2010-2012 were excluded from the analysis because the state reported data differently and mean percentages could not be calculated for these two years. Three separate analyses were conducted for each placement category, Full Inclusion, Partial Inclusion and Substantially Separate.

To answer Research Question 1, School Type was the criterion variable. I weighted the enrollment by the frequency of students enrolled in each school category to determine odds of enrollment by school type for each disability category and special education category. For Research Question 3, Percent in Placement was the criterion variable. I weighted the Placement by the school for students placed in each placement (Full inclusion, Partial Inclusion, and Substantially Separate).

For Research Questions 2 and 4, descriptive comparisons were made by examining consecutive years of data to identify trends over time. For Research Question 2, odds ratios were compared across years. For Research Question 4, mean percentages were compared across years. Because of the limited changes in percentages over time it was inappropriate to test small differences because significant differences were likely, despite a lack of practical importance (Blackwell, 2012). If I examined trends over a ten-year period, statistical comparisons would be appropriate, however, I could not use data from previous studies to test differences over a ten year period as I used different statistical analyses than Blackwell (2012) . I used descriptive comparisons to ensure I didn't inflate the likelihood of finding a significant finding when one did not exist or was

not interpretable when comparing data across years.

To answer Question 5, I used descriptive statistics to determine if charter schools were following state and federal regulations under the IDEA. When dealing with compliance under the IDEA, drawing comparisons between charter schools and the associated LEA districts did not provide useful comparisons, as all schools are mandated to follow all state and federal regulations. The most recent CPR completed for each charter school was selected, as this represented the most accurate data. The years selected for review ranged from 2009-2010 through 2015-2016. During these school years, any charter school that went through the full CPR process was included in the sample. This resulted in 64 charter schools included in the sample for analysis.

As part of this analysis, I coded each of the 59 criteria rated in the CPR reports in an Excel database created for this study. The MADESE gives each district a rating on a nominal scale of (1) commendable, (2) implemented, (3) partially implemented, (4) not implemented, or (5) not applicable. The compliance rating system defined by the DESE is as follows: *commendable* - any requirement or aspect of the requirement implemented in an exemplary manner significantly beyond the requirements of law or regulation; *implemented* - the requirement is substantially met in all important aspects; *partially implemented* - the requirement, in one or several important aspects, is not entirely met; *not implemented* - the requirement is totally or substantially not met; and *not applicable* - the requirement does not apply to the school district or charter school.

Each of the special education indicators are grouped into nine separate components by the MADESE. These nine components are as follows: (1) assessment of students; (2) student identification and program placement; (3) parent and community

involvement; (4) curriculum and instruction; (5) student support services; (6) faculty, staff and administration; (7) facilities; (8) program evaluation; (9) recordkeeping and fund use. Each indicator was grouped under the corresponding category for analysis. This allowed a percentage to be calculated for each of the nine components based on the number of special education indicators that received a commendable/implemented rating.

First, I calculated and examined compliance rates for each of the 59 special education indicators in each CPR report. The ratings as listed above (commendable, implemented, partially implemented, not implemented, or not applicable), were combined since ratings of “commendable” or “implemented” meant schools were compliant and “partially implemented” or “not implemented”, meant schools were not compliant. The MADESE assigns corrective actions to districts that receive a “partially implemented” or “not implemented” rating, therefore these two categories were collapsed into one. The same for commendable and implemented, both are considered compliant under state and federal regulations and require no corrective action from the district. I used code ratings of “commendable” and “implemented” as 1, “partially implemented” and “not implemented” were coded as 2. In cases where a criterion was rated as “not applicable” I treated that data as “missing” and did not include that criterion as part of the analyses. All data were entered in an Excel spreadsheet and coded per the MADESE’s rating outlined above.

### **Limitations of the Study**

There were limitations to this study that need to be taken into consideration when interpreting the results. First, these results were limited to one state and cannot be generalized to students with disabilities in charter schools in other states throughout the

country. Each state has a separate set of regulations for charter schools that required different enrollment practices than Massachusetts and therefore, these results are applicable only to this state.

A second limitation for placement is this type of analysis does not show which students are educated in specific placements. For example, students with intellectual impairments may be placed in substantially separate programs based on their level of need. This analysis only allows for generalizations regarding placement in charter schools (e.g. full inclusion, partial inclusion and substantially separate). To see which disability types are placed in specific settings, a review of each IEP for each individual student would need to be conducted. The IEP is considered a confidential document and can only be reviewed after a release of information has been signed by the parent. It would not be feasible to review every IEP for every student in the state, nor would every parent be agreeable to have their child's IEP reviewed for research purposes.

A third limitation is parent choice and charter school enrollment. There is no way to determine if parents of students with severe disabilities want to enroll their students in charter schools. Charter schools conduct lotteries for enrollment and parents need to initiate that process on their own behalf. Therefore, there may be lower enrollment for students with severe disabilities in charter schools simply because parents have not attempted to enroll their child or do not believe charter schools can serve their child. Further investigation into reasons why parents of students with severe disabilities do not enroll their child in a charter school would need to be conducted to ensure lower enrollment numbers are not due to parent choice.

A fourth limitation is the method MADESE used to report data for all schools. In

the analysis of placement, mean percentages were compared across years using multiple regression. This analysis was selected because the state reports placement of students in percentages by district and I analyzed the data as they are reported by the state.

Therefore, there are charter schools that vary for each of the three placements studied and the comparisons I made were based on mean percentages for all charter schools.

Comparisons were made based on a range of percentages compared to each specific district percentage. Consequently, some charter schools may be placing students at higher or lower percentages in certain placements, which is not captured using mean percentages for comparison.

Lastly, since data were collapsed into nine categories and a percentage taken from each category for the compliance analysis, it was not possible to determine specifically which special education indicators charter schools received corrective action for. Each charter school may have been cited under a different indicator in the category reviewed. To determine which indicators required corrective action specifically, readers would have to go to the MADESE's website and read each individual report. This created limitations in the recommendations regarding compliance since they are discussed in generalities for each category and not specific indicators charter schools were cited for as was done by Blackwell (2012). Therefore, some charter schools are more compliant with state and federal regulations for special education. These charter schools should be identified and serve as models for other charter schools with regards to compliance under state and federal regulations. Recommendations are provided on based on the nine overarching categories using descriptive statistics

## CHAPTER IV

### RESULTS

#### Enrollment of Students with Disabilities

Table 1 displays descriptive statistics for students with disabilities by disability category enrolled in charter schools and traditional public school districts from 2010-2011 to 2015-2016. Overall, charter schools enrolled fewer students with disabilities (12.7% – 15.1%) than traditional public school districts (18.6% - 19.1%). While charter schools consistently enrolled fewer students with disabilities in eleven out of thirteen disability categories, this was especially evident for students with low-incidence, or severe disabilities (e.g. intellectual impairments, sensory impairments, autism, developmental delays and emotional impairments).

Specifically, an analysis of the six-year span indicated charter schools consistently enrolled disproportionate numbers of students with emotional impairments (0.8% - 1.3%) intellectual impairments (0.5% - 0.6%), developmental delays (0.5% - 0.9%) and autism (0.5% - 0.9%), compared to traditional public schools that enrolled more students with emotional impairments (2.1% - 2.2%), intellectual impairments (1.5% - 1.9%), developmental delays (1.0% - 2.3%) and autism (1.3% - 2.1%). Most students with disabilities attending charter schools were students with communication impairments (2.3% - 2.8%) and specific learning disabilities (4.2% - 4.4%), but still less than traditional public schools' enrollment for students with communication impairments (2.9% - 3.1%) and specific learning disabilities (4.4% - 5.8%). Charter schools enrolled a greater percentage of students with health impairments (1.4% - 2.3%) and neurological impairments (0.7% - 1.0%) than traditional public schools did for health impairments

(1.2% - 1.8%) and neurological impairments (0.6% - 0.7%).

**Table 1. Special Education Disability Category Rates by Academic Years 2011- 2016**

Disability Category	2011	2012	2013	2014	2015	2016
<b>Public Schools</b>						
All Disability (%)	19.1	18.9	18.9	18.6	18.6	18.7
Communication (%)	3.0	3.1	3.1	2.9	2.9	2.9
Specific Learning (%)	5.8	5.2	5.0	4.4	4.4	4.4
Emotional (%)	2.2	2.2	2.2	2.1	2.1	2.1
Health (%)	1.2	1.3	1.5	1.7	1.7	1.8
Developmental (%)	1.0	2.2	2.3	2.3	2.3	2.3
Intellectual (%)	1.9	1.9	1.7	1.6	1.6	1.5
Autism (%)	1.3	1.4	1.6	2.0	2.0	2.1
Multiple Disabilities (%)	0.4	0.4	0.5	0.6	0.6	0.4
Neurological (%)	0.6	0.6	0.7	0.7	0.7	0.7
Physical (%)	0.2	0.2	0.2	0.1	0.1	0.1
Hearing (%)	0.2	0.2	0.2	0.2	0.2	0.2
Vision (%)	0.1	0.1	0.1	0.1	0.1	0.1
Deaf/Blind (%)	0.0	0.0	0.0	0.0	0.0	0.0
<b>Charter Schools</b>						
All Disability (%)	12.7	13.0	13.3	15.0	15.0	15.1
Communication (%)	2.8	2.5	2.6	2.4	2.4	2.3
Specific Learning (%)	4.2	4.5	4.3	4.3	4.3	4.4
Emotional (%)	0.8	0.8	1.0	1.3	1.3	1.3
Health (%)	1.4	1.5	1.8	2.3	2.3	2.1
Developmental (%)	0.5	0.5	0.6	0.9	0.9	0.8
Intellectual (%)	0.5	0.6	0.5	0.6	0.6	0.6
Autism (%)	0.5	0.6	0.6	0.9	0.9	0.9
Multiple Disabilities (%)	0.9	0.8	0.7	0.4	0.4	0.4
Neurological (%)	0.7	0.9	0.9	0.9	0.9	1.0
Physical (%)	0.2	0.2	0.2	0.2	0.2	0.2
Hearing (%)	0.0	0.0	0.1	0.0	0.0	0.0
Vision (%)	0.1	0.0	0.1	0.0	0.0	0.0
Deaf/Blind (%)	0.0	0.0	0.0	0.0	0.0	0.0

During school year 2010-2011, charter schools enrolled significantly fewer students with disabilities (12.7%) compared to traditional public school districts (19.1%). While the percentage of students with low-incidence disabilities attending charter schools were even lower compared to traditional public school districts. Specifically, charter



schools enrolled very low percentages of students with emotional impairments (0.8%), intellectual impairments (0.5%), developmental delays (0.5%) and autism (0.5%). In 2010-2011 traditional public schools enrolled a higher percentage of students with emotional impairments (2.2%), intellectual impairments (1.9%), developmental delays (1.0%) and autism (1.3%). However, charter schools enrolled a higher percentage of students with health impairments (1.4%) and neurological impairments (0.7%) than traditional public school districts for health impairments (1.2%) and neurological impairments (0.6%)

During school year 2011-2012, charter schools enrolled significantly fewer students with disabilities (13.0%) compared to traditional public school districts (18.9%). Like the previous year, the percentage of students with low-incidence disabilities attending charter schools was lower compared to traditional public school districts. Specifically, charter schools again enrolled less than 1% of students with emotional impairments (0.8%), intellectual impairments (0.6%), developmental delays (0.5%) and autism (0.6%), with only marginal increases in the percentage of students with intellectual impairments and autism attending charter schools from the previous school year. The percentage of students with low-incidence disabilities enrolled in traditional public school districts did not change significantly from the previous year; emotional impairments (2.2%), intellectual impairments (1.9%), developmental delays (2.2%) and autism (1.4%). Most students with disabilities attending charter schools were students with communication impairments (2.5%) and specific learning disabilities (4.5%). Charter schools again enrolled a larger percentage of students with health impairments (1.5%) and neurological impairments (0.9%) compared to traditional public schools for

health impairments (1.3%) and neurological impairments (0.6%).

During school year 2012-2013 charter schools again enrolled fewer students with disabilities (13.3%) than traditional public school districts (18.9%). Like previous years, significantly lower percentages of students with low-incidence disabilities were enrolled in charter schools; emotional impairments (1.0%); intellectual impairments (0.5%), developmental delays (0.6%) and autism (0.6%) compared to traditional public school districts; emotional impairments (2.2%); intellectual impairments (1.7%), developmental delays (2.3%) and autism (1.6%). Most students enrolled in charter schools were students with communication impairments (2.6%) and specific learning disabilities (4.3%). Charter schools enrolled a higher percentage of students with health impairments (1.8%) and neurological impairments (0.9%) compared to traditional public schools for health impairments (1.5%) and neurological impairments (0.7%).

During school year 2013-2014 charter schools enrolled fewer students with disabilities (15.0%) than traditional public school districts (18.6%), however, the percentage of students with disabilities attending charter schools went up from previous years by almost 2%, where traditional public school districts remained relatively stable. While the total percentage of students with disabilities enrolled in charter schools increased, the percentage of students with low-incidence disabilities; emotional impairments (1.3%); intellectual impairments (0.6%), developmental delays (0.9%) and autism (0.9%) continued to be significantly less than the percentage of students with low-incidence disabilities enrolled in traditional public school districts; emotional impairments (2.1%); intellectual impairments (1.6%), developmental delays (2.3%) and autism (2.0%). Like previous years, most students with disabilities enrolled in charter

schools were students with communication impairments (2.4%) and specific learning disabilities (4.3%). The largest increase for students with disabilities attending charter schools was seen in the health impairment category (2.3%), up almost 1 percent since the previous school year, compared to traditional public school districts that enrolled a lower percentage of students with health impairments (1.7%) compared to charter schools. Charter schools also continued to enroll a higher percentage of students with neurological impairments (0.9%) compared to traditional public school districts (0.7%).

During school year 2014-2015 the percentage of students with disabilities attending charter schools (15.0%) did not change and was less than the percentage of students with disabilities attending traditional public school districts (18.6%). Like previous years, the percentage of students with low-incidence disabilities enrolled in charter schools; emotional impairments (1.3%); intellectual impairments (0.6%), developmental delays (0.9%) and autism (0.9%) was significantly less than the percentage of students with low-incidence disabilities enrolled in traditional public school districts; emotional impairments (2.1%); intellectual impairments (0.6%), developmental delays (2.3%) and autism (0.9%). Most students enrolled in charter schools were diagnosed with communication impairments (2.4%); specific learning disabilities (4.3%) and health impairments (2.3%). Charter schools continued to enroll a higher percentage of students with health impairments (2.3%) and neurological impairments (0.9%) compared to traditional public school districts for health impairments (1.7%) and neurological impairments (0.7%).

During school year 2015-2016, the percentage of students with disabilities attending charter schools (15.1%) was less than the percentage of students with

disabilities attending traditional public school districts (18.7%). Again, as in the previous five years, the percentage of students enrolled in charter schools with low-incidence disabilities; emotional impairments (1.3%); intellectual impairments (0.6%), developmental delays (0.8%) and autism (0.9%), was significantly less than the percentage of students with low-incidence disabilities enrolled in traditional public school districts; emotional impairments (2.1%); intellectual impairments (1.5%), developmental delays (2.3%) and autism (2.1%). Most students enrolled in charter schools were diagnosed with communication impairments (2.3%); specific learning disabilities (4.4%); and health impairments (2.1%). Charter schools enrolled a higher percentage of students with health impairments (2.1%) and neurological impairments (1.0%) than traditional public schools for health impairments (1.8%) and neurological impairments (0.7%).

#### **Summary of Descriptive Statistics for Enrollment by Disability Category**

Over the span of six years, the percentage of students with disabilities attending charter schools increased, however, charter schools continued to enroll a smaller percentage of students with disabilities compared to traditional public school districts. Furthermore, while the total percentage of students with disabilities increased over time, the percentage of students with low incidence or severe disabilities attending charter schools increased only marginally. Specifically, the percentage of students with intellectual impairments enrolled in charter schools ranged from 0.5% - 0.6% over the course of six years compared to the percentage enrolled in traditional public school districts which ranged from 1.5% - 1.9% over the span of six years. The percentage of students attending charter schools diagnosed with emotional impairments ranged from 0.8% - 1.3% over the span of six years, compared to traditional public school districts

which ranged from 2.1 - 2.2% over the same six-year span. It should be noted the percentage of students with emotional impairments enrolled in charter schools increased over six years, but was not equal to the percentage of students with emotional impairments enrolled in traditional public school districts. Both traditional public school districts and charter schools enrolled a small percentage of students with sensory impairments (e.g. hearing impairments, vision impairments and deaf/blind), however there were several years where charter schools did not enroll any students with sensory impairments. This included school years 2011-2012, 2013-2014, 2014-2015 and 2015-2016.

Lastly, there was minimal change in the percentage of students enrolled in charter schools with developmental delays, which ranged from 0.5% – 0.9% and autism which ranged from 0.5% - 0.9% compared to traditional public school districts which experienced a steady increase in the percentage of students with autism, starting at 1.3% in 2010-2011 and increasing to 2.1% by the 2015-2016 school year. Interestingly, charter schools consistently enrolled a higher percentage of students with health impairments and neurological impairments than traditional public school districts, with steady increases in the percentage of students with health impairments over the six-year span ranging from 1.4% -2.3% and neurological impairments ranging from 0.7% - 1.0%. Traditional public school districts enrolled a smaller percentage of students with health impairments, ranging from 1.2% - 1.8% and neurological impairments ranging from 0.6% - 0.7%.

### **Logistic Regression Analyses for Enrollment of Students with Disabilities**

Table 2 provides estimates from logistic regression models regarding the likelihood of students with disabilities to be enrolled in charter schools. As shown in Table 2, for the charter schools examined in the 2010-2011 school year, students with

disabilities were less likely to be enrolled in charter schools with an odds ratio of 0.616 ( $p < .001$ ), which indicated students with disabilities were disproportionately represented in charter schools and were more likely to attend traditional public schools during school year 2010-2011. Specifically, students with disabilities were 6/10 as likely to be enrolled in charter schools compared to traditional public schools.

**Table 2. Odds Ratios of Charter School Enrollment by Disability Category**

	2011	2012	2013	2014	2015	2016
<b>Disability Category</b>						
All Disability	0.616***	0.640***	0.658***	0.772***	0.772***	0.775***
Sensory	0.274***	0.280***	0.439***	0.363***	0.363***	0.314***
Health	1.110	1.053	1.132	1.284***	1.284***	1.132***
Autism	0.381***	0.379***	0.376***	0.426***	0.426***	0.395***
Specific Learning	0.670***	0.803	0.804	0.950	0.950	0.971
Communication	0.839***	0.757***	0.803***	0.778***	0.778***	0.783***
Intellectual	0.381***	0.379***	0.376***	0.426***	0.426***	0.395***
Emotional	0.355***	0.364***	0.411***	0.611***	0.611***	0.594***
Developmental	0.226***	0.200***	0.225***	0.375***	0.375***	0.311***
Physical	0.985	0.990	1.241	1.242	1.242	1.341
Neurological	1.137	1.376***	1.246***	1.223***	1.223***	1.327***

Each year charter schools enrolled more students with disabilities, however, students with disabilities were less likely to be enrolled in charter schools despite these increases when compared to traditional public schools. By school year 2015-2016, students with disabilities were less likely to be enrolled in charter schools with an odds ratio of 0.775 ( $p < .001$ ), or 8/10 as likely to be enrolled in charter schools as traditional public schools. Despite the increase over six years, students with disabilities were still less likely to be enrolled in charter schools overall (OR range 0.616 – 0.775). All years were statistically significant ( $p < .001$ ). Corresponding tables for each school year are included in the Appendix and provide detailed information of the variables in the analyses for reference.

## **Odd Ratios for Enrollment by Disability Category**

Table 2 provides estimates from logistic regression models by disability category. To measure and compare disability category enrollment by school type, odds ratios were calculated. This ratio compared the likelihood of a student identified under a specific disability category being enrolled in a charter school. As shown in Table 2 above, students with low-incidence disabilities (e.g. intellectual, emotional, developmental delays, autism and sensory impairments) were less likely to be enrolled in charter schools.

### Intellectual Impairment

Students with intellectual impairments were less likely to be enrolled in charter schools (OR range = 0.381-0.426). All years were statistically significant ( $p < .001$ ). In school year 2010-2011 students with intellectual impairments were 4/10 as likely to be enrolled in charter schools and by 2015-2016 they were still 4/10 as likely to be enrolled in charter schools compared to traditional public schools. This indicated there was no difference in the likelihood of students with intellectual impairments being enrolled in charter schools over the past six years.

### Autism

Students with autism were less likely to be enrolled in charter schools (OR range = 0.381-0.426). All years were statistically significant ( $p < .001$ ). In school year 2010-2011 students with autism were 4/10 as likely to be enrolled in charter schools and by 2015-2016 they were still 4/10 as likely to be enrolled in charter schools compared to traditional public schools. This indicated there was no difference in the likelihood of students with autism being enrolled in charter schools over the past six years.

### Emotional Impairment

Students with emotional impairments were less likely to be enrolled in charter schools (OR range = 0.355-0.611). All years were statistically significant ( $p < .001$ ). In school year 2010-2011 students with emotional impairments were 4/10 as likely to be enrolled in charter schools and by 2015-2016 were 6/10 as likely to be enrolled in charter schools compared to traditional public schools. This indicated there was a small change in the likelihood of students with emotional impairments being enrolled in charter schools over the past six years.

### Sensory Impairment

The sensory impairment category was collapsed to include hearing impairments, vision impairments and students who are deaf/blind, since the sample size for each category was too small to be statistically significant. Students with sensory impairments were less likely to be enrolled in charter schools over the six-year span (OR range = 0.274-.439). All years were statistically significant ( $p < .001$ ). In school year 2010-2011 students with sensory impairments were 3/10 as likely to be enrolled in charter schools and in 2015-2016 students with sensory impairments were still 3/10 as likely to be enrolled in charter schools compared to traditional public schools. This indicated there was no change in enrollment of students with sensory impairments in charter schools over the last six years.

### Developmental Delay

Students with developmental delays were less likely to be enrolled in charter schools (OR range = .226-.375). All years were statistically significant ( $p < .001$ ). In



school year 2010-2011 students diagnosed with a developmental delay were 2/10 as likely to be enrolled in charter schools and by 2015-2016 students diagnosed with a developmental delay were 3/10 as likely to be enrolled in charter schools compared to traditional public schools. This indicated a minimal change in the enrollment of students with developmental delays in charter schools over the past six years.

#### Specific Learning Disability

In 2010-2011, students with specific learning disabilities were less likely to be enrolled in charter schools (OR= 0.67). Only school year 2010-2011 was statistically significant ( $p < .001$ ). In 2010-2011 students with specific learning disabilities were 7/10 as likely to be enrolled in a charter school. The enrollment of students with specific learning disabilities increased significantly by school year 2015-2016, with an OR of 0.971, which indicated students with specific learning disabilities were equally likely to be enrolled in charter schools compared to public schools. This was the only disability category to have students equally likely to be enrolled in charter schools compared to traditional public school districts during the six-year span.

#### Communication Impairment

Students with communication impairments were less likely to be enrolled in charter schools, however, the odds of students with communication impairments to be enrolled were marginally less than traditional public school districts (OR range = .757-.838). All years were statistically significant ( $p < .001$ ). In school year 2010-2011 students with communication impairments were 8/10 as likely to be enrolled in charter schools and by 2015-2016 students with communication impairments were still 8/10 as likely to be enrolled in charter schools compared to traditional public schools. This indicated there

was no change in the enrollment of students with communication impairments over the past six years. Therefore, the likelihood of students with communication impairments to be enrolled in charter schools was high compared to other disability categories, however, students with communication impairments were less likely to be enrolled in charter schools overall. Decreases were noted in the likelihood of students with communication impairments to be enrolled in charter schools over the six-year span from 2010-2011 (OR= 0.839) to 2015-2016 (OR= 0.783).

#### Health Impairment

Students diagnosed with health impairments were more likely to be enrolled in charter schools compared to traditional public schools (OR range = 1.132-1.284). School years 2013-2014, 2014-2015 and 2015-2016 were statistically significant ( $p < .001$ ). This indicated charter schools were more likely to enroll students with health impairments over the last six years than traditional public school districts.

#### Neurological Impairment

Students diagnosed with neurological impairments were more likely to be enrolled in a charter school (OR range = 1.327 – 1.376) for all school years except for 2010-2011. All years, except 2010-2011 were statistically significant ( $p < .001$ ). Students with neurological impairments were more likely to be enrolled in charter schools over the six-year span, with the likelihood of students with neurological impairments being enrolled in charter schools increasing during this time.

### **Summary of Enrollment by Disability Category**

Students with severe disabilities, specifically emotional impairments, intellectual impairments, autism, developmental delays and sensory impairments were less likely to

be enrolled in charter schools over the six-year span. Students with specific learning disabilities were equally likely to be enrolled in charter schools. Students with communication impairments were only 8/10 as likely to be enrolled in charter schools, despite descriptive statistics showing enrollment was almost equally likely between the two school types. Students with health impairments and neurological impairments were more likely to be enrolled in charter schools than traditional public schools over the six-year span.

### **Odd Ratios for Enrollment by District-to-Charter Comparisons**

Table 3 provides estimates from logistic regression models regarding the likelihood of students with disabilities to be enrolled in charter schools compared to a comparison district, Boston, for school year 2015-2016. The most recent school year was selected for analysis as this would reflect the most current enrollment data collected by the MADESE. Prior school years were not included as it was determined enrollment for students with disabilities increased in charter schools over the six-year span and therefore calculating odds ratios for previous years by district would be redundant.

As mentioned above, Boston was not reported in the table because it was the comparison district for all other districts in this analysis. Boston was the comparison district because it was the largest district and had the largest number of charter schools in the state. Consequently, they had the largest number of students, which is the requirement for a comparison group (Tabachnick & Fidell, 2004). Boston was also an appropriate comparison group because charter schools had odds of enrolling students with disabilities that were closer to the public school odds. The percentage of students with disabilities in Boston Public Schools was 19.5%, while the percentage in Boston charter schools was

17.3%, a 2.2% difference. The odds of students with disabilities in charter schools was 0.21, while the odds in Boston Public Schools was 0.24. The odds ratio for Boston charter schools was 0.86, indicating charter schools were almost 9/10 as likely to enroll students with disabilities as public schools, which was relatively comparable. Consequently, this represented an ideal comparison to determine if odds ratios in other districts were substantially different than the odds ratio in Boston.

One important consideration in thinking about the districts in the table below is the state classification of Commissioner's Districts. Per the MADESE, ten districts combine to form a cohort known as the Commissioner's Districts. These districts are: Boston, Brockton, Fall River, Holyoke, Lawrence, Lowell, Lynn, New Bedford, Springfield and Worcester. Per the MADESE these urban districts are identified based on the following criteria: (1) 10,000 or more students (Holyoke is an exception); (2) highest poverty and subgroup enrollment in the state; (3) three or more schools in Corrective Action or Restructuring in the aggregate for ELA, math or both and; (4) in Corrective Action either in the aggregate or for subgroups as a district.

Special education comprises one subgroup as referenced in the indicators above. Historically, urban public school districts enroll a higher percentage of students with disabilities ranging from 14% on the low end to 26% on the high end (MADESE, 2016). According to the MADESE, these districts also have historically higher drop-out rates and lower achievement scores on state standardized assessments. Currently two of the ten urban districts, Holyoke and Lawrence, have been designated chronically underperforming ("Level 5") and placed in receivership by the MADESE. Brockton is not included in the analysis because there are no charter schools located in Brockton in

the DESE reports. In Table 3, the Commissioner's Districts are in bold and italics.

**Table 3. Odd Ratios of Charter School Enrollment District-to-Charter Comparison for SY 2015-2016**

District	Odds Ratio	Sig
Adams	1.024	0.867
Ayer Shirley	0.582***	<0.001
Barnstable	0.625***	<0.001
Cambridge	0.634***	<0.001
Chelsea	1.472***	<0.001
Chicopee	0.423	<0.001
Easthampton	0.913	0.64
Everett	0.516**	0.001
<b><i>Fall River</i></b>	<b><i>0.641***</i></b>	<b><i>&lt;0.001</i></b>
Fitchburg	0.863	0.284
Foxborough	0.516***	<0.001
Framingham	0.991	0.942
Franklin	0.595**	0.001
Greenfield	0.976	0.902
Hadley	0.477**	0.001
Haverhill	0.637***	<0.001
<b><i>Holyoke</i></b>	<b><i>0.617***</i></b>	<b><i>&lt;0.001</i></b>
<b><i>Lawrence</i></b>	<b><i>0.345***</i></b>	<b><i>&lt;0.001</i></b>
<b><i>Lowell</i></b>	<b><i>0.84</i></b>	<b><i>0.032</i></b>
<b><i>Lynn</i></b>	<b><i>0.742***</i></b>	<b><i>&lt;0.001</i></b>
Malden	0.86	0.66
Marblehead	0.627	0.009
Marlborough	0.211***	<0.001
Martha's Vineyard	1.313	0.171
Monomoy	1.022	0.906
<b><i>New Bedford</i></b>	<b><i>0.615***</i></b>	<b><i>&lt;0.001</i></b>
Newburyport	0.876	0.486
Norwell	0.979	0.869
Plymouth	0.656***	<0.001
Salem	0.916	0.468
Saugus	0.507**	0.001
South Hadley	1.769***	<0.001
<b><i>Springfield</i></b>	<b><i>0.58***</i></b>	<b><i>&lt;0.001</i></b>
Tyngsborough	1.386	0.004
<b><i>Worcester</i></b>	<b><i>0.535***</i></b>	<b><i>&lt;0.001</i></b>

Table 3 shows 19 out of 35 charter schools were significantly less likely to enroll students with disabilities compared to Boston. This was especially relevant in the Commissioner's districts, in which seven of the ten districts identified (Fall River, Holyoke, Lawrence, Lynn, New Bedford, Springfield and Worcester) were less likely to enroll students with disabilities compared to Boston. These districts are in urban settings, which traditionally enroll a larger percentage of students with disabilities. Out of 35 districts sampled, only two districts were more likely to enroll students with disabilities (South Hadley and Chelsea) when compared to Boston (OR = 1.472 and 1.769, respectively).

Table 3 highlights the odds ratios of enrollment for students with disabilities in the Commissioner's Districts. Students with disabilities were less likely to be enrolled in charter schools in seven of the Commissioner's districts (OR range = 0.345-0.742), as mentioned above. The OR was lowest in Lawrence, where students with disabilities were 3/10 as likely to be enrolled in charter schools than in traditional public school districts. The OR was highest in Lynn, where students with disabilities were just 7/10 as likely to be enrolled in charter school than in traditional public school districts.

### **Placement of Students with Disabilities**

I used multiple regression analyses to examine differences between charter schools and public schools regarding placement of students with disabilities in Full Inclusion, Partial Inclusion, and Substantially Separate settings. MADESE defined Full Inclusion placements for students who spend 80% or more of their school day with general education peers; Partial Inclusion for students who are removed from the general

education setting at least 21% of the school day, but not more than 60% of the time and; Substantially Separate placements for students who have all IEP services provided outside the general education classroom for more than 60% of the school day. I conducted separate analyses for each district for four school years (2012-2013 to 2015-2016). School years 2010-2011 and 2011-2012 were excluded from analysis as the MADESE used a different data collection and reporting process that could not easily be translated into SPSS for analysis using regression. I used the number of students as a weight for the analyses so that SPSS could interpret the aggregated counts as individuals within each category. For each analysis, School Type was the dichotomous predictor (Charter, Public School), and Placement was the criterion, with the percentage of students in a placement as the measure of placement. In each analysis, I tested the mean difference in the percent of students with disabilities in each of the three potential placements, full inclusion, partial inclusion and substantially separate.

#### Full Inclusion

As shown in Table 4 there were some changes in the mean for Full Inclusion from 2013 to 2016. Specifically, the mean for public school districts increased from 46.5 to 52.9, which indicated an increase in the percentage of students in Full Inclusion placements in public school districts. There was some variation in the mean for charter schools, with an increase from 81.5 in 2013 to 83.8 in 2016. I found significant differences in the placement of students with disabilities in Full Inclusion for each year. Charter schools had significantly higher percentages of students with disabilities placed in Full Inclusion placements each year. The effect sizes (ES) were small in 2013 to 2015. The ES was small to moderate in 2016.

**Table 4. Multiple Regression Analyses: Full Inclusion Placements from 2013-2016**

<b>Year</b>	<b>School Type</b>	<b>Mean</b>	<b>Std. Dev</b>	<b>F</b>	<b>Sig</b>	<b>ES</b>
2013	Charter	81.5	25.1	16562	<0.001	.222
	Public	45.5	16.1			
2014	Charter	79.4	20.9	16435	<0.001	.217
	Public	52.5	14.6			
2015	Charter	79.2	21.1	22427	<0.001	.275
	Public	51.2	12.3			
2016	Charter	83.8	17.5	37092	<0.001	.386
	Public	52.9	10.7			

Partial Inclusion

As shown in Table 5 there were some changes in the mean for Partial Inclusion from 2013 to 2016. Specifically, the mean for public schools decreased from 21.0 to 15.1, which indicated a decrease in the percentage of students placed in Partial Inclusion in public schools. There was also some variation in the mean for charter schools with a decrease from 14.8 in 2013 to 12.5 in 2016. I found differences in the placement of students with disabilities in Partial Inclusion placements for each year. Public school districts had slightly higher percentages of students with disabilities placed in Partial Inclusion settings each year. However, the effect sizes were too small to be considered meaningful. I interpret this as both public school districts and charter schools have decreased the percentage of students in Partial Inclusion placements as both schools have increased the percentage of students in Full Inclusion placements over the last four years. However, there were minimal differences between both charter schools and public school districts in the percentage of students placed in Partial Inclusion by 2016.



**Table 5. Multiple Regression Analyses: Partial Inclusion from 2013-2016**

<b>Year</b>	<b>School Type</b>	<b>Mean</b>	<b>Std. Dev</b>	<b>F</b>	<b>Sig</b>	<b>ES</b>
2013	Charter	14.8	20.8	798	<0.001	.014
	Public	21.0	12.5			
2014	Charter	15.1	16.4	389	<0.001	.007
	Public	18.9	13.7			
2015	Charter	15.3	16.7	48	<0.001	.001
	Public	16.3	9.7			
2016	Charter	12.5	15.5	462	<0.001	.008
	Public	15.1	7.6			

Substantially Separate

As shown in Table 6 there were some changes in the mean for Substantially Separate placements from 2013 to 2016. Specifically, the mean for public school districts decreased from 25.1 in 2013 to 23.4 in 2016, which indicated a decrease in the percentage of students placed in Substantially Separate settings in public school districts. There was little variation in the mean for charter schools which ranged from 3.6 in 2013 to 3.7 in 2016. I found significant differences in the placement of students with disabilities in Substantially Separate placements for each year. Public school districts had significantly higher percentages of students with disabilities placed in Substantially Separate settings compared to charter schools. The effect sizes were small for 2013 through 2015, with small to moderate ES for 2016.

**Table 6. Multiple Regression Analyses: Substantially Separate from 2013-2016**

<b>Year</b>	<b>School Type</b>	<b>Mean</b>	<b>Std. Dev</b>	<b>F</b>	<b>Sig</b>	<b>ES</b>
2013	Charter	3.6	9.5	15682	<0.001	.213
	Public	25.1	10.4			
2014	Charter	4.6	7.6	19487	<0.001	.247
	Public	23.4	10.0			
2015	Charter	4.7	7.7	22151	<0.001	.273
	Public	24.2	9.6			
2016	Charter	3.7	6.9	23363	<0.001	.283
	Public	23.4	9.4			

### **Analysis of Charter Schools Coordinated Program Review**

Table 7 provides a descriptive analysis of charter schools' compliance with state and federal special education regulations under the IDEA. There are nine separate tables for each of the nine components evaluated under the MADESE CPR reporting process. As shown in Table 7 for Component I: Assessment of Students, thirty-three (51%) charter schools reviewed (n=64) were 90-100% compliant in this area. This means out of 14 special education (SE) indicators listed in Table 7 under Component I, half of the charter schools in the state were cited by the MADESE for corrective action in at least two of the fourteen indicators. Seventeen (27%) charter schools were 80-89% compliant and five (8%) charter schools were 70-79% compliant with the SE indicators under Component I. Out of 64 charter schools reviewed nine (14%) were less than 69% compliant and were cited for corrective action in five or more of the fourteen SE indicators under Component I, Assessment of Students.

Under Component I, Assessment of Students, the category indicators consisted of the special education eligibility process, conducting appropriate assessments to determine eligibility, adherence to timelines and review or revision of IEPs. The MADESE also

evaluated if transition services were discussed at team meetings and if students' progress toward goals and benchmarks in the IEP were monitored and student progress reported to parents. Compliance under SE indicators 1-14 ensured students were appropriately assessed in all areas of suspected disability and IEP teams met appropriate timelines for assessment and eligibility determination. The MADESE also determined if the appropriate team members were invited to the IEP meeting and if students were reevaluated within state mandated guidelines.

**Table 7. Descriptive Analyses for CPR: Compliance Levels Presented by Ranges – Component I - Assessment of Students**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
<b>Assessment of Students</b> <ul style="list-style-type: none"> <li>• SE 1: Assessments are appropriately selected and interpreted for students referred for evaluation</li> <li>• SE 2: Required and optional assessments</li> <li>• SE 3: Special requirements for determination of specific learning disability</li> <li>• SE 4: Reports and assessment results</li> <li>• SE 5: Participation in general state and district-wide assessment programs</li> <li>• SE 6: Determination of transition services</li> <li>• SE 7: Transfer of parental rights at age of majority and student participation and consent at the age of majority</li> <li>• SE 8: IEP Team composition and attendance</li> <li>• SE 9: Timelines for determination of eligibility and provision of documents to parents</li> <li>• SE 9A: Elements of the eligibility determination; general education accommodations and services for ineligible students</li> <li>• SE 10: End of school year</li> </ul>	51%	27%	8%	14%

evaluations <ul style="list-style-type: none"> <li>• SE 11: School district response to parent’s request for independent educational evaluation</li> <li>• SE 12: Frequency of evaluation</li> <li>• SE 13: Progress reports and content</li> <li>• SE 14: Review and revision of IEPs</li> </ul>				
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As shown in Table 8, Component II: Student Identification and Program Placement, there are eight SE indicators. Twenty-six (40%) charter schools (n=64) received a compliance rating between 90-100% from the MADESE. Consequently, thirty-eight (60%) charter schools were cited in at least one of eight SE indicators. Nineteen (30%) charter schools were 80-89% compliant and nine (14%) charter schools were 70-79% compliant under Component II. Out the total sample reviewed, ten (15%) charter schools were less than 69% compliant and cited for corrective action under SE indicators 15-22.

The indicators in this category consisted of Child Find, IEP development, determining the least restrictive environment, as well as, IEP implementation, respectively. Child Find referred to the district’s efforts to ensure parents and school staff were aware if a child is suspected of having a disability, then the school is mandated to evaluate the student in all areas of suspected disability. Once all assessments were completed, the team must convene and determine eligibility. Component II encompassed the core of IEP development and was critical to ensuring students received the appropriate supports and services through their IEP.

**Table 8. Descriptive Analyses for CPR: Compliance Levels Presented by Ranges – Component II: Student Identification and Program Placement**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
Student Identification and Program Placement <ul style="list-style-type: none"> <li>• SE 15: Outreach by the school district</li> <li>• SE 16: Screening</li> <li>• SE 18A: IEP development and consent</li> <li>• SE 18B: Determination of placement; provision of IEP to parent</li> <li>• SE 19: Extended evaluation</li> <li>• SE 20: Least restrictive program selected</li> <li>• SE 21: School day and school year requirements</li> <li>• SE 22: IEP implementation and availability</li> </ul>	40%	30%	14%	15%

As shown in Table 9, Component III: Parent and Community Involvement, there are eight SE indicators. Twenty-four (37%) charter schools (n=64) received a compliance rating ranging from 90-100% from the MADESE. Seventeen (27%) charter schools received a compliance rating that ranged from 80-89% and fifteen (23%) charter schools received a compliance rating that ranged from 70-79% under this category. Therefore, 32 charter schools were cited for corrective action with SE indicators 24-32 in at least one out of the eight SE indicators reviewed. Of the total sample, eight (13%) charter schools in the state were <69% compliant with SE indicators 24-32.

The indicators in this category included parent participation at meetings and parent consent to evaluate, as well as, ensuring all documents were translated into the parents’ native language. This section also included using the Board of Special Education Appeals (BSEA) dispute resolution process when the district and parent could not agree on a proposed IEP and ensuring a Parent Advisory Council (PAC) was established for

each charter school to advocate for students with disabilities in the district.

**Table 9. Descriptive Analyses for CPR: Compliance Levels Presented by Ranges – Component III - Parent and Community Involvement**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
Parent and Community Involvement <ul style="list-style-type: none"> <li>• SE 24: Notice to parent regarding proposal or refusal to initiate or change the identification, evaluation, or educational placement of the student or the provision of FAPE</li> <li>• SE 25: Parental consent</li> <li>• SE 25B: Resolution of Disputes</li> <li>• SE 25A: Sending of copy of notice to Special Education Appeals</li> <li>• SE 26: Parent participation in meetings</li> <li>• SE 27: Content of Team meeting notice to parents</li> <li>• SE 29: Communications are in English or the primary language of the parent</li> <li>• SE 32: Parent Advisory Council for special education</li> </ul>	37%	27%	23%	13%

As shown in Table 10, Component IV: Curriculum and Instruction, fifty-six (88%) charter schools received a compliance rating ranging 90-100% by the MADESE. This means most charter schools (n=64) were fully implementing all six SE indicators 33-41. Five charter schools (8%) received a compliance rating ranging between 80-89% and one charter school (1%) received a compliance rating ranging between 70-79%. There were two charter schools (3%) with compliance ratings that were <69% under indicators 33-41. This meant that out of six SE indicators, these two charter schools were not compliant with 4 or more of the indicators reviewed.

These indicators included offering a continuum of special education placements and services for students with disabilities, assistive technology and ensuring special

education group sizes fit within the state regulations for both grade and age span. There is also an indicator that assessed whether students with disabilities had opportunities to be included in the general education curriculum.

**Table 10. Descriptive Analyses for CPR: Compliance Levels Presented by Ranges – Component IV - Curriculum and Instruction**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
Curriculum and Instruction <ul style="list-style-type: none"> <li>• SE 33: Involvement in the general curriculum</li> <li>• SE 34: Continuum of alternative services and placement</li> <li>• SE 35: Assistive technology; specialized materials and equipment</li> <li>• SE 36: IEP implementation, accountability and financial responsibility</li> <li>• SE 40: Instructional grouping requirements for students aged 5 and older</li> <li>• SE 41: Age span requirements</li> </ul>	88%	8%	1%	3%

As shown in Table 11, Component V: Student Support Services, there were seven SE indicators. Forty-three (67%) charter schools (n=64) were 90-100% compliant in this category. While seventeen (27%) charter schools fell within the 80-89% compliance range and no charter schools fell in the 70-79% compliance range. There were four (6%) charter schools that fell into the <69% range, which meant they were not compliant in at least 4 out of the seven SE indicators 43-49 rated by the MADESE. This category consisted of ensuring behavioral interventions were utilized, along with following the state regulations for suspending students with disabilities and ensuring students with disabilities had access to the same programs and activities as their general education peers.

**Table 11. Descriptive Analyses for CPR: Compliance Levels Presented by Ranges – Component V - Student Support Services**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
Student Support Services <ul style="list-style-type: none"> <li>• SE 43: Behavioral interventions</li> <li>• SE 44: Procedure for recording suspensions</li> <li>• SE 45: Procedures for suspension up to 10 days and after 10 days: General requirements</li> <li>• SE 46: Procedures for suspension of students with disabilities when suspensions exceed 10 consecutive school days or a pattern has developed for suspensions exceeding 10 cumulative days; responsibilities of the Team, responsibilities of the district</li> <li>• SE 47: Procedural requirements applied to students not yet determined to be eligible for special education</li> <li>• SE 48: Equal opportunity to participate in educational, nonacademic, extracurricular and ancillary programs, as well as participation in regular education</li> <li>• SE 49: Related services</li> </ul>	67%	27%	0.0%	6%

As shown in Table 12, Component VI: Faculty, Staff and Administration, there were six SE indicators. Forty-four (69%) charter schools fell within the 90-100% compliance range under SE indicators 50-54. While seventeen (26%) charter schools fell within the 80-89% compliance range. There were no charter schools that fell within the 70-79% range. Three (5%) charter schools fell within the <69% compliance range.

This category consisted of ensuring a special education administrator worked for the district to oversee special education and related service providers. It also included SE indicators regarding the use of paraprofessionals, specifically, confirming paraprofessionals and assistants did not design instruction for students with disabilities,



but were expected to implement instruction under the supervision of an appropriately licensed teacher. This also included SE indicators for professional development for both general and special education teachers regarding; (1) training on state and federal special education requirements and related local special education policies and procedures; (2) analyzing and accommodating diverse learning styles of all students and; (3) methods of collaboration among teachers, paraprofessionals and teacher assistants to accommodate diverse learning styles of all students in the general education classroom. Lastly this component assessed if the district had trained interpreters for parents that did not speak English as a first language for all IEP meetings.

**Table 12. Descriptive Analyses for CPR: Compliance Levels Presented by Ranges – Component VI - Faculty, Staff and Administration**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
Faculty, Staff and Administration <ul style="list-style-type: none"> <li>• SE 50: Administrator of Special Education</li> <li>• SE 51: Appropriate special education teacher licensure</li> <li>• SE 52: Appropriate certifications/licenses or other credentials – related service providers</li> <li>• SE 52A: Registration of educational interpreters</li> <li>• SE 53: Use of paraprofessionals</li> <li>• SE 54: Professional development</li> </ul>	69%	26%	0.0%	5%

As shown in Table 13, Component VII: Facilities, only 56 (n=56) charter schools were included in the sample because eight charter schools were not rated in this area and therefore were excluded from the sample. In this category, all 56 (100%) charter schools were compliant. This category included only one SE indicator, which was ensuring the school district provided facilities and classrooms for special education students that would; (1) maximize the inclusion of students into the life of the school; (2) provide

accessibility in order to fully implement each student’s IEP; (3) are at least equal in all physical respects to the average standards of general education facilities and classrooms; (4) were given the same priority as general education programs in the allocation of instructional and other space in public schools in order to minimize the separation or stigmatization of eligible students; and (5) were not identified by signs or other means that stigmatize students.

**Table 13. Descriptive Analyses for CPR: Compliance Levels Presented by Ranges – Component VII - Facilities**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
School Facilities				
<ul style="list-style-type: none"> <li>SE 55: Special education facilities and classrooms</li> </ul>	100.0%	0.0%	0.0%	0.0%

As shown in Table 14, Component VIII: Program Evaluation, only 53 charter schools were included in the analysis as eleven schools did not receive a rating in this category and therefore, were excluded from the sample. All 53 (100.0%) charter schools were rated compliant in this area. This category included one SE indicator which was ensuring special education programs and services were regularly evaluated by school administrators to make necessary changes to special education programs. There was no specific requirement under SE 56 for how districts evaluated their programs, however, there must be evidence that special education programs were evaluated to determine their effectiveness and need for modification or development.

**Table 14. Descriptive Analyses for CPR: Compliance Presented by Ranges – Component VIII - Program Evaluation**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
Program Plan and Evaluation				
<ul style="list-style-type: none"> <li>SE 56: Special education programs and services are evaluated</li> </ul>	100.0	0.0	0.0	0.0

As shown in Table 15, Component IX: Recordkeeping and Fund Use, there was

only one SE indicator. Included in this category were 64 (n=64) charter schools. All 64 (100.0%) charter schools were compliant under SE indicator 59. SE indicator 59 required students that transferred from one school district to another school district, whether both of those districts were in the Commonwealth of Massachusetts or not, that: (1) any Massachusetts school to which the student is transferring took reasonable steps to promptly obtain the student’s records, including the IEP from the former school; and (2) any Massachusetts school from which the student was transferring take steps to promptly respond to the receiving school’s request for records.

**Table 15. Descriptive Analyses for CPR: Compliance Levels Presented by Ranges – Component IX - Recordkeeping and Fund Use**

Special Education (SE) Indicators on CPR	90 – 100%	80 – 89%	70 – 79%	< 69%
Record Keeping and Fund Use				
• SE 59: Transfer of student records	100.0	0.0	0.0	0.0

## **CHAPTER V**

### **CONCLUSIONS AND RECOMMENDATIONS FOR PRACTICE**

#### **Summary of Study and Findings**

I examined enrollment and placement of students with disabilities in charter schools compared to traditional public schools. I found systematic underrepresentation of students with disabilities in charter schools over the span of six years. This was especially the case for disability categories that required intensive supports and services, which are generally expensive. These disability categories included students with emotional impairments, intellectual impairments, developmental delays and autism. I also found charter schools failed to provide an array of services consistent with mandates from the IDEA of 2004. Specifically, students in charter schools were more likely to be placed in full inclusion settings compared to traditional public school districts. Consequently, this made sense, given traditional public school districts enrolled a higher percentage of students with severe needs, who typically cannot be educated in a full inclusion setting.

Finally, I found significant variability in compliance levels under state and federal regulations for charter schools. Most charter schools were cited for corrective action in special education indicators that had a direct impact on students and the services provided. Specifically, charter schools were cited for corrective action most often under the following categories; (1) assessment of students (2) student identification and program placement; (3) parent and community involvement; (4) student support services and; (5) faculty, staff and administration.

In general, I found charter schools in Massachusetts failed to meet the

expectations of providing a full continuum of supports and services for students with disabilities. This was especially relevant for students with severe needs that were disproportionately enrolled in traditional public school districts throughout the state because they offered the full continuum of supports. Concentrating students with disabilities in traditional public school districts represents segregation practices and because students with severe needs represent higher-than-average costs, this imbalance is not financially sustainable for traditional public school districts (Lake, Miron & Noguera, 2014). Furthermore, it's not good for the reputation of the charter schools to make claims that they serve the neediest students – just not “that” kind of needy (Lake et al., 2014). If charter schools want to expand across the state and be considered an equitable school choice for all students, they must educate a similar population of students with disabilities as traditional public school districts.

Federal and state laws prohibit the exclusion of students with disabilities from charter schools, yet the same trends for enrollment and placement of students with disabilities in Massachusetts has not changed over the last ten years. When Blackwell (2012) analyzed enrollment and placement for school years 2005-2006 through 2009-2010, he found charter schools disproportionately underrepresented students with disabilities. Specifically, students with autism, emotional impairments and intellectual impairments were disproportionately underrepresented in charter schools throughout the state (Blackwell, 2012). My analysis of charter enrollment for the subsequent six years, showed charter schools continued to disproportionately underrepresent students with disabilities in Massachusetts. Students with autism, emotional impairments, intellectual impairments, sensory impairments and developmental delays were significantly less

likely to be enrolled in charter schools. While students with health impairments and neurological impairments were more likely to be enrolled in charter schools. These findings were consistent with previous studies conducted in Massachusetts regarding enrollment and placement of students with disabilities in charter schools (Blackwell, 2012; Wilkens, 2009).

In looking at the district-to-district comparisons, charter schools in the Commissioner's Districts were less likely to enroll students with disabilities, except for Boston. This is especially concerning given urban districts typically have the highest percentages of students with disabilities in the state. Since the Commissioner's Districts are considered underperforming, and in the lowest 10% based on statewide student achievement scores, they have the highest charter cap compared to other districts in the state. Data indicated these urban districts are less likely to enroll students with disabilities, specifically students with severe disabilities. Therefore, claims charter schools located in these districts are outperforming traditional public school districts are misleading. A closer examination as to why charter schools located in the Commissioner's districts are disproportionately underrepresenting students with disabilities is warranted.

With regards to compliance, charter schools showed significant variability in following state and federal regulations under the IDEA. This is concerning since these regulations protect students with disabilities. Charter schools consistently received partially implemented or not implemented ratings on many indicators. Since the MADESE conducts the CPR, each SE indicator in which a charter school is rated "partially implemented" or "not implemented" requires corrective action. Therefore,

when the MADESE visits charter schools for the mid-cycle review, three years after the full CPR, they will look specifically at those indicators to ensure they have been remedied. Massachusetts has developed a strong accountability system through the CPR process that will help charter schools understand their obligations under the IDEA. However, charter schools that are consistently cited for non-compliance with state and federal regulations should be required to go through a state-developed training program to support their efforts in ensuring all staff understand their obligations under the IDEA, as a remedy for this challenge.

### **Contributions to Research**

This research was conducted to extend the work of Blackwell (2012) and Wilkins (2009) from five years prior to determine if enrollment and placement practices have changed in Massachusetts charter schools. As the debate to open more charter schools continues, it is critical to understand the population charter schools serve to inform our policy and practice in Massachusetts. It is also important as we look towards developing a stronger education system that welcomes and supports all students regardless of disability category. If charter schools are going to offer innovative programs and services, as well as, choice opportunities for families, they need to be prepared to serve all students with disabilities. The fact that disproportionate enrollment and placement for students with disabilities has continued over the last decade raises significant concerns. Based on these findings a stronger collaboration to support charter schools' recruitment of students with disabilities is critical.

Disproportionate underrepresentation of students with disabilities in Massachusetts' charter schools, specifically students with severe disabilities, raise

concerns as policymakers advocate for charter school expansion. While charter schools increased the percentage of students with disabilities enrolled over the six-year span (15.1%), charter schools did not enroll an equal percentage of students with disabilities compared to traditional public school districts (19.1%) One possibility is charter schools may be overtly or covertly discouraging students with disabilities from attending (Blackwell, 2012). Typically, students with severe disabilities are more expensive to educate given their high level of need and often require services outside the general education classroom. Considering charter schools educate most of their students with disabilities in full inclusion settings, students with severe disabilities that require services in partial inclusion or substantially separate settings, may be discouraged from enrolling or remaining in charter schools (Blackwell, 2012). If students with severe disabilities are not successful in full inclusion settings, there is very little opportunity for other placements in charter schools. As data indicated many charter schools place most students with disabilities in full inclusion settings.

Additional concerns are raised regarding disproportionate placement of students with disabilities in charter schools compared to traditional public school districts. Charter regulations in Massachusetts require charter schools to offer a full continuum of services, from full inclusion to substantially separate programming. Therefore, the percentage of students in each placement, should be relatively equal for both charter and traditional public school districts. Data indicated charter schools placed fewer students in substantially separate placements, which provided further evidence charter schools are not enrolling students with severe needs, as students with severe needs often require a unique set of services that cannot typically be provided in a full inclusion setting.



Placement is important as placement decisions may influence enrollment levels for students with disabilities (GAO Report, 2012). Charter schools are less likely to enroll students with severe disabilities if they cannot provide the appropriate special education programming. This can happen for several reasons as charter schools may not have the same capacity, resources (e.g. space), knowledge, or experience to serve students with severe needs (GAO Report, 2012). This appears to be a feasible explanation for why data over the span of ten years show students with severe disabilities are less likely to be enrolled in charter schools in Massachusetts, since charter schools place most students with disabilities in full inclusion.

It is expected charter schools will enroll similar percentages of students with disabilities considering charter schools receive the same per pupil funding to educate students with disabilities as traditional public school districts. This would include students with severe disabilities, including intellectual impairments, emotional impairments, and autism. It is concerning this pattern of enrollment has not changed in charter schools over the last ten years. By enrolling students with mild/moderate disabilities, charter schools are not educating the same population of students as traditional public school districts. Consequently, traditional public schools are working to support a population of students with more significant needs and specialized supports, with the same per pupil funding, while charter schools are not.

Part of the disproportionality may not be due to charter schools' unwillingness to serve a diverse population of students, but because charter schools are not prioritizing the enrollment of students with disabilities during the development and design phases of their charters (Blackwell, 2012; Wilkens, 2009). Considering there have been limited to no

change in the enrollment practices for Massachusetts' charter schools in the last ten years, we should look to policymakers to answer the questions Blackwell (2012) posed, "What types of policy levers can be used to ensure charter schools enroll and educate a representative range of learners?" and "How can the innovative qualities of charter schools be designed to serve all students?"

The easiest solution would be to look towards additional financial support for charter schools and special education programming for the neediest populations. However, providing financial relief to charter schools would not ensure they are prepared and equipped to provide students with severe disabilities the education they require to be successful. Given the specific needs of students with intellectual impairments, emotional impairments and autism, charter leaders and teachers need specific training around how to develop curricula that benefit a range of students, as opposed to one-size-fits-all. Therefore, it would make sense to require charter schools to demonstrate the capacity and willingness to serve a broad range of students with disabilities during the charter application process. The capacity to educate all students should begin at the charter school's inception and be evident in the mission of the school, as well as, the instructional and curricular design for the school (Blackwell, 2012).

To avoid accusations of bias in admissions, planning for students with disabilities during the application process is critical, as charter schools frequently point out they offer equitable enrollment through the lottery process (Lake, Miron & Noguera, 2014). However, anecdotal evidence obtained from parents across the country, suggested in some cases, parents are counseled to take their children out of charter schools due to an inappropriate "fit" or explicitly told the school lacks the resources to meet their child's

needs (Lake et al., 2014). While the extent of such practices is difficult to document, there is evidence the lottery process itself is unlikely to include parents of some of the most disadvantaged and needy children (Lake et al., 2014; Betts & Tang, 2011; COPAA, 2012). This includes not only parents of students with severe disabilities, but parents of undocumented or homeless children, and parents who may be overwhelmed by life circumstances, who are less likely to participate in a lottery (Lake et al., 2014). While these are significant concerns, we should not lose sight of the most critical issue: special education students should be in schools, whether charter or public, that have the resources and trained staff to meet their needs (Lake et al., 2014).

Providing all students access to a quality public education is the cornerstone upon which the Individuals with Disabilities Education Act (IDEA) was developed. Therefore, in accordance with both federal and state regulations, students with disabilities, regardless of disability category, should have the same access and equitable treatment in charter schools as typically developing peers. Charter schools are open to all students in the community and promote themselves as such. However, the findings from this study are consistent with two previous studies (Blackwell, 2012; Wilkens, 2009), which have shown charter schools in Massachusetts disproportionately under-enroll students with disabilities.

### **Implications for Practice**

There are several ways in which this research can have implications on current and future practice. Charter schools should serve the same populations as the district schools in which they are located. It is clear from research over the last decade that is not the case. Therefore, policymakers and charter leaders should look at developing a plan to

encourage students with disabilities to attend charter schools and support charter schools in serving students with severe disabilities. This includes ensuring charter schools can provide the full continuum of special education services from full inclusion to substantially separate settings.

Policymakers should encourage charter schools to develop charter applications that include students with disabilities and their plan to serve this population, specifically students with severe disabilities. The current charter application process requires consideration of recruitment and retention for students with disabilities in the application. However, there is not an in-depth planning process for how the unique needs of students with disabilities will be met. This may contribute to students with disabilities attrition from charter schools or discourage them from attending altogether. The charter should include not only a plan for recruitment, but how students with disabilities will receive the services needed to access the curriculum and make progress. This includes professional development opportunities for staff to understand best practices in special education and how to implement IEPs.

It is recommended the approval of an application for a charter school be dependent in part upon the ability of the applicant to show evidence of special education preparedness, including expertise in matters of programming, requirements of law, financial arrangements and provision of related services (Estes, 2000). This would support schools, their faculty, their parents, and their students, as an integral part of the application process would be a requirement that all faculty and staff complete a training program in which the most elementary concepts and basic procedures of the IDEA are explained (Estes, 2000).

Since charter schools place a strong emphasis on full inclusion, the charter should include a plan of how students with severe disabilities will be served in an inclusive setting (e.g. through a co-teaching model, assistive technology, etc.). For students that cannot be served in full inclusion models, there should be an explanation of the continuum that will be provided in the charter school. Challenges arise when charter schools in Massachusetts identify a student that requires a specialized program that charter schools are not mandated to provide. Interestingly, many of these specialized programs are designed to serve students with emotional impairments, intellectual impairments and autism, the three disability categories that are least likely to be enrolled in charter schools. Since traditional school districts offer specialized programs they are required to take students with severe disabilities back from charter schools when the charter school determines that they cannot meet the student's needs.

Since charter schools are not mandated to create specialized programs for students with disabilities per the MADESE, but must provide a continuum of services, there should be some discussion around how charter schools can create capacity in this regard. One potential option is to examine current policy regarding what charter schools are mandated to provide for special education services. If students with severe disabilities enroll in a charter school and require a substantially separate placement with a specific service, (e.g. discrete trial training and PECS for students with autism or therapeutic programming for students with emotional impairments), then charter schools should work collaboratively and partner to develop these programs.

Cities with large numbers of charter schools, like Denver, New Orleans and New York City, have built special education collaboratives, co-ops and financial risk pools so

that all charter schools have the capacity to serve all disability categories (Lake et al., 2014). Some states offer charter schools the opportunity to apply for grants to develop innovative new approaches to special education (Lake et al., 2014). State and district leaders should create funding structures and partnerships to ensure charter school autonomies lead to innovations and improvements in special education, not just general education (Lake et al., 2014). Policymakers and state leaders can accomplish this by supporting rigorous recruitment and admission practices, ensuring schools are getting their fair share of funding, giving charter schools access to special education expertise and networks, and promoting innovative new approaches through grants and charter-district partnerships (Lake et al., 2014).

In addition to reviewing state policy for charter schools, future research should look at investigating enrollment practices in charter schools including why parents of students with disabilities choose or do not choose to enroll their child in a charter school. It is critical to track the number of students with severe disabilities in charter schools to determine if they remain in charter schools throughout their academic career. A closer examination of the students with disabilities that enroll in charter schools, but ultimately leave, and the reasons why, will provide valuable insight into how charter schools are meeting the needs of this subgroup. Understanding why students with severe disabilities choose not to enroll or do not remain in charter schools after they enroll, will allow us to provide targeted support and professional development in these specific areas to decrease continued discrepancies in enrollment for students with disabilities.

### **Conclusion**

To date, limited research regarding the efficacy of charter schools for students

with disabilities exists. There are three studies that specifically examined charter enrollment for students with disabilities in the state of Massachusetts (Wilkens, 2009; Blackwell, 2012; Setren, 2015). Two of these studies were completed over five years ago (Wilkens, 2009; Blackwell, 2012), while the charter movement has continued to evolve and gain support in the last five years. This study sought to add to the current research on students with disabilities in charter schools in Massachusetts. The MADESE is commended on their data collection methods for enrollment and placement of students with disabilities in public schools throughout the state. As the state continues to provide guidance on how charter schools recruit and retain students, rigorous data collection methods are warranted to increase accountability for charter schools consistently underserving students with disabilities, particularly students with severe needs. The issues involving special education programming are complex and cannot be addressed through simplistic recruitment and retention plans, but must be demonstrated through evidence charter schools are meeting the needs of all students with disabilities.

As Wilkens (2009) noted, the charter school experiment will be valid only if charter schools serve the same student populations as do traditional public school districts. Educators have known for some time that schools can produce educational success if they simply decline to admit students who are costly or more difficult to serve and there is no need to create a new type of public or private school to demonstrate the obvious yet again (Wilkens, 2009). Based on ten years of data showing enrollment and placement of students with disabilities in charter schools has not changed, it is time we put this conversation at the forefront of charter school policy. We can no longer afford to ignore disproportionate under-enrollment in charter schools because doing so is a

disservice to our neediest population. By focusing on the needs of students with disabilities and the quality of education they receive, we will do more to ensure our most vulnerable children have access to the education they require and ultimately deserve.



**TABLES**

**Table 16. Odds Ratios for Charter School Enrollment by Disability Category SY 2011**

Variable	B	S.E.	Wald	df	P	Odds Ratio	95% CI for Odds Ratio	
							LCI	UCI
All Disabilities	-.485	.020	586.629	1	.000	.616	.592	.64
Sensory Impairment	-1.293	.227	32.580	1	.000	.274	.176	.428
Health Impairment	.104	.057	3.309	1	0.069	1.11	.992	1.242
Autism	-.964	.092	109.750	1	.000	.381	.318	.457
Specific Learning Disability	-.401	.033	145.282	1	.000	.670	.627	.715
Intellectual Impairment	-.964	.092	109.750	1	.000	.381	.318	.457
Emotional Impairment	-1.037	.072	205.015	1	.000	.355	.308	.409
Developmental Delay	-1.489	.089	278.417	1	.000	.226	.189	.269
Physical Impairment	-.015	.158	.009	1	.923	.985	.723	1.341
Neurological	.128	.082	2.461	1	.117	1.137	.969	1.334
Communication	-.175	.041	18.270	1	.000	.839	.774	.909

**Table 17. Odds Ratios for Charter School Enrollment by Disability Category SY 2012**

Variable	B	S.E.	Wald	df	P	Odds Ratio	95% CI for Odds Ratio	
							LCI	UCI
All Disabilities	-.446	.018	590.373	1	.000	.640	.618	.664
Sensory Impairment	1.272	.212	36.098	1	.000	.280	1.85	.424
Health Impairment	.051	.052	.992	1	.319	1.053	.952	1.165
Autism	-.971	.081	144.120	1	.000	.379	.323	.444
Specific Learning Disability	-.219	.030	53.528	1	.000	.803	.758	.852
Intellectual Impairment	-.971	.081	144.120	1	.000	.379	.323	.444
Emotional Impairment	-1.011	.066	231.517	1	.000	.364	.320	.415
Developmental Delay	-1.612	.087	343.904	1	.000	.200	.168	.237
Physical Impairment	-.010	.152	.005	1	.946	.990	.735	1.333
Neurological	.319	.066	23.073	1	.000	1.376	1.208	1.567
Communication	-.278	.039	50.040	1	.000	.757	.701	.818

**Table 18. Odds Ratios for Charter School Enrollment by Disability Category SY 2013**

Variable	B	S.E.	Wald	df	P	Odds Ratio	95% CI for Odds Ratio	
							LCI	UCI
All Disabilities	-.418	.018	550.933	1	.000	.658	.636	.681
Sensory Impairment	-.824	.171	23.280	1	.000	.439	.314	.613
Health Impairment	.124	.047	6.919	1	.009	1.132	1.032	1.241
Autism	-.979	.075	169.889	1	.000	.376	.324	.435
Specific Learning Disability	-.218	.030	52.879	1	.000	.804	.758	.853
Intellectual Impairment	-.979	.075	169.889	1	.000	.376	.324	.435
Emotional Impairment	-.889	.061	209.083	1	.000	.411	.365	.464
Developmental Delay	-1.492	.080	351.591	1	.000	.225	.192	.263
Physical Impairment	.216	.138	2.462	1	.117	1.241	.948	1.626
Neurological	.220	.065	11.288	1	.000	1.246	1.096	1.417
Communication	-.219	.038	33.339	1	.000	.803	.746	.865

**Table 19. Odds Ratios for Charter School Enrollment by Disability Category SY 2014**

Variable	B	S.E.	Wald	df	P	Odds Ratio	95% CI for Odds Ratio	
							LCI	UCI
All Disabilities	-.259	.015	313.590	1	.000	.772	.750	.795
Sensory Impairment	-1.014	.167	36.993	1	.000	.363	.262	.503
Health Impairment	.250	.036	47.768	1	.000	1.284	1.196	1.379
Autism	-.853	.055	243.033	1	.000	.426	.383	.474
Specific Learning Disability	-.051	.026	3.875	1	.049	.950	.903	1.000
Intellectual Impairment	-.853	.055	243.033	1	.000	.436	.383	.474
Emotional Impairment	-.493	.045	120.440	1	.000	.611	.559	.667
Developmental Delay	-.981	.054	334.439	1	.000	.375	.337	.416
Physical Impairment	.217	.126	2.969	1	.085	1.242	.971	1.590
Neurological	.202	.056	12.752	1	.000	1.223	1.095	1.367
Communication	-.251	.034	54.265	1	.000	.778	.728	.832

**Table 20. Odd Ratios for Charter School Enrollment by Disability Category SY 2015**

Variable	B	S.E.	Wald	df	P	Odds Ratio	95% CI for Odds Ratio	
							LCI	UCI
All Disabilities	-.259	.015	313.590	1	.000	.772	.750	.795
Sensory Impairment	-1.014	.167	36.993	1	.000	.363	.262	.503
Health Impairment	.250	.036	47.768	1	.000	1.284	1.196	1.379
Autism	-.853	.055	243.033	1	.000	.426	.383	.474
Specific Learning Disability	-.051	.026	3.875	1	.049	.950	.903	1.000
Intellectual Impairment	-.853	.055	243.033	1	.000	.426	.383	.474
Emotional Impairment	-.493	.045	120.440	1	.000	.611	.559	.667
Developmental Delay	-.981	.054	334.439	1	.000	.375	.337	.416
Physical Impairment	.217	.126	2.969	1	.085	1.242	.971	1.590
Neurological	.202	.056	12.752	1	.000	1.223	1.095	1.367
Communication	-.251	.034	54.265	1	.000	.778	.728	.832

**Table 21. Odds Ratios for Charter School Enrollment by Disability Category SY 2016**

Variable	B	S.E.	Wald	df	P	Odds Ratio	95% CI for Odds Ratio	
							LCI	UCI
All Disabilities	-.256	.015	298.604	1	.000	.775	.752	.797
Sensory Impairment	-1.157	.178	42.205	1	.000	.314	.222	.446
Health Impairment	.124	.037	11.098	1	.001	1.132	1.053	1.218
Autism	-.928	.055	282.046	1	.000	.395	.355	.440
Specific Learning Disability	-.029	.026	1.247	1	.264	.971	.932	1.022
Intellectual Impairment	-.928	.055	282.046	1	.000	.395	.355	.440
Emotional Impairment	-.521	.046	129.822	1	.000	.594	.543	.650
Developmental Delay	-1.167	.059	389.880	1	.000	.311	.277	.349
Physical Impairment	.294	.127	5.324	1	.021	1.341	1.045	1.721
Neurological	.283	.054	27.126	1	.000	1.327	1.193	1.475
Communication	-.245	.035	48.954	1	.000	.783	.731	.838

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