

The Fourth Time is the Charm: Charter School Legislation in Washington State

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A Capstone project presented in partial fulfillment of the

requirements for the degree of

Master of Arts in Policy Studies

Interdisciplinary Arts & Sciences

University of Washington Bothell

2011

# THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

## Abstract

Washington State is amongst a handful of states without charter school legislation. Even in the absence of such legislation, the idea of charter schools is no new phenomenon in Washington. State residents voted against the authorization of charter schools in 1996, 2000, and 2004. A review of voter's ballots and *Seattle Times* online newspaper archives revealed three of the most common reasons cited opposing charter school legislation in 1996, 2000, and 2004. 1. If charter school legislation was implemented, low-income and other disadvantaged students would be left behind in increasingly impoverished traditional public schools, 2. Charter schools increase taxes and take money away from traditional public schools, and 3. Charter schools are experimental and have not been proven to work. This research tests the validity of these three arguments in states with charter school legislation by answering the following research questions: 1. What was the demographic composition of traditional public schools vs. charter schools after charter school legislation was implemented? 2. What was the amount of per-pupil revenue for traditional public schools vs. charter schools after charter school legislation was implemented? 3. What percent of traditional public schools vs. charter school students performed at or above proficiency on the National Assessment of Educational Progress (NAEP) after charter school legislation was implemented? Results reveal that greater percentages of minority students attended charter schools and charter schools receive significantly less funding per-pupil than traditional public schools. Results did not reveal any significant differences between NAEP scores for charter schools and traditional public schools.

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## **Purpose**

Washington State is amongst a handful of states without Charter School Legislation. Even in the absence of such legislation, the idea of charter schools is no new phenomenon in Washington. State residents voted against the authorization of Charter Schools in 1996, 2000, and 2004 for a variety of reasons. After reviewing official voters' ballots for the specified election periods as well 34 archived newspaper articles published in the *Seattle Times* newspaper in 1996, 2000, and 2004, I have been able to identify three of the most common reasons cited in opposition to charter school legislation in all three election years. It is believed that:

1. If charter school legislation was implemented low-income and other disadvantaged students would be left behind in increasingly impoverished schools.
2. Charter schools increase taxes and take money away from traditional public schools.
3. Charter schools are experimental and have not been proven to work (charter school students are not performing any better than traditional public school students).

This research seeks to test the validity of the three identified arguments against charter school legislation in Washington State by answering the following research questions:

1. What was the demographic composition of traditional public schools vs. charter schools after charter school legislation was implemented?
2. What was the amount of per-pupil revenue for traditional public schools vs. charter schools after charter school legislation was implemented?
3. What percent of traditional public school students vs. charter school students performed at or above proficiency on the National Assessment of Educational Progress (NAEP) after charter school legislation was implemented?

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## **Background and Significance**

### *Charter Schools and Washington State*

Even in the absence of charter legislation, the idea of charter schools is no new phenomenon in Washington. In 1996, 2000, and 2004, Washington residents had the opportunity to vote on independent school/charter school legislation. To no success, charter schools were turned down by voters each time.

In 1996, Initiative 177 was about legislation for independent schools. The initiative's official ballot title was: "Shall voters be authorized to create 'renewed' school districts where non-profit organizations may operate publicly funded 'independent' public schools with parental choice and revised state regulation?" The intent of the initiative was to restore accountability, efficiency, and parental choice to public education. It was believed that the state's public school system had lost its academic focus, was encumbered with bureaucracy, and limited the rights of parents and taxpayers.

In 2000, Initiative 729 was about legislation for Charter Public Schools. The initiative's official ballot title was: "Shall school districts and public universities be authorized to sponsor charter public schools, independently operated, open to all students, and subject to revised state regulation?" The intent of the initiative was to provide more high-quality public choices for families, students, and teachers. In this specific instance, high-quality was defined as a proven and promising learning environment that would be likely to produce an increase in student achievement.

In March of 2004, the Washington State Legislature passed Engrossed Second Substitute House Bill 2295 authorizing the implementation of charter schools. The primary purpose of the legislation was to provide more high-quality learning environments and opportunities to assist all

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students including those that are educationally disadvantaged in meeting the state's academic standards. Washington State residents overturned the legislation by voting against it on Referendum 55 in November 2004.

### *Development of Arguments Against Charter Schools*

To gain a better understanding of the arguments for and against charter school legislation in Washington State, I conducted a content analysis. To begin, I examined 34 editorials in the *Seattle Times* newspaper published in 1996, 2000, and 2004 as well as the official voter ballots for the 1996, 2000, and 2004 elections. From this analysis I was able to identify the most common arguments against charter school legislation in Washington State. In addition to identifying arguments, I was also able to identify a number of strong opponents of charter school legislation during each of the three election years. For example, in 2000 some of the opponents included: League of Women Voters, Washington Education Association, Association of Washington Public Principals, Seattle Education Association, and the Washington State Parent Teacher Association. In 2004, some of the major opponents were: Washington State Teachers Union, Washington Association of School Administrators, Washington State School Directors Association, and the League of Women Voters.

### *Need for Education Reform in Washington: Evidence of an Achievement Gap*

There is evidence of a consistent achievement gap in Washington State. According to the League of Education Voters (2011), Washington State is one of nine states with a growing achievement gap. According to the House Bill 2722 Advisory Committee (2008), higher percentages of White female and male students in grades four, seven, and ten met grade level standards on reading and math sections on the Washington Assessment of Student Learning (WASL) than Hispanic and African American students. For example, 62% of White female

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students and 60% of White male students met seventh grade proficiency requirements for math, compared to 32% of Hispanic females and 30% of Hispanic males and also 31% of African American females and 28% of African American males.

The percentages of White, Hispanic, and African American students taking Advanced Placement (AP) tests in Washington State were also examined. While the percentage of students taking AP tests is not necessarily indicative of an achievement gap, it does highlight the discrepancy between the percent of minority students enrolled in rigorous advanced placement courses. According to the House Bill 2722 Advisory Committee (2008), higher percentages of White students took AP tests in 2003-2007 compared to African American and Hispanic students. In 2007 for example, 69% of White students, 6% of Hispanic students, and only 2% of African American students took AP tests.

Verbal, math, and writing scores on the Scholastic Aptitude Test (SAT) were also examined. The scores for White students taking the SAT in 2008 were higher than the scores of African American and Hispanic students taking the SAT during the same year. It was also reported that 69% of White students took the SAT compared to 7% of Hispanics and 4% of African Americans.

With such disheartening information, maintaining the status quo is not an option. “Academic success remains a primary avenue for social mobility in the United States” (Finn & Rock, 1997; Jordan & Sanders, 2000). People that are academically successful are more stable in their employment, more likely to have health insurance, live healthier lives, are less dependent on public assistance, and are less likely to engage in criminal activity (National Alliance of Business Inc., 1998). According to the Bureau of Labor Statistics (2008) income is higher and unemployment rates are lower for individuals with advanced degrees. Consequently, low levels

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of academic achievement may have long-lasting consequences for communities, families, individuals, and society as a whole (Nebbitt, Lombe, LaPoint, & Bryant, 2009).

### *Charter Schools*

Given the implications of academic success and academic failure, it is important for education reforms to target closing the achievement gap. One possible reform could be charter schools. The charter school movement started in 1988 when the former American Federation of Teachers President Albert Shanker called for the reform of public schools by implementing charter schools. Charter schools are nonsectarian public schools that fall under the umbrella of choice schools. The "charter" establishing each such school is a performance contract that details and highlights the school's mission, program, goals, students served, methods of assessment, and ways to measure success. The first charter school legislation was passed in Minnesota in 1991. Currently 40 states and Washington, D.C. have charter school legislation. There are a handful of states that have not implemented legislation. These states include: Washington, Montana, North Dakota, South Dakota, Nebraska, Alabama, Kentucky, West Virginia, Vermont, and Maine (US Charter Schools, n.d.). According to the Center for Education Reform (2009) there are approximately 5000 Charter Schools in the United States, serving an estimated 1.5 million students. Charter schools operate with freedom from many of the traditional public school regulations. These schools aim to:

- Increase opportunities for learning and access to quality education for all students.
- Create choice for parents and students within the public school system.
- Provide a system of accountability for results in public education.
- Encourage innovative teaching practices.
- Create new professional opportunities for teachers.

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- Encourage community and parent involvement in public education.
- Leverage improved public education broadly (US Charter Schools, n.d.).

According to the Center for Education Reform (2009), charter schools typically operate under three fundamental principles; choice, autonomy, and accountability. Choice is given to parents and students to select the school that best meet the needs of the child. Teachers can choose to teach at schools in which their creativity and abilities can directly impact and shape their educational environment as well as the educational environment of their students. While charter schools are required to adhere to the same major laws and regulations of traditional public schools, they have the ability to be innovative and can truly focus on setting and reaching high academic standards for their students. Charter schools have a responsibility of meeting the goals established by their charter contract and if they do not meet the specified goals, the schools can be closed.

### **Review of Literature**

#### *Charter School Demographics*

Contrary to the argument that implementing charter schools would leave low-income and disadvantaged students behind in increasingly impoverished schools, there is research that shows otherwise. For instance, in terms of overall demographics, fifty-two percent of charter school students are minorities; fifty percent are at risk; and fifty-four percent of charter school students are low-income (US Charter Schools, 2008). Buckley and Schneider (2005) examined charter school demographics in Washington D.C. during the 2002-2003 academic year. The results found that charter schools enroll a disproportionately high number of students who meet free or reduced price lunch eligibility. In other words, D.C. charter schools are enrolling higher numbers of low-income students. In order to be eligible for free lunch, families must be at or below 130%

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of the Federal poverty line. To be eligible for reduced price lunch, families must be at or below 185% of the Federal poverty line (U.S. Department of Agriculture, 2008). Another research study examined the impact of charter schools on the performance of traditional public schools in Texas. The results revealed that disadvantaged students are not actually left behind in impoverished and failing public schools; instead there appears to be a movement of at-risk students to charter schools. The researcher indicates that the findings could be the result of two things. Parents of students with academic problems willingly seek out charter schools because they do not believe that traditional public schools can get the job done, or school officials push low performing at-risk students out of traditional public schools as a result of pressure to improve the school's academic outcomes (Bohte, 2004). Regardless of the cause or how the results are interpreted, the existing research is clear: at-risk students are being educated in charter schools.

Grady, Bielick, and Aud (2010) examined characteristics of public charter school students in the United States in 2007 and found a smaller percentage of charter school students to be White as compared to White students attending other public schools. Forty-two percent of charter school students were from single-parent homes and 34% were classified as being poor.

### *Per-Pupil Funding*

There is an estimated \$2.2 billion annual gap between charter school funding and traditional public school funding. This research shows that charter schools are actually receiving less money than their traditional public school counterparts (The Hechinger Report, 2010). Researchers examined the per-pupil funding for ten charter schools in Dayton, Ohio and compared it to the per-pupil funding in traditional public schools in Dayton, Ohio. The results found that charter schools receive about one-third less money per-pupil than traditional public

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schools. During the 2000-2001 school year on average charter schools received \$7,510 per pupil, whereas traditional public schools received \$10,802 per pupil (Thomas B. Fordham Institute, 2004). One of the primary reasons for this discrepancy is the Ohio charter school legislation. Charter schools are allowed to receive state dollars, federal dollars, but cannot receive any funding from local taxes (Thomas B. Fordham Institute, 2004).

The reason behind the discrepancy does not seem to be indigenous to Ohio. Charter schools across the country face similar issues in not being eligible for the same funding and resources as traditional public schools. For example, in most states charter schools do not receive capital funds for school facilities (U.S. Charter Schools, n.d.). In Michigan charter schools are not allowed to levy millages or sell public bonds (Michigan Association of Public School Academies, n.d.). In Texas, open enrollment charter schools do not receive funds from local tax revenue and do not have access to state facilities allotments (Texas Education Agency, n.d.).

Finn and Osberg (2005) argue that the funding models for traditional public schools and charter schools appears to be designed to produce failure, not success on the part of charter schools across the country. The researchers examined per-pupil finding in 17 states with charter school legislation. Overall results found that charter schools were significantly underfunded relative to district schools. Traditional public schools received more funding per-pupil in all states in the sample. Minnesota was the only exception where per-pupil funding for charter schools exceeded the amount of per-pupil funding for traditional public schools by \$246.

### *Academic Success*

There is a plethora of research on academic achievement in charter schools. The research findings appear to be inconsistent and heavily dependent on the research methodology. Some of this research highlights the academic deficits of charter schools. For instance Braun, Jenkins,

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Grigg, and Tirre (2006) examined data from the 2003 National Assessment of Educational Progress (NAEP) for fourth-grade assessments in reading and mathematics for charter school students and traditional public school students using hierarchical linear models (HLMs) to control for multiple student and school characteristics. They found that even after controlling for student characteristics, charter school mean scores in reading and mathematics were lower on average than the scores of traditional public schools. Another study examined 2,403 charter schools in 16 states and found that math gains of 46% of the charter schools were not any different from the average math gains of students in traditional public schools. Seventeen percent of charter schools had math gains that were significantly higher than the math gains of students in traditional public schools, and 37% of charter schools had math gains that were significantly below the math gains of students in traditional public schools (Center for Research on Education Outcomes, 2009).

Other research has found that the performance between charter school students and traditional public school students is no different. For example Gleason, Clark, Clark Tuttle, Dwayer, and Silverberg (2010) compared math and reading test scores of students who applied and were admitted to charter schools to math and reading test scores of students who applied, but were not admitted to one of 36 charter middle schools across 15 states. The results found that on average, charter middle schools are neither more nor less successful than traditional public schools in improving student achievement. However, the researchers did find that the impact of charter middle schools on student achievement varies significantly across schools. For example, the 36 charter middle schools in the sample serving more low-income or low-achieving students had statistically significant positive effects on math test scores, whereas charter schools serving more advantaged students with higher income and prior high achievement had significant

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negative effects on math test scores. This finding could suggest that charter schools better serve the most at-risk populations.

There is also research that highlights academic gains. Ladner and Burke (2010) examined the achievement gap between elementary and secondary White and minority students (Black and Hispanic) in Florida. The results found that with parental choice, higher standards, accountability, and flexibility, the performance of Hispanic students has significantly increased. Hispanic students in Florida are performing at or above the overall performance average in 31 states. Researchers at the Manhattan Institute (2003) compared test scores for charter schools with a general student population to test scores in traditional public schools serving similar populations. The results found that on average these particular charter schools scored higher in reading and math than similar traditional public schools.

### *Significance of this Study*

While an abundance of information is available on charter schools, there are still apparent gaps in the literature. For instance, as it relates to charter school demographics vs. traditional public school demographics, previous studies have highlighted inconsistencies in the demographic composition. This could be due to the level of measurement (e.g., state, district, or school). This proposed research study is important because it will add to the existing literature about charter school vs. traditional public school demographics at the state level. In addition, few studies have examined longitudinal data for the demographic composition of charter schools in all U.S. states with charter school legislation. Examining the demographics over the course of multiple years will identify any patterns or trends in the data and will provide a more comprehensive depiction of charter schools over time.

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As it relates to academic success in charter schools, few studies have examined NAEP scores over a period of time in a number of different states with charter school legislation. It is important to understand what is happening in regards to academic achievement in charter schools throughout the country year after year to better understand if outcomes are improving, remaining the same, or decreasing.

### **Methodology**

#### **Research Question 1: What was the demographic composition of traditional public schools vs. charter schools after charter school legislation was implemented?**

##### *Sample Description*

Data for this research question was collected for all 41 states that have charter schools as well as the District of Columbia, which has also approved them. Because this study seeks to test the assumptions of arguments against implementing charter school legislation in Washington State, state level data was chosen as the unit of analysis. Examining data at the state level is the most appropriate to allow inferences and generalizations to be made to Washington state. Looking at the student or school level biases the experience of a few states with very large charter populations, including California, Arizona, Michigan, Florida, and Texas, which is unlikely for Washington state. For a list of states included in the sample, please see Table 1 in the Appendix. Ninety percent of the states in the sample passed charter school legislation prior to 2000. Eighty-five percent of the states opened their first charter school prior to 2000. Approximately two-thirds of the sample had charter caps (66%). Charter caps are legal mandates that restrict the number of charter schools that can be opened and operating in a state at one time. The average number of charter schools in a state during the 2009-2010 school year was 113 with a standard deviation (SD) of 160. The average number of charter students in a state during this same school

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year was 40,508 (SD=59,025). A large standard deviation indicates that the data are spread out over a large range of values. In other words, the number of charter schools and students in charter schools varied greatly across different states. This variation is likely caused by the extremely large states of California, Arizona, Michigan, Florida, and Texas with each having more than 110,000 charter school students and at least 240 charter schools during the 2009-2010 school year.

### *Procedures*

Data for the 41 states in this sample was assessed over a period of eleven years from 1999-2010. Secondary data was collected from the National Alliance for Public Charter Schools (NAPCS) charter school dashboard. For details about this sample, please see Table 1 in the Appendix. The dashboard contains information about students and schools. Users can then sort this information at a national level, state level, or district level.

### *Description of Variables*

The independent variable examined was school type, specifically charter schools and traditional public schools. The dependent variables were race/ethnicity measured on a nominal scale and income measured on an interval scale, specifically whether a student is Black or Hispanic and whether a student is eligible for free or reduced price lunch. These variables were deemed to be the most adequate in testing the validity of this research question because students can be classified as disadvantaged based on a number of different categories. These include disadvantaged minorities and economically disadvantaged students. As previously mentioned, research has shown that there is an achievement gap between Whites and minority students. In addition, research has shown that there is a correlation between race and poverty status. For example, in 2006, 24% of Blacks, 10% of Asians, and 21% of Hispanics were considered to be

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living in poverty compared to 8% of Whites (U.S. Census Bureau, 2006). In terms of economically disadvantaged students, these students are usually defined as students of low-income. In the context of education, free and reduced price lunch eligibility is typically used to identify students from low-income families. As mentioned previously, in order to be eligible for free lunch, families must be at or below 130% of the Federal poverty line. To be eligible for reduced price lunch, families must be at or below 185% of the Federal poverty line (U.S. Department of Agriculture, 2008).

### *Analytic Strategy*

Descriptive statistics of Black and Hispanic race and free or reduced price lunch eligibility were conducted to obtain the mean and standard deviation. Independent samples t-test were conducted to see if there were any statistically significant differences between charter schools and traditional public schools. In addition, states with charter school legislation were grouped in to two different types of groups based on the following characteristics: charter caps and year of charter school legislation. Grouping was done because pooling many states of various sizes and other characteristics to obtain national means may result in the loss of details about some states. Grouping allows for more careful testing of the arguments against charter school legislation to see if they apply to particular states, even if not to all states. Descriptive statistics and independent samples t-test were also performed on the grouped data.

***Research Question 2: What was the amount of per-pupil revenue for traditional public schools vs. charter schools after charter school legislation was implemented?***

### *Sample Description*

The sample for this research question was a convenience sample. Data was not available for all 41 states and the District of Columbia with charter school legislation. Data on per-pupil

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revenue was only available for 15 states with charter school legislation. As a result, data was only analyzed for these 15 states. For a list of the states included in this sample, please see Table 2 in the Appendix. One hundred percent of the states in this particular sample passed charter school legislation by the year 2000 (67% between 1991 and 1995 and 33% between 1996 and 2000). Whereas 90% of states in the overall population passed charter school legislation prior to 2000 and 10% passed legislation between 2001 and 2005. All 15 states in this particular sample opened their first charter school by the year 2000 (50% of states opened charter schools by 1995 and 50% of states opened charter schools between 1996 and 2000). Whereas only 85% of states in the overall population opened their first charter school by the year 2000. Two-thirds of the states in the sample have charter caps, which is identical to the overall population. In this particular sample of 15 states, the average number of charter schools in a state during the 2009-2010 school year was 202 with a standard deviation of 202. The average number of charter school students in a state during the 2009-2010 school year for this sample was 76,679 with a standard deviation of 80,815. This variation is likely caused by the extremely large states of California, Michigan, Florida, and Texas with each having more than 110,000 charter school students and at least 240 charter schools during the 2009-2010 school year. The states in this sample on average had a greater number of schools and students than the overall population which had an average of 113 schools (SD=160) and an average of 40,508 students (SD=59,025) during the 2009-2010 school year.

### *Procedures*

Data for this research question was assessed over two school years, 2005-2006 and 2006-2007. Secondary data was collected from two sources. Data for the 2005-2006 school year was obtained from *Follow the Money* a public tool created by the Center for Education Reform. This

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online tool allows users to compare per-pupil funding in states and districts with charter school legislation. This data was derived from the 2006 Public Education Finance report and the 2006 Charter School Survey. Public Education Finances is a report released by the U.S. Census Bureau. Data for the 2006-2007 school year was obtained from Ball State University's reports on charter school funding inequities for the 2006-2007 school year. The data from Ball State University examines per-pupil revenue in charter schools and per-pupil revenue in traditional public schools in states with charter school legislation.

### *Description of Variables*

The independent variable examined was school type, specifically charter schools and traditional public schools. The dependent variable was per-pupil revenue. Per-pupil revenue is the amount of money allocated to a school to teach a particular student. Per-pupil revenues are commonly used in research to assess the average spending per student. For this research, the average per-pupil revenue in a state was measured in dollars and cents on an interval scale.

### *Analytic Strategy*

Descriptive statistics of per-pupil revenue were conducted to obtain the mean and standard deviation. Independent samples T-Test were conducted to see if there were any statistically significant differences between per-pupil revenue for charter schools and per-pupil revenue for traditional public schools.

***Research Question 3: What percent of traditional public school students vs. charter school students performed at or above proficiency on the National Assessment of Educational Progress (NAEP) after charter school legislation was implemented?***

### *Description of Sample*

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The sample for this research question was also a convenience sample and is identical to the sample for the second research question. The 15 states in this sample implemented legislation and opened charter schools earlier than the states in the overall population. These 15 states also had more charter schools and charter school students than the overall population. For a list of the states included in this sample, please see Table 2 in the Appendix.

### *Procedures*

Data for this research question was assessed in 2005, 2007, and 2009 and was obtained from the NAPCS charter school dashboard.

### *Description of Variables*

Similar to the other research questions, the independent variable was school type. The dependent variable was scores on the National Assessment of Educational Progress (NAEP). Specifically the percent of students in a state performing at or above proficiency measured on an interval scale. The NAEP is commonly used in the education literature to assess student achievement. The NAEP is a national test that measures student proficiency in mathematics, reading, science, writing, the arts, civics, economics, geography, and U.S. History. The NAEP is administered to students in grades four, eight, and twelve (NAEP, 2011). As a part of No Child Left Behind (NCLB) Legislation, beginning in the 2002-2003 school year, states and school districts receiving Title I funds were required to administer NAEP reading and mathematics tests to a sample of fourth and eighth graders every other year in order to compare results across states (NAEP, 2010). For the purpose of this analysis, the focus will only be on math and reading scores for students in fourth and eighth grade. These assessments are given the most frequently (biennially) and are commonly used in the literature to assess student achievement.

### *Analytic Strategy*

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In order to obtain a combined math and reading score for both fourth and eighth graders, I conducted Pearson correlations to determine if there was a relationship between math and reading scores. The results indicated a strong positive correlation between the two; as a result I pooled the scores for fourth grade reading and math as well as eighth grade reading and math. For more information about the correlations between NAEP reading and math scores, please see Table 3 in the Appendix.

Descriptive statistics of fourth and eighth grade NAEP scores were conducted to obtain the mean and standard deviation. Independent samples T-Tests were conducted to see if there were any statistically significant differences between NAEP scores for charter schools and NAEP scores for traditional public schools.

### **Results**

#### **Research Question 1: What was the demographic composition of traditional public schools vs. charter schools after charter school legislation was implemented?**

##### *Descriptive Statistics*

Descriptive statistics were conducted for race and income for the 41 states and the District of Columbia with charter school legislation. These results reveal consistently higher percentages of Black and Hispanic students enrolled in charter schools than traditional public schools between 1999 and 2010. On average 48% of charter school students were Black or Hispanic compared to 31% of Black and Hispanic students enrolled in traditional public schools, a difference of 17 percentage points. As it relates to the percent of students eligible for free or reduced price lunch, the results reveal that charter schools and traditional public schools on average educate approximately equal percentages of low-income students. On average, 39% of charter school students were eligible for free or reduced price lunch, compared to 40% of

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students in traditional public schools, a difference of only one percentage point. For more information about these results, please see Figures 1 and 2 in the Appendix.

As mentioned previously, states were also grouped by specific characteristics. These characteristics included charter caps and year of charter school legislation. Grouping of states based on charter caps yielded two subgroups: states with charter caps and states without charter caps. It was expected that states with charter school caps would have different characteristics than states without charter school caps. Grouping of states based on the year of charter legislation yielded three subgroups: the first group included states with charter legislation that was passed between 1991 and 1995; the second group included states with charter legislation that was passed between 1996 and 2000; and the third group consisted of states with charter legislation that was passed between 2001 and 2005. Five year intervals were selected because it was expected that early adopters of charter school legislation would be different from later adopters of charter school legislation.

There were 14 states in the sample without charter caps. These states included: Arizona, Colorado, Florida, Georgia, Kansas, Maryland, Minnesota, Nevada, New Jersey, Oregon, Pennsylvania, South Carolina, Virginia, and Wyoming. In these states, charter schools consistently educated higher percentages of Black and Hispanic students than traditional public schools between 1999 and 2010. Of students in charter schools in states without charter caps, on average 40% of the students were Hispanic and Black. In traditional public schools, on average 32% were Black and Hispanic. This is a difference of eight percentage points. This difference is smaller than the results for the overall population of 41. As it relates to free and reduced price lunch eligibility, the results reveal that charter schools and traditional public schools on average educate approximately equal percentages of low-income students. Over an 11 year period this

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was an average of 34% in charter schools and 37% in traditional public schools, a difference of three percentage points. This difference is larger than the difference in the overall population. For more information about these results, please see Figures 3 and 4 in the Appendix.

There were 27 states in the sample with charter caps. These states included: Alaska, Arkansas, California, Connecticut, District of Columbia, Hawaii, Idaho, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Mississippi, Missouri, New Hampshire, New Mexico, New York, North Carolina, Ohio, Oklahoma, Rhode Island, Tennessee, Texas, Utah, and Wisconsin. In states with charter caps, charter schools consistently educated greater percentages of Black and Hispanic students than traditional public schools. On average, 52% of charter school students were Hispanic or Black compared to 31% of traditional public school students, a difference of 21 percentage points. Charter schools in states with charter caps enroll higher percentages of Black and Hispanic students than charter schools in states without charter caps and charter schools in the overall population. As it relates to free and reduced price lunch eligibility, on average, 43% of charter school students were eligible for free or reduced price lunch, compared to 41% of students eligible in traditional public schools. For more information about these results, please see Figures 5 and 6 in the Appendix.

There were 19 states in the sample that implemented charter school legislation between 1991 and 1995. These states included: Minnesota, California, Colorado, Georgia, Massachusetts, Michigan, New Mexico, Wisconsin, Arizona, Kansas, Hawaii, Wyoming, Alaska, Arkansas, Delaware, Louisiana, New Hampshire, Rhode Island, and Texas. States with charter school legislation implemented during this time frame consistently educated larger percentages of Black and Hispanic students than traditional public schools. On average, 41% of charter school students were Black or Hispanic, compared to 30% of students in traditional public schools. This

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is a difference of 11 percentage points. As it relates to free and reduced price lunch eligibility, in states with charter school legislation implemented between 1991 and 1995, charter schools and traditional public schools educated equal percentages of low-income students (39%). For more details about these results, please see Figures 7 and 8 in the Appendix.

There were 18 states in the sample that implemented charter school legislation between 1996 and 2000. These states included: Florida, New Jersey, South Carolina, Connecticut, District of Columbia, Illinois, North Carolina, Nevada, Pennsylvania, Mississippi, Ohio, Virginia, Idaho, Missouri, New York, Utah, Oregon, and Oklahoma. Similar to states with charter school legislation implemented between 1991 and 1995, states with charter school legislation implemented between 1996 and 2000 consistently educated larger percentages of Hispanic and Black students than traditional public schools. On average, 54% of charter school students were Black or Hispanic, compared to 33% of traditional public school students. In regards to free and reduced price lunch eligibility, states with charter legislation enacted between 1996 and 2000 educated approximately the same percentages of low-income students in charter schools (38%) and traditional public schools (40%). For more information about these results, please see Figures 9 and 10 in the Appendix.

There were only four states in the sample with charter school legislation passed between 2001 and 2005. These states included: Indiana, Iowa, Tennessee, and Maryland. Data for this sample is only available for 2003-2010. The data for these states was a lot different than the states with charter school legislation passed in earlier years. For example, during the 2004-2005 school year, charter schools and traditional public schools served approximately the same percentage of Black and Hispanic students. There was then a large shift in the percentage of Black and Hispanic students served by charter schools during the years following. Overall,

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between 2003 and 2010, 61% of charter school students were Black and Hispanic; compared to 27% of Hispanic and Black students served in traditional public schools. Free and reduced price lunch eligibility was also a bit different for this sample. It appears that for the first couple of years of the analysis, charter schools and traditional public schools educated approximately equal percentages of low-income students, however, as time progressed, charter schools in these four states increasingly enrolled higher percentages of low-income students. On average, 49% of the charter school population in these four states was low-income students; compared to the low-income student population in traditional public schools of 37%. For more information about these results, please see Figures 11 and 12 in the Appendix.

### *Independent Samples T-Test*

Independent samples t-test were conducted to see if there were statistically significant race and income differences for charter schools and traditional public schools. These results are presented in Table 4. There were statistically significant effects for the percentages of Black and Hispanic students for all years of analysis, with charter schools enrolling higher percentages of Black and Hispanic students than traditional public schools. There were no statistically significant differences for free or reduced price lunch eligibility. These results are presented in Table 5 in the Appendix.

When examining data for charter schools in states without charter caps, there were no statistically significant effects for Black and Hispanic race between traditional public schools and charter schools. These results are displayed in Table 6. However when looking at results for states with charter caps, there were a number of significant effects for the percentages of Black and Hispanic students in almost all years of analysis, with charter schools enrolling higher percentages of Black and Hispanic students than traditional public schools, these results are

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displayed in Table 7. There were no statistically significant effects for free or reduced price lunch eligibility in states without or with charter caps, these results are displayed in Tables 8 and 9.

Data for states based on the year of charter school legislation yielded fewer statistically significant results for states with charter legislation implemented between 1991 and 1996. The only significant effect for percentages of Black and Hispanic students was during the 2000-2001 school year, with charter schools enrolling higher percentages of minority students than traditional public schools. However, there were a number of statistically significant differences for the percentage of Black and Hispanic students served by charter schools and traditional public schools in states with charter school legislation implemented between 1996 and 2000. These specific states enrolled higher percentages of Black and Hispanic students in charter schools than traditional public schools. For charter schools in states with legislation enacted between 2001 and 2005, the results were mixed. For instance, in 2005-2006, 2006-2007, 2007-2008 and 2008-2009 these specific states had significantly higher percentages of Black and Hispanic students enrolled in charter schools than in traditional public schools, but no significant effects were found during any other years. For more information about these results, see Tables 10, 11, and 12. As it relates to free or reduced price lunch eligibility, there were no significant effects in states with charter school legislation enacted between 1991 and 2000. However between 2001 and 2005, there were three statistically significant effects for free or reduced price lunch eligibility, with greater percentages of low-income students enrolled in charter schools than in traditional public schools. For more information about these results, see Tables 13, 14, and 15 in the Appendix.

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***Research Question 2: What was the amount of per-pupil revenue for traditional public schools vs. charter schools after charter school legislation was implemented?***

### *Descriptive Statistics*

Descriptive statistics were conducted for per-pupil revenue for the 15 states included in the sample. In these 15 states, traditional public schools received more funding per-pupil than charter schools for both the 2005-2006 and 2006-2007 school years. Over the course of the two years of examination, traditional public school funding basically stayed the same. However charter school funding increased by about \$1,760 during the 2006-2007 school year. For more information about these results, see Figure 13 in the Appendix.

### *Independent Samples T-Test*

Independent samples t-test were conducted to see if there were statistically significant differences in per-pupil revenue for charter schools and traditional public schools. Statistically significant effects for per-pupil revenue were found during both the 2005-2006 and 2006-2007 school years, with charter schools receiving less funding per-pupil than traditional public schools. These results can be found in Table 16.

***Research Question 3: What percent of traditional public school students vs. charter school students performed at or above proficiency on the National Assessment of Educational Progress (NAEP) after charter school legislation was implemented?***

### *Descriptive Statistics*

Descriptive statistics were conducted for fourth and eighth grade NAEP scores for the 15 states included in the sample. The results show that students in charter schools are not performing any better or worse than students in traditional public schools on the NAEP. On average, 33% of fourth grade charter school students performed at or above proficiency on the

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NAEP, compared to 35% of traditional public school students. On average, 29% of eighth grade charter school students performed at or above proficiency on the NAEP, compared to 30% of traditional public school students. For more information about these results, see Figure 14 in the Appendix.

### *Independent Sample T-Tests*

Independent samples t-test were conducted to see if there were statistically significant differences in fourth and eighth grade NAEP scores for charter schools and traditional public schools. There were no statistically significant differences. For more information about these results, see Table 17 in the Appendix.

## **Discussion**

### *Summary of findings*

Contrary to the arguments identified against charter schools, there were a number of statistically significant relationships. Opponents in Washington State believed that the implementation of charter school legislation would leave low-income and other disadvantaged students behind in increasingly impoverished schools. The results revealed a statistically significant effect for minority race, with charter schools consistently serving *greater* percentages of Black and Hispanic students than traditional public schools. This effect was prevalent for the entire sample of 41 states and the District of Columbia as well as when grouping data by charter caps and year of charter school legislation. The only exception was in the 14 states without charter caps, where there was no statistically significant difference in student race between charter schools and traditional public schools.

There were no significant effects for the percentage of students eligible for free and reduced price lunch except for when grouping data based on year of charter school legislation.

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Charter schools in states with legislation implemented between 2001 and 2005 had higher percentages of students eligible for free or reduced price lunch than traditional public schools. The lack of significant findings in this area is interesting given the typical relationship between race and income status in the literature. Nonetheless, results reveal that low-income students are not being left behind in increasingly impoverished traditional public schools. Instead, charter schools and traditional public schools are enrolling approximately equal percentages of students eligible for free or reduced price lunch, while educating higher percentages of Black and Hispanic students.

Opponents in Washington State also believed that charter schools increase taxes and take money away from traditional public schools. However, the results revealed otherwise. There were statistically significant differences between charter schools and traditional public schools, but charter schools received significantly *less* funding than traditional public schools.

There was one argument held by Washington State charter school opponents that appears to be true. Opponents believe charter schools are experimental and have not been proven to work; charter school students are not performing any better than traditional public school students. There were no significant differences for fourth and eighth grade NAEP scores between charter schools and traditional public schools. This suggests that on average, charter schools and traditional public schools are getting the same percentage of students to meet standards on the NAEP.

### *Limitations*

One limitation of this study rests within the convenience sample for research question number two about per-pupil revenues and research question number three about student standardized test scores. Because data comparing charter schools to traditional public schools

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was not available for all 41 states and the District of Columbia, the sample size was reduced to 15. Including more states in the sample could have possibly provided for more accurate and representative results. In addition, only having two years of analyses for the second research question and three for the third research question was a limitation. It restricted the ability to see patterns over time. Having data available for additional years of analyses, as in research question one would have allowed for a more thorough examination of per-pupil revenue and standardized test scores over the years.

### *Strengths*

A strength of this study is that it addressed three common arguments against charter schools in Washington State, though preliminary in nature, this research can possibly add to the existing literature in support of charter school legislation in the state. Another strength is in the longitudinal approach of this research, especially for the first research question. Having this data allowed for the display of a consistent trend over a period of 11 years and invalidated the argument from Washington State charter school opponents that charter schools leave low-income and other disadvantaged students behind in increasingly impoverished schools. Overall, the results of this study showed that no matter how you sliced the pie, charter schools consistently enroll significantly higher percentages of Black and Hispanic students than traditional public schools.

### **Conclusions and Directions for Future Research**

Results from the research invalidate two of the most common reasons against charter school legislation in the state of Washington. Descriptive statistics and independent samples t-test show that overall charter schools are enrolling higher percentages of Black and Hispanic students than traditional public schools. This difference was prevalent for the overall population

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of 41 states and the District of Columbia as well as when grouping data by charter caps and year of charter school legislation. The only grouping in which this difference was not prevalent was in the 14 states without charter school caps. As mentioned previously, these 14 states included Arizona, Colorado, Florida, Georgia, Kansas, Maryland, Minnesota, Nevada, New Jersey, Oregon, Pennsylvania, South Carolina, Virginia, and Wyoming. Further research is needed to examine the composition of these particular states to better understand why there are no statistically significant differences for minority race between charter schools and traditional public schools.

It is important to note that, when grouping states, there was only one group that revealed statistically significant effects for free or reduced price lunch eligibility. This significant difference was prevalent in states with charter school legislation implemented between 2001 and 2005. These states included: Indiana, Iowa, Tennessee, and Maryland. On average, for the four states with charter school legislation implemented between 2001 and 2005, 47% of the charter school students were eligible for free or reduced price lunch compared to the low-income student population in traditional public schools of 37%. These results could be due to the smaller sample size of four for this particular grouping. The overall results do not reveal any significant differences for free or reduced price lunch eligibility. In other words, charter schools and traditional public schools are enrolling approximately equal percentages of low-income students. Considering the correlation between race and income that is commonly cited in the literature, this finding comes as a bit of surprise. Given the significant effects for minority race, it was expected that similar effects would have been found for free and reduced price lunch eligibility. Further research should examine the reasons for significant differences for minority race in charter schools vs. traditional public schools, but not free or reduced price lunch eligibility.

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Given these results, charter school legislation should not be rejected in Washington State. According to this research and other existing literature, there is not a disproportionate amount of low-income and disadvantaged students in traditional public schools as compared to charter schools. Instead, charter schools appear to be an attractive alternative to traditional public schools for many low-income and disadvantaged students.

The second invalidated argument is that charter schools increase taxes and take money away from traditional public schools. Data on per-pupil revenues was used to test this assumption and it was hypothesized that the amount of per-pupil revenue would be greater for charter schools than traditional public schools. This was proven to be false. The results revealed statistically significant differences between charter schools and traditional public schools. During both years of analyses, charter schools received significantly less funding than traditional public schools. Although this study only examined data for 15 states with charter school legislation, this finding appears to be consistent with existing literature. Charter schools are often operating with less federal, state, and local funding than their traditional public school counterparts. As a result, charter school legislation in Washington State should not be rejected based off of the invalid argument that charter schools take money away from traditional public schools.

As mentioned previously, there was one argument made by Washington State charter opponents that actually appears to be true. Critics argued that charter schools are experimental and have not been proven to work. In other words, they argued that charter school students do not perform any better than traditional public school students. There were no significant effects on the NAEP for fourth and eighth grade students in charter schools and traditional public schools. This suggests that on average, students in charter schools and traditional public schools are performing similarly on math and reading sections of the NAEP. While this finding does not

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invalidate the claim of the charter school opponents in the state of Washington, it is not necessarily a negative finding. Instead, it is a finding that warrants additional research. With charter schools on average educating higher percentages of minority students than traditional public schools, future research should examine the NAEP results of Black and Hispanic students in charter schools compared to NAEP results for Black and Hispanic students in traditional public schools. Examining results by minority race may yield significant differences between charter schools and traditional public schools.

With Washington State being one of nine states with a growing achievement gap, it is important that education reform efforts target the population of struggling students. If charter schools are proving to be an attractive alternative for many minority and low-income students, who are often amongst the states lowest performing students (House Bill 2722 Advisory Committee, 2008), perhaps charter schools in the state of Washington should be given a chance. Existing literature supports the idea that charter schools better serve the most at-risk populations. As previously mentioned, Gleason, Clark, Clark Tuttle, Dwoyer, and Silverberg (2010) compared math and reading test scores of students who applied and were admitted to charter schools to math and reading test scores of students who applied, but were not admitted to one of 36 charter middle schools across 15 states. The results found that the 36 charter middle schools in the sample serving more low-income or low-achieving students had statistically significant positive effects on math test scores, whereas charter schools serving more advantaged students with higher income and prior high achievement had significant negative effects on math test scores.

Given that so much of what has already been done to attempt to reform education in the state of Washington has not worked to close the achievement gap, creation and innovation in the

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form of charter schools should be re-examined. Perhaps the implementation of charter school legislation could best serve our state's most struggling students. At the very least, given the results of this study, charter schools deserve the opportunity to be re-discussed as a viable option for helping to close the achievement gap in Washington State.

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Washington State Initiative 729, 2000

Washington State Referendum 55, 2004

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Appendix

**Table 1: Charter Schools in the United States**

<b>US Charter Schools</b>	<b>Year Legislation Passed</b>	<b>Charter Cap</b>	<b>Number of Charter Schools 2009-2010</b>	<b>Number of Charter School Students 2009-2010</b>
Alaska	1995	Yes	26	5,365
Arizona	1994	No	508	113,608
Arkansas	1995	Yes	29	8,641
California	1992	Yes	807	317,364
Colorado	1993	No	158	66,826
Connecticut	1996	Yes	18	5,215
Delaware	1995	Yes	18	9,173
District of Columbia	1996	Yes	57	27,660
Florida	1996	No	411	137,788
Georgia	1993	No	89	45,703
Hawaii	1994	Yes	31	7,819
Idaho	1998	Yes	36	14,611
Illinois	1996	Yes	39	35,836
Indiana	2001	Yes	54	18,610
Iowa	2002	Yes	8	560
Kansas	1994	No	36	5,089
Louisiana	1995	Yes	77	31,549
Maryland	2003	No	36	11,278
Massachusetts	1993	Yes	62	27,393
Michigan	1993	Yes	240	110,840
Minnesota	1991	No	153	35,375
Mississippi	1997	Yes	Missing	
Missouri	1998	Yes	33	18,418
Nevada	1997	No	28	12,630
New Hampshire	1995	Yes	11	816
New Jersey	1996	No	68	21,687
New Mexico	1993	Yes	72	13,090
New York	1998	Yes	140	42,298
North Carolina	1996	Yes	96	38,808
Ohio	1997	Yes	322	92,565
Oklahoma	1999	Yes	18	6,315
Oregon	1999	No	102	18,461
Pennsylvania	1997	No	135	79,167
Rhode Island	1995	Yes	13	3,452
South Carolina	1996	No	38	13,032

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Tennessee	2002	Yes	22	5,156
Texas	1995	Yes	273	147,244
Utah	1998	Yes	72	34,166
Virginia	1998	No	3	179
Wisconsin	1993	Yes	206	36,268
Wyoming	1995	No	3	261

**Table 2: States Examined for Research Questions Two and Three**

<b>US Charter Schools</b>	<b>Year Legislation Passed</b>	<b>Charter Cap</b>	<b>Number of Charter Schools 2009-2010</b>	<b>Number of Charter School Students 2009-2010</b>
Alaska	1995	Yes	26	5,365
California	1992	Yes	807	317,364
Colorado	1993	No	158	66,826
Delaware	1995	Yes	18	9,173
Florida	1996	No	411	137,788
Georgia	1993	No	89	45,703
Idaho	1998	Yes	36	14,611
Michigan	1993	Yes	240	110,840
Minnesota	1991	No	153	35,375
New Mexico	1993	Yes	72	13,090
North Carolina	1996	Yes	96	38,808
Ohio	1997	Yes	322	92,565
Pennsylvania	1997	No	135	79,167
Texas	1995	Yes	273	147,244
Wisconsin	1993	Yes	206	36,268

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**Table 3: NAEP Reading and Math Correlations**

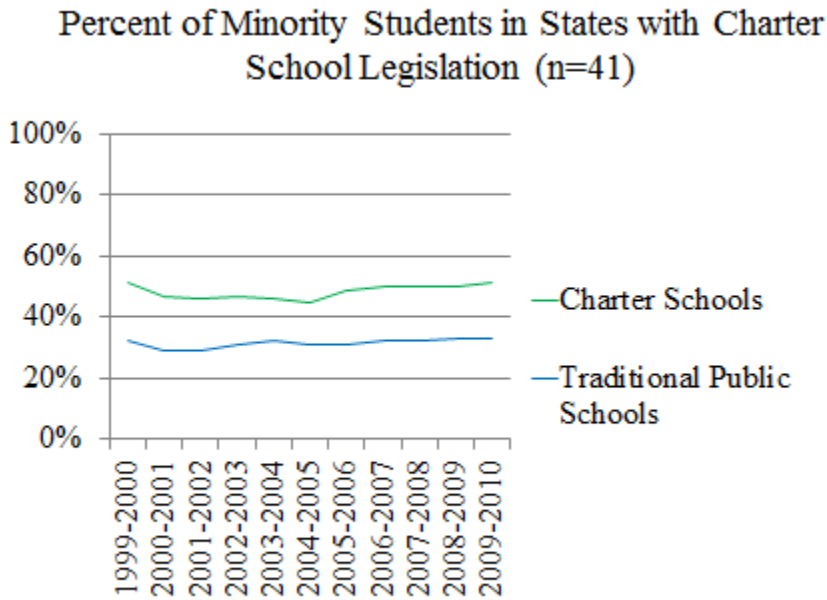
	1	2	3	4	5	6	7	8	9	10	11	12
<b>1. 2005: 4<sup>th</sup> Grade Reading</b>	-											
<b>2. 2005: 4<sup>th</sup> Grade Math</b>	.857**	-										
<b>3. 2005: 8<sup>th</sup> Grade Reading</b>	.586	.685	-									
<b>4. 2005: 8<sup>th</sup> Grade Math</b>	.321	.515	.892**	-								
<b>5. 2007: 4<sup>th</sup> Grade Reading</b>	.646	.795**	.146	-.067	-							
<b>6. 2007: 4<sup>th</sup> Grade Math</b>	.781*	.920**	.541	.313	.922**	-						
<b>7. 2007: 8<sup>th</sup> Grade Reading</b>	.600	.718*	.836**	.643*	.341	.699*	-					
<b>8. 2007: 8<sup>th</sup> Grade Math</b>	.638	.652*	.934**	.760**	.205	.559	.927**	-				
<b>9. 2009: 4<sup>th</sup> Grade Reading</b>	.672*	.864**	.610	.469	.791**	.903**	.633*	.541	-			
<b>10. 2009: 4<sup>th</sup> Grade Math</b>	.749*	.835**	.606	.497	.819**	.869**	.598*	.583*	.923**	-		
<b>11. 2009: 8<sup>th</sup> Grade Reading</b>	.655*	.794**	.825**	.615*	.523	.817**	.838**	.810**	.830**	.758**	-	
<b>12. 2009: 8<sup>th</sup> Grade Math</b>	.606	.716*	.809**	.627	.497	.746**	.817**	.858**	.783**	.780**	.962**	-

\*\*p< .01

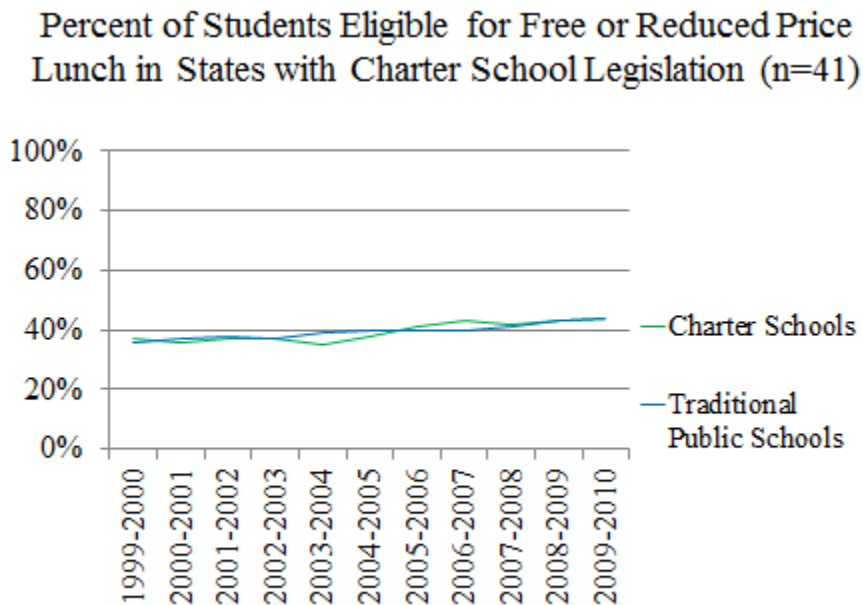
\*p< .05

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**Figure 1: Minority Students**



**Figure 2: Free or Reduced Price Lunch Eligibility**



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Figure 3: Minority Students in States without Charter Caps

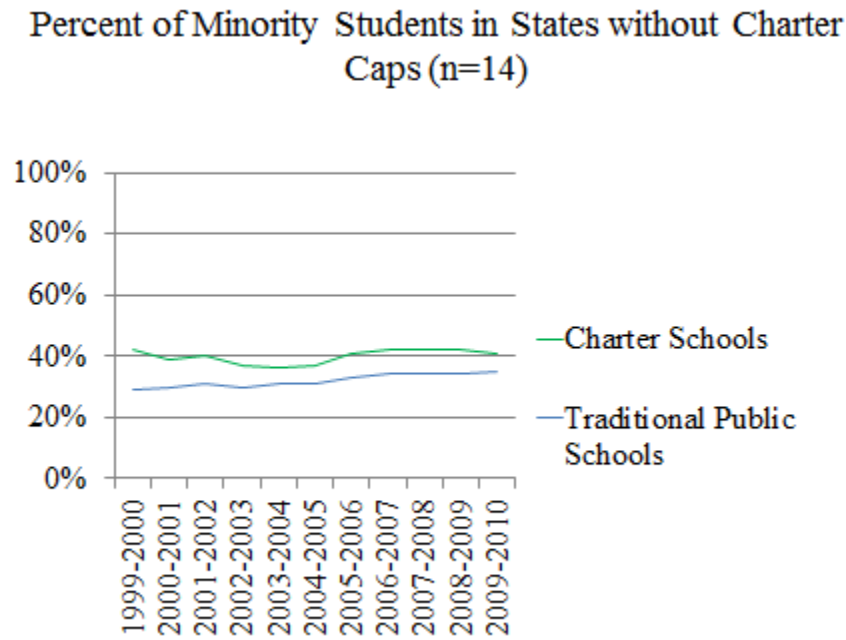
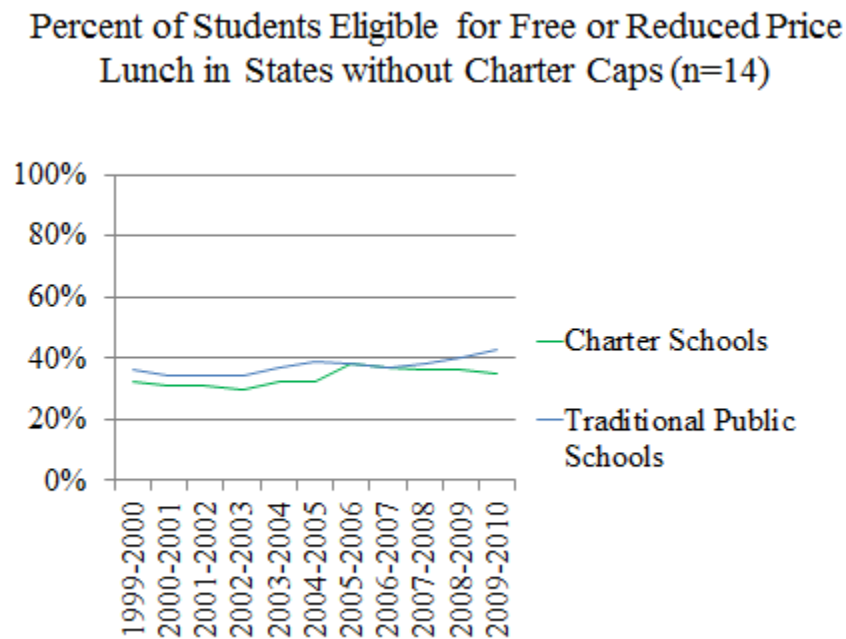
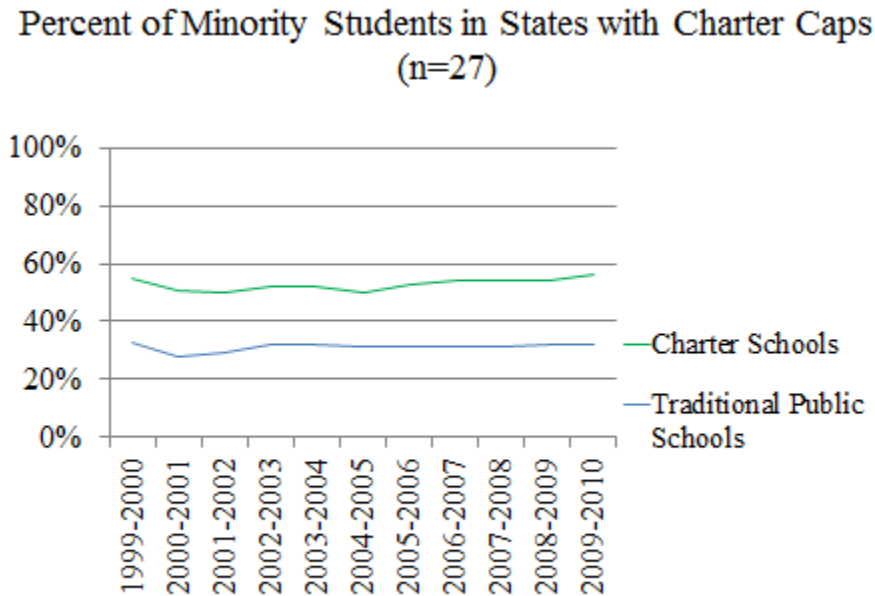


Figure 4: Free or Reduced Price Lunch Eligibility in States without Charter Caps

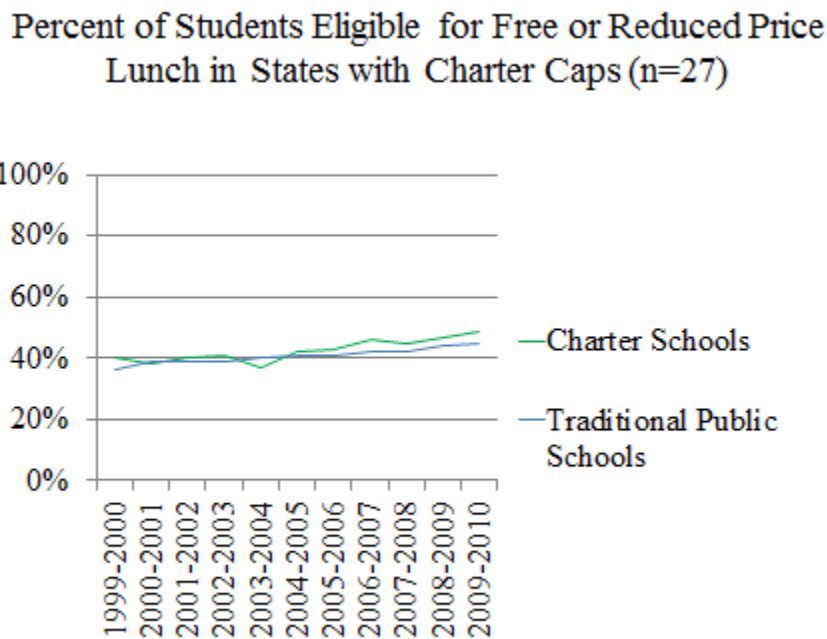


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**Figure 5: Minority Students in States with Charter Caps**

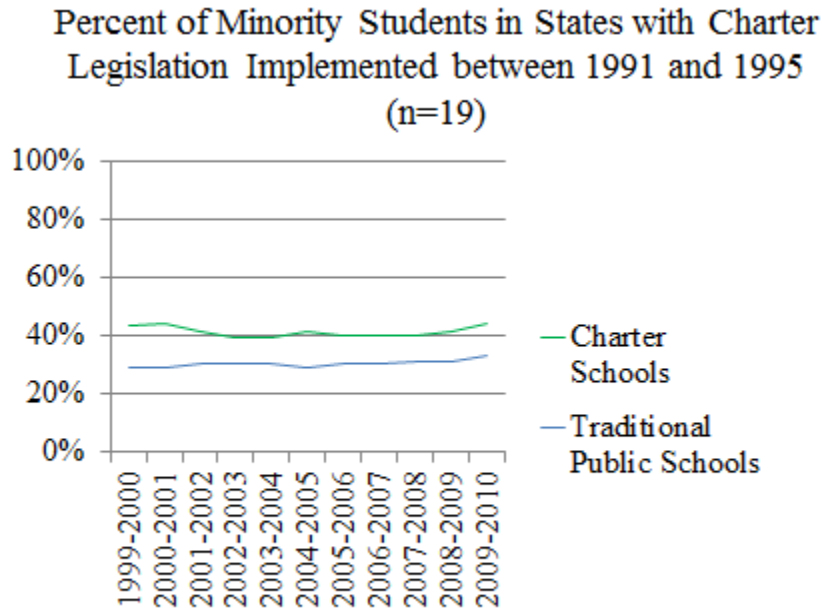


**Figure 6: Free or Reduced Price Lunch Eligibility in States without Charter Caps**

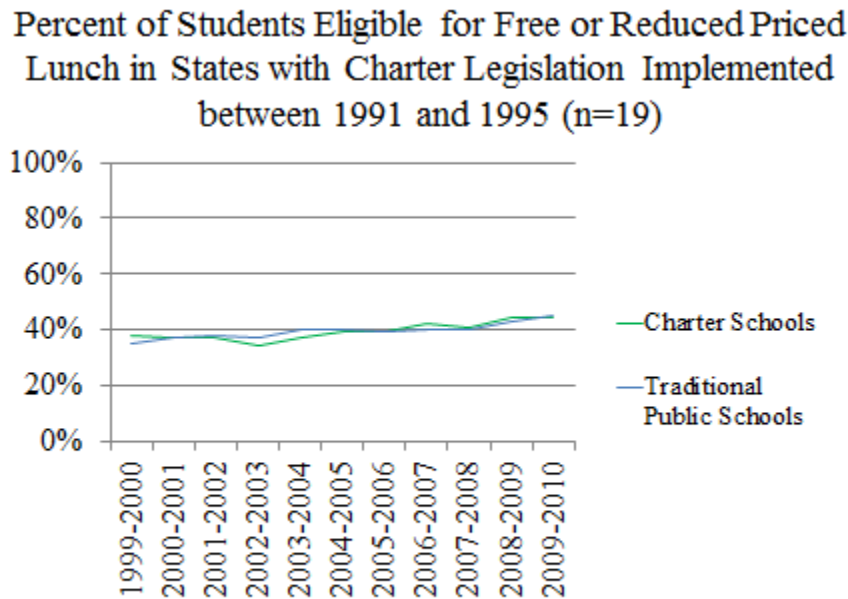


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**Figure 7: Minority Race in States with Charter School Legislation Implemented between 1991 and 1995**

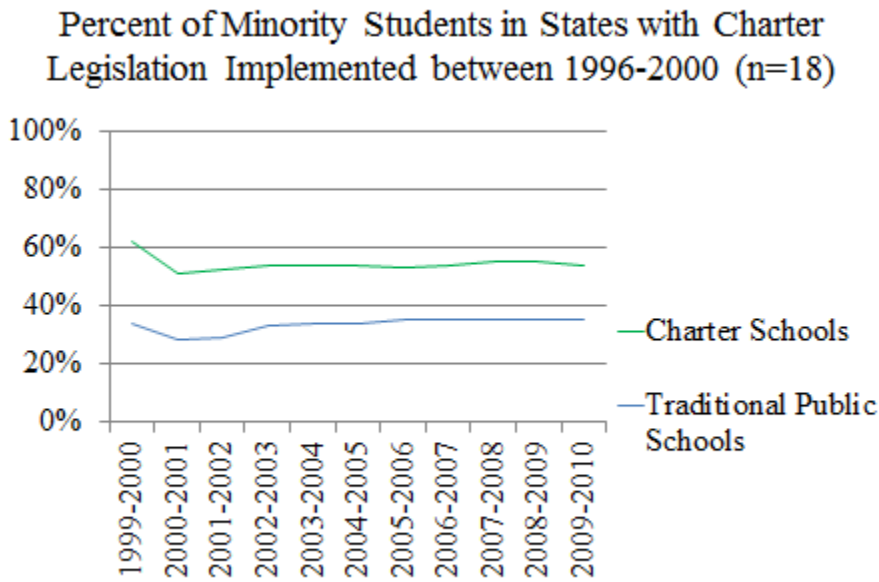


**Figure 8: Free or Reduced Price Lunch in States with Charter School Legislation Implemented between 1991 and 1995**

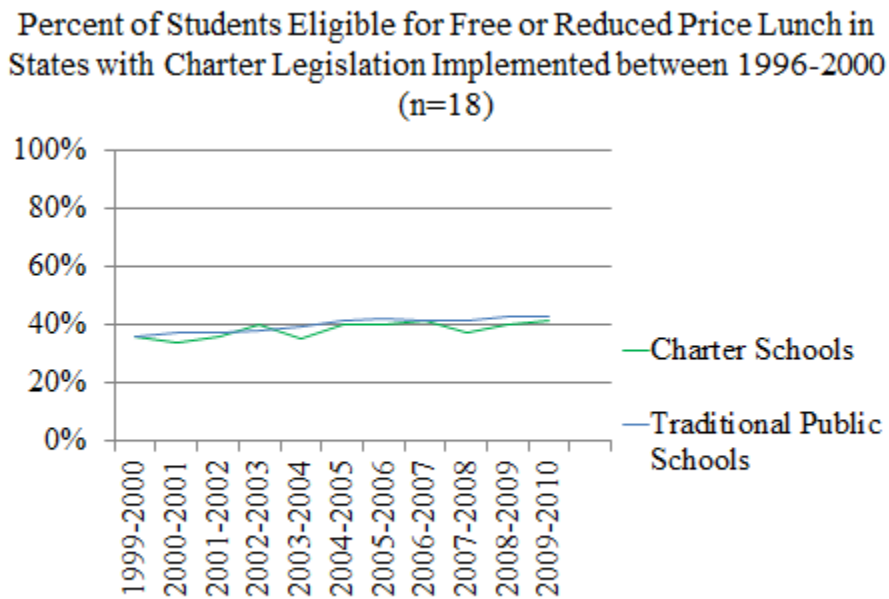


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**Figure 9: Minority Race in States with Charter School Legislation Implemented between 1996 and 2000**

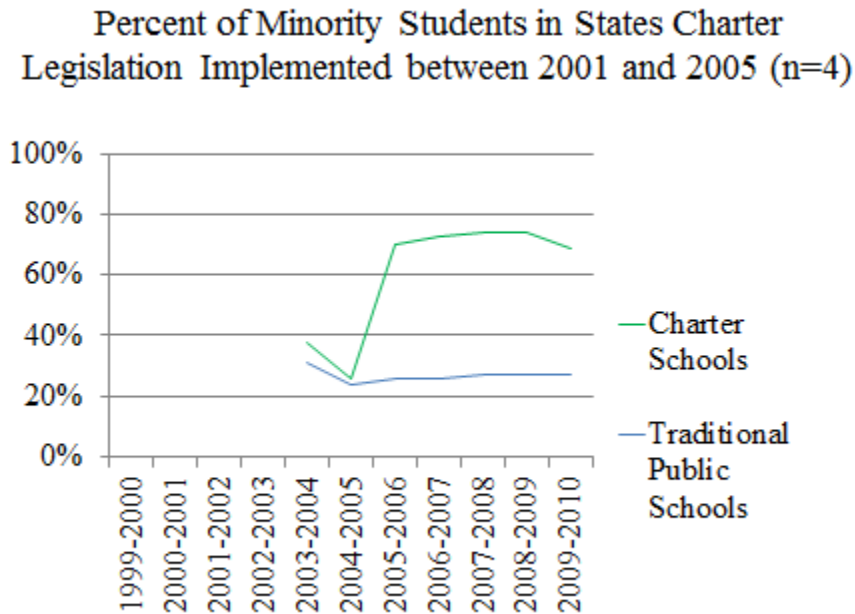


**Figure 10: Free or Reduced Price Lunch in States with Charter School Legislation Implemented between 1996 and 2000**

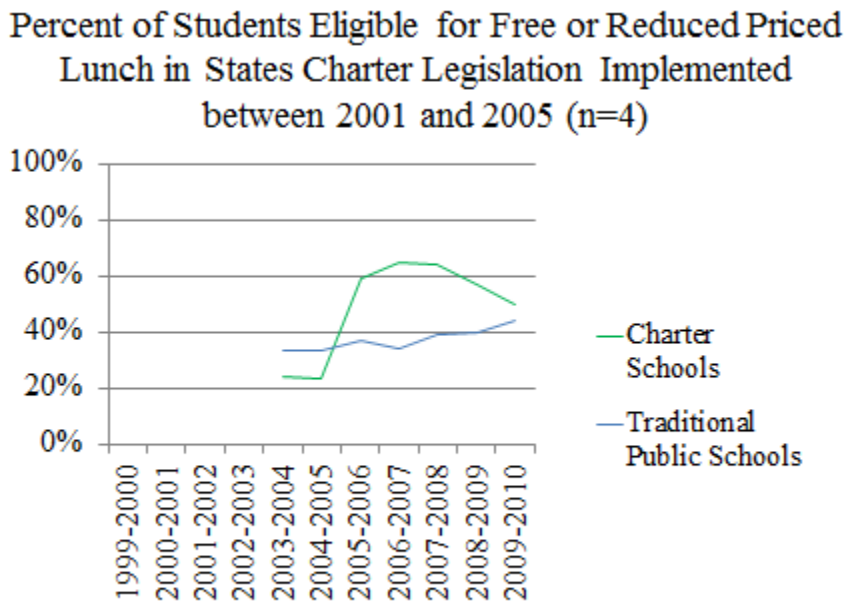


THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Figure 11: Minority Race in States with Charter School Legislation Implemented between 2001 and 2005**



**Figure 12: Free or Reduced Price Lunch in States with Charter School Legislation Implemented between 2001 and 2005**



THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 4: Differences in Black and Hispanic Race for Charter Schools and Traditional Public Schools**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Black and Hispanic Race	51.19	28.09	31.58	19.46	3.020**	53
2000-2001: Black and Hispanic Race	47.21	26.32	28.68	14.68	3.507**	62
2001-2002: Black and Hispanic Race	46.20	25.93	29.34	14.78	3.245**	64
2002-2003: Black and Hispanic Race	46.54	26.00	31.00	18.11	2.988**	72
2003-2004: Black and Hispanic Race	46.21	26.54	31.82	17.97	2.767**	74
2004-2005: Black and Hispanic Race	45.31	26.36	31.03	18.72	2.711**	73
2005-2006: Black and Hispanic Race	48.65	27.68	31.43	18.01	3.332**	80
2006-2007: Black and Hispanic Race	50.00	28.43	31.84	18.06	3.367**	80
2007-2008: Black and Hispanic Race	50.00	28.17	32.30	18.04	3.374**	80
2008-2009: Black and Hispanic Race	50.26	28.27	32.53	17.86	3.393**	80
2009-2010: Black and Hispanic Race	51.00	28.82	33.00	17.48	3.318**	76

\*\*p < .01

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 5: Differences in Free or Reduced Price Lunch Eligibility for Charter Schools and Traditional Public Schools**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Free and Reduced Price Lunch Eligibility	37.42	25.18	35.57	11.00	.323	44
2000-2001: Free and Reduced Price Lunch Eligibility	35.60	22.19	37.09	11.15	-.319	54
2001-2002: Free and Reduced Price Lunch Eligibility	36.76	22.64	37.54	10.82	-.171	58
2002-2003: Free and Reduced Price Lunch Eligibility`	37.13	21.43	37.28	12.35	-.038	70
2003-2004: Free and Reduced Price Lunch Eligibility`	35.22	19.72	39.03	10.60	-1.005	68
2004-2005: Free and Reduced Price Lunch Eligibility	38.40	19.16	39.83	11.86	-.377	68
2005-2006: Free and Reduced Price Lunch Eligibility	41.23	19.00	40.18	11.34	.297	76
2006-2007: Free and Reduced Price Lunch Eligibility	43.34	19.90	40.17	11.39	.854	74
2007-2008: Free and Reduced Price Lunch Eligibility`	41.76	22.08	40.50	10.83	.325	79
2008-2009: Free and Reduced Price Lunch Eligibility`	43.26	21.35	42.51	11.35	.199	80
2009-2010: Free and Reduced Price Lunch Eligibility`	43.70	25.14	44.19	10.44	-.103	66

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 6: Differences in Black and Hispanic Race for Charter Schools and Traditional Public Schools in States without Charter Caps**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Black and Hispanic Race	41.94	16.60	28.70	14.22	1.713	14
2000-2001: Black and Hispanic Race	39.26	23.14	29.86	12.23	1.221	20
2001-2002: Black and Hispanic Race	40.18	24.70	30.76	12.27	1.184	22
2002-2003: Black and Hispanic Race	37.22	23.18	29.78	13.31	1.002	24
2003-2004: Black and Hispanic Race	35.75	23.24	31.44	13.36	.602	26
2004-2005: Black and Hispanic Race	37.35	23.27	31.30	13.61	.810	24
2005-2006: Black and Hispanic Race`	40.60	23.14	33.00	13.45	1.077	26
2006-2007: Black and Hispanic Race	41.84	24.73	33.54	13.54	1.101	26
2007-2008: Black and Hispanic Race`	42.49	24.23	34.00	13.50	1.144	26
2008-2009: Black and Hispanic Race`	42.30	24.14	34.31	13.48	1.081	26
2009-2010: Black and Hispanic Race	40.80	24.80	34.76	13.20	.804	26

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 7: Differences in Black and Hispanic Race for Charter Schools and Traditional Public Schools in States with Charter Caps**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Black and Hispanic Race	55.09	31.28	32.72	21.42	2.617*	37
2000-2001: Black and Hispanic Race	51.00	27.41	28.01	16.17	3.311**	40
2001-2002: Black and Hispanic Race	49.63	26.58	28.52	16.28	3.104**	40
2002-2003: Black and Hispanic Race	51.58	26.50	31.61	20.49	2.921**	46
2003-2004: Black and Hispanic Race	52.31	26.88	32.05	20.45	2.939**	46
2004-2005: Black and Hispanic Race	49.62	27.38	30.89	21.16	2.686*	47
2005-2006: Black and Hispanic Race`	52.82	29.29	30.68	20.30	3.229**	52
2006-2007: Black and Hispanic Race	53.55	29.82	30.96	20.19	3.260**	52
2007-2008: Black and Hispanic Race`	53.79	29.70	31.42	20.18	3.237**	52
2008-2009: Black and Hispanic Race`	54.38	29.78	31.61	19.93	3.302**	52
2009-2010: Black and Hispanic Race	56.48	29.83	31.93	19.65	3.437**	48

\*p < .05

\*\*p < .01

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 8: Differences in Free or Reduced Price Lunch Eligibility for Charter Schools and Traditional Public Schools for States without Charter Caps**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Free and Reduced Price Lunch Eligibility	31.89	18.78	35.66	8.68	-.482	12
2000-2001: Free and Reduced Price Lunch Eligibility	30.55	20.14	33.84	8.26	-.478	18
2001-2002: Free and Reduced Price Lunch Eligibility	30.95	21.34	34.34	8.10	-.493	20
2002-2003: Free and Reduced Price Lunch Eligibility`	29.77	16.49	33.58	10.40	-.677	22
2003-2004: Free and Reduced Price Lunch Eligibility`	31.85	17.89	36.68	8.45	-.880	24
2004-2005: Free and Reduced Price Lunch Eligibility	32.36	15.02	38.50	8.77	-1.223	22
2005-2006: Free and Reduced Price Lunch Eligibility	37.97	15.47	38.04	8.27	-.014	26
2006-2007: Free and Reduced Price Lunch Eligibility	37.34	15.58	37.44	8.27	-.020	24
2007-2008: Free and Reduced Price Lunch Eligibility`	35.68	17.07	37.84	7.79	-.432	26
2008-2009: Free and Reduced Price Lunch Eligibility`	36.44	17.39	40.28	8.55	-.741	26
2009-2010: Free and Reduced Price Lunch Eligibility`	34.58	21.68	43.24	8.52	-1.341	24

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 9: Differences in Free or Reduced Price Lunch Eligibility for Charter Schools and Traditional Public Schools for States with Charter Caps**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Free and Reduced Price Lunch Eligibility	39.84	27.72	35.53	12.12	.569	30
2000-2001: Free and Reduced Price Lunch Eligibility	38.39	23.33	38.89	12.32	-.080	34
2001-2002: Free and Reduced Price Lunch Eligibility	40.12	23.25	39.39	11.93	.121	36
2002-2003: Free and Reduced Price Lunch Eligibility`	40.81	22.95	39.14	13.03	.310	46
2003-2004: Free and Reduced Price Lunch Eligibility`	37.22	20.86	40.41	11.64	-.627	42
2004-2005: Free and Reduced Price Lunch Eligibility	41.55	20.59	40.53	13.33	.200	44
2005-2006: Free and Reduced Price Lunch Eligibility	43.05	20.75	41.38	12.75	.344	48
2006-2007: Free and Reduced Price Lunch Eligibility	46.47	21.38	41.59	12.64	.981	48
2007-2008: Free and Reduced Price Lunch Eligibility`	44.92	23.96	41.93	12.05	.569	51
2008-2009: Free and Reduced Price Lunch Eligibility`	46.79	22.63	43.66	12.55	.628	52
2009-2010: Free and Reduced Price Lunch Eligibility`	49.35	25.94	44.77	11.64	.738	40

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 10: Differences in Black and Hispanic Race for Charter Schools and Traditional Public Schools in States with Charter School Legislation Implemented between 1991 and 1995**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Black and Hispanic Race	42.58	26.30	29.66	17.14	1.594	28
2000-2001: Black and Hispanic Race	43.89	22.43	29.42	16.48	2.121*	31
2001-2002: Black and Hispanic Race	41.05	23.05	30.11	16.67	1.586	32
2002-2003: Black and Hispanic Race	38.81	21.28	29.61	17.11	1.429	34
2003-2004: Black and Hispanic Race	39.18	20.61	30.12	17.30	1.429	34
2004-2005: Black and Hispanic Race	40.92	21.21	29.22	18.07	1.809	35
2005-2006: Black and Hispanic Race`	39.63	23.59	29.59	18.08	1.472	36
2006-2007: Black and Hispanic Race	40.07	24.87	30.23	18.28	1.390	36
2007-2008: Black and Hispanic Race`	40.35	24.78	30.81	18.55	1.344	36
2008-2009: Black and Hispanic Race`	40.85	24.61	30.99	18.44	1.398	36
2009-2010: Black and Hispanic Race	44.07	23.83	32.67	18.05	1.619	34

\*p < .05

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 11: Differences in Black and Hispanic Race for Charter Schools and Traditional Public Schools in States with Charter School Legislation Implemented between 1996 and 2000**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Black and Hispanic Race	61.96	27.52	33.78	22.35	2.821*	23
2000-2001: Black and Hispanic Race	50.75	30.31	27.89	13.00	2.760*	29
2001-2002: Black and Hispanic Race	51.66	28.39	28.51	12.99	2.966**	30
2002-2003: Black and Hispanic Race	54.21	29.21	33.14	19.56	2.543*	34
2003-2004: Black and Hispanic Race	54.14	29.55	33.66	19.36	2.461*	34
2004-2005: Black and Hispanic Race	53.88	29.21	34.45	20.05	2.194*	30
2005-2006: Black and Hispanic Race`	53.48	29.79	34.64	19.03	2.261*	34
2006-2007: Black and Hispanic Race	54.34	29.93	34.80	18.78	2.347*	34
2007-2008: Black and Hispanic Race`	54.67	29.50	35.15	18.51	2.377*	34
2008-2009: Black and Hispanic Race`	54.88	30.01	35.42	18.19	2.353*	34
2009-2010: Black and Hispanic Race	53.81	32.28	34.59	18.04	2.143*	32

\*p < .05

\*\*p < .01

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 12: Differences in Black and Hispanic Race for Charter Schools and Traditional Public Schools in States with Charter School Legislation Implemented between 2001 and 2005**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
2003-2004: Black and Hispanic Race	38.05	42.92	30.65	19.30	.222	2
2004-2005: Black and Hispanic Race	25.97	30.97	24.23	18.43	.083	4
2005-2006: Black and Hispanic Race`	69.75	24.52	25.75	15.17	3.053*	6
2006-2007: Black and Hispanic Race	73.00	23.46	26.18	15.27	3.346*	6
2007-2008: Black and Hispanic Race`	74.13	21.56	26.60	15.16	3.606*	6
2008-2009: Black and Hispanic Race`	74.13	21.72	26.88	15.20	3.565*	6
2009-2010: Black and Hispanic Race	68.80	31.45	27.23	15.08	2.384	6

\* $p < .05$

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 13: Differences in Free or Reduced Price Lunch Eligibility for Charter Schools and Traditional Public Schools for States with Charter School Legislation Implemented between 1991 and 1995**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Free and Reduced Price Lunch Eligibility	39.84	27.72	35.53	12.12	.569	30
2000-2001: Free and Reduced Price Lunch Eligibility	38.39	23.33	38.89	12.32	-.080	34
2001-2002: Free and Reduced Price Lunch Eligibility	40.12	23.25	39.39	11.93	.121	36
2002-2003: Free and Reduced Price Lunch Eligibility`	40.81	22.95	39.14	13.03	.310	46
2003-2004: Free and Reduced Price Lunch Eligibility`	37.22	20.86	40.41	11.64	-.627	42
2004-2005: Free and Reduced Price Lunch Eligibility	41.55	20.59	40.53	13.33	.200	44
2005-2006: Free and Reduced Price Lunch Eligibility	43.05	20.75	41.38	12.75	.344	48
2006-2007: Free and Reduced Price Lunch Eligibility	46.47	21.38	41.59	12.64	.981	48
2007-2008: Free and Reduced Price Lunch Eligibility`	44.92	23.96	41.93	12.05	.569	51
2008-2009: Free and Reduced Price Lunch Eligibility`	46.79	22.63	43.66	12.55	.628	52
2009-2010: Free and Reduced Price Lunch Eligibility`	49.35	25.94	44.77	11.64	.738	40

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Table 14: Differences in Free or Reduced Price Lunch Eligibility for Charter Schools and Traditional Public Schools for States with Charter School Legislation Implemented between 1996 and 2000**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
1999-2000: Free and Reduced Price Lunch Eligibility	36.16	25.25	36.01	12.11	.017	18
2000-2001: Free and Reduced Price Lunch Eligibility	33.80	25.17	37.13	11.65	-.416	22
2001-2002: Free and Reduced Price Lunch Eligibility	35.92	25.46	37.25	10.98	-.179	26
2002-2003: Free and Reduced Price Lunch Eligibility`	40.12	24.99	37.55	12.56	.390	34
2003-2004: Free and Reduced Price Lunch Eligibility`	34.51	22.39	38.66	10.85	-.668	30
2004-2005: Free and Reduced Price Lunch Eligibility	40.38	22.92	40.62	14.18	-.034	26
2005-2006: Free and Reduced Price Lunch Eligibility	39.74	22.69	41.91	12.46	-.336	30
2006-2007: Free and Reduced Price Lunch Eligibility	40.93	22.53	41.45	11.71	-.082	30
2007-2008: Free and Reduced Price Lunch Eligibility`	37.42	25.28	41.10	10.84	-.553	33
2008-2009: Free and Reduced Price Lunch Eligibility`	39.66	24.39	43.00	12.05	-.521	34
2009-2010: Free and Reduced Price Lunch Eligibility`	40.93	30.97	42.72	8.23	-.202	24

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

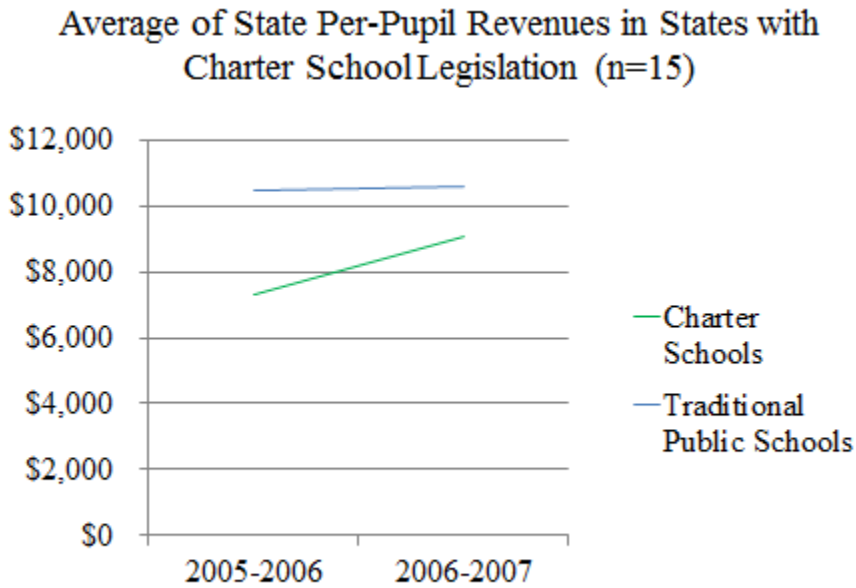
**Table 15: Differences in Free or Reduced Price Lunch Eligibility for Charter Schools and Traditional Public Schools for States with Charter School Legislation Implemented between 2001 and 2005**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
2003-2004: Free and Reduced Price Lunch Eligibility`	24.15	29.06	32.90	2.12	-.425	2
2004-2005: Free and Reduced Price Lunch Eligibility	22.87	16.61	33.00	2.48	-1.045	4
2005-2006: Free and Reduced Price Lunch Eligibility	58.58	8.42	36.63	7.19	3.966**	6
2006-2007: Free and Reduced Price Lunch Eligibility	65.23	5.22	33.83	3.09	8.966**	4
2007-2008: Free and Reduced Price Lunch Eligibility`	63.75	5.31	38.70	7.57	5.419**	6
2008-2009: Free and Reduced Price Lunch Eligibility`	57.43	17.93	40.05	7.44	1.790	6
2009-2010: Free and Reduced Price Lunch Eligibility`	50.43	28.79	44.23	7.43	.417	6

\*\*p < .01

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Figure 13: Average Per-Pupil Revenue**



**Table 16: Differences in Per-Pupil Revenue for Charter Schools and Traditional Public Schools**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
2005-2006: Per-Pupil Revenue	\$7,278.93	\$1,104.403	\$10,435.53	\$1,650.360	-6.156***	28
2006-2007: Per-Pupil Revenue	\$9,039.79	\$1,259.863	\$10,609.21	\$1,537.745	-2.954**	26

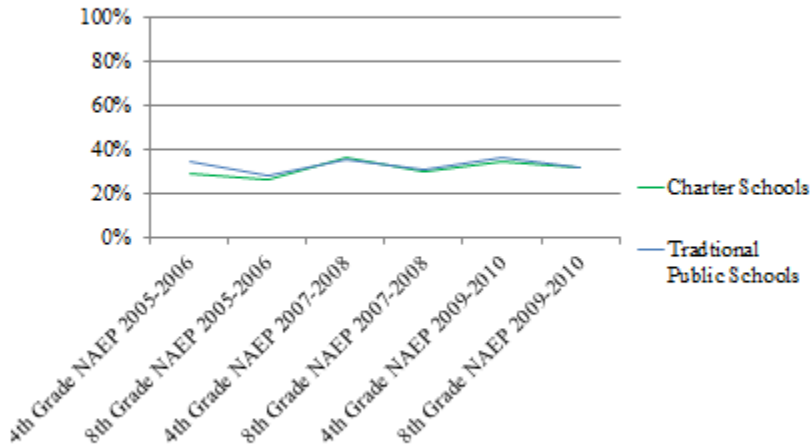
\*\*p < .01

\*\*\*p < .001

THE FOURTH TIME IS THE CHARM: CHARTER SCHOOL LEGISLATION IN WASHINGTON STATE

**Figure 14: NAEP Scores**

Percent of Students Performing at or Above Proficiency on the NAEP in States with Charter School Legislation (n=15)



**Table 17: Differences in NAEP Scores for Charter Schools and Traditional Public Schools**

	Charter Schools		Traditional Public Schools		<i>t</i>	df
	Mean	SD	Mean	SD		
2005-2006: 4 <sup>th</sup> Grade NAEP	29.33	12.65	34.17	4.09	-1.090	16
2005-2006: 8 <sup>th</sup> Grade NAEP	25.60	11.00	27.60	6.19	-.501	18
2007-2008: 4 <sup>th</sup> Grade NAEP	36.05	17.12	35.15	4.47	.161	18
2007-2008: 8 <sup>th</sup> Grade NAEP	29.55	14.54	30.55	4.54	-.218	20
2009-2010: 4 <sup>th</sup> Grade NAEP	34.00	15.93	36.12	5.23	-.455	24
2009-2010: 8 <sup>th</sup> Grade NAEP	32.00	16.45	32.46	5.06	-.092	22