# Atlanta Public Schools
# Equity Audit Report

Authors:

C. Kevin Fortner
Anita Faust-Berryman
Gabriel T. Keehn

The authors thank the following individuals from Atlanta Public Schools and Georgia State University for their advice, assistance, and reviews to improve the quality of the information provided in this report: Dr. Rubye Sullivan, Dr. Paul Alberto, Adam Churney, Dr. Curtis Grier, Dr. Joy Johnson, John Keltz, and Naber Sohrab.

# I. Executive Summary

In order to conduct this equity audit, we reviewed recent literature related to the practice of equity audits and compiled data from a variety of sources including the U.S. Census Bureau, administrative data on schools, principals, teachers, and students across the Atlanta Public Schools (APS) system, recent APS reports, and financial reporting data. Products known as equity audits vary widely in the information contained within them and in the thresholds for determining whether or not conditions within a system are equitable. The aim of this report is to convey information about the state of the system at the region, cluster, and school levels using a variety of indicators. These indicators include community characteristics, financial data, and the characteristics of schools. School characteristics are represented by measures of school leadership, classroom and teacher characteristics, and student characteristics. In addition, the appendices further describe some school characteristics while limiting data to specific subgroups of students. The data for this report are largely restricted to the 2012-13 school year.

Equity audits are a relatively new tool for school systems and there are large variations in their thresholds for determining whether or not characteristics are substantially different across schools. Simple percentage difference cutoffs or using standard error calculations to generate confidence intervals of means both avoid complex questions of whether or not differences across schools are practically meaningful. This report finds substantial variations across schools on numerous characteristics, but leaves questions of whether and how to address these differences to the broad group of stakeholders concerned with educational outcomes for the students of APS.

While the report in its entirety may appear overwhelming, we hope that this report will serve as a resource document for those concerned about variations across schools within the district. The main report provides a narrative description of a variety of tables and graphs to guide the reader in understanding and interpreting the information contained within the main report and the appendices organized by school level.

Conducting this equity audit also revealed some additional important themes. There exist substantial variations across schools in the APS system in all of the areas where equity was examined. These include differences in indicators of teacher quality, academic programming, financial resources (particularly represented by PTA and foundation funds), playgrounds, student

academic achievement, and classroom instruction. Also, while numerous sources of data on personnel, students, and facilities are housed within APS, there are no systemic mechanisms for the compilation of these disparate data sources into information tools to guide decision-making within the district. Additionally, it should be noted that the time constraints involved in this analysis required a restriction to a single year of information. This single year ‘snapshot’ does not allow an examination of the trends of the indicators compiled. We cannot speak to whether or not these measures represent positive, negative, or no changes over recent years. Finally, should policymakers within APS respond to the information in this report with specific actions intended to alter the characteristics of schools, a plan must also be developed that will allow the district to monitor the changes that occur due to these actions.

# II. Introduction

## A. Purpose of the audit

While educational stakeholders across the United States may recognize that there are differences between states, schools, and districts in terms of the populations served by schools, the personnel working within them, and the outcomes experienced by students, the nature and magnitude of those differences may not be known. Differences within districts and between schools potentially exist as well and while some disclosure of differences based on subgroup populations is required by current accountability policies at the state and federal level, only limited information on a specified set of student characteristics and outcomes is known. In addition, the required disclosures may only require reporting based on a single characteristic – (i.e., race or special education status) instead of other categories of interest such as female students.

Equity audits are an emerging inquiry method that appears to be gaining momentum in the educational policy arena (Skrla, Scheurich, Garcia, & Nolly, 2004). Equity audits typically provide information on the characteristics of students, school personnel, and other resources at the school level to provide information that may inform questions of equity. There is currently a high degree of variability in the content of equity audits and this report will continue that trend by examining school characteristics at the community, school leadership, classroom teacher, and student levels. In addition, this equity audit will use roster level information to examine school characteristics based on particular subgroups of students.

Atlanta Public Schools (APS) engaged the services of researchers at Georgia State University to examine differences in the characteristics across schools within the district. Data sources for the audit include administrative data provided by personnel in the Research & Evaluation for School Improvement division of APS and data from the US Census Bureau's 2012 American Community Survey. The audit examines data from the 2012-2013 school year and focuses on between school comparisons. This audit includes all non-residential public schools within the district and organizes those schools into the following groups: high schools, middle schools, elementary schools, charter schools, and alternative schools.

The report continues with a literature review related to equity audits and a discussion of the data and methods utilized in the study. Next, we present data on the community characteristics of school zones in APS utilizing data from the US Census Bureau, school characteristics using APS data at the region and cluster level, and present selected school characteristics based on an analysis of student subgroups of particular interest for an equity audit. Complete school characteristics organized by school subgroups are contained in the appendices. Finally, in the discussion section we review the major findings, limitations, and implications of the equity audit.

## III. Literature

Equity audits are an emerging research endeavor and the academic literature related to these types of analyses is somewhat sparse. There is no methodological consensus as the "right" way to go about the process. There are, however, three distinct aspects of equity audits consistently mentioned in this literature. Among these are the conceptual definition of the equity audit, the goals of equity audits, and some salient school characteristics that equity audits should consider. We organize this survey of the literature along these three aspects of the equity audit literature.

### Definitional Considerations

The most influential work on the method and reasoning behind equity audits is a series of papers and subsequent book led by Linda Skrla (for an overview of this work, see Skrla, Scheurich, Garcia, & Nolly, 2004). The term itself has a long history stemming from its use in civil rights more generally as well as curriculum auditing (English, 1988; Poston, 1992; Skrla, Scheurich, Garcia, & Nolly, 2004). Originally, equity audits were conducted either voluntarily or under pressure from activists by school districts to measure compliance with various civil rights statutes which made non-discrimination a condition of receipt of federal funding (Groenke, 2010). While the impetus for conducting an equity audit will generally no longer be related to specific legislation, the general reasoning behind the practice remains similar, namely to provide administrators, teachers, and districts with "clear, accurate, [and] useful understanding of the degree of inequity present in their own schools and school districts" (Skrla, Scheurich, Garcia, & Nolly, 2004, p. 141). An equity audit then, is the collection of data relevant to equity (see below), the organization of those data in a clear and comprehensible way so as to facilitate

positive change on the part of stakeholders, and the interpretation of those data to expose areas of both weakness and strength within a district with respect to equity.

**Goals of an Equity Audit**

The goals of an equity audit will be somewhat different in each case, with different districts focusing on their specific needs and particular areas of concern. For instance, in the well-publicized case of Montgomery County Public Schools (MCPS), which, in the course of just over a decade was able to nearly erase racially driven academic inequity, they outlined six specific concrete goals of their process before undertaking it (Childress, Doyle, & Thomas, 2009). Some of these goals were more universal, such as "developing a system of shared accountability" and "workforce excellence through targeted training and action research" (Childress, Doyle, & Thomas, 2009, p. 22). Other goals, however, related specifically to the needs of MCPS, such as "broadening the concept of literacy" and establishing "family and community partnerships" (2009, p. 22). Some communities may, for example, already have strong existing family and community ties within their schools which can be used to help put the findings of the equity audit into practice or a given district may want to focus their efforts on examining STEM subjects rather than literacy.

Equity audits may sometimes focus on a particular subset of schools within a district. Brown (2010) describes the findings of an equity audit which was focused exclusively on "state-recognized 'Honor Schools of Excellence.'" The district undertook this audit in order to expose potentially flawed systems of positive recognition for schools and some of the deeper signs of disparate achievement within schools which seem initially to be quite similar with respect to equity considerations (Brown, 2010). Interestingly, Brown found that while there was indeed significant equity between the schools in terms of demographic, teacher, and programmatic comparisons (which accounted for the publicly visible equity), there remained significant inequity with respect to achievement. This ability to expose deep, hidden types of inequity across schools which initially appear very similar is a great strength of equity audits as a tool for district leaders.

A more general goal which is often cited as the long-term objective of an equity audit is Scott's (2001) conception of "systemic equity." Scott defines the term as follows:

> Systemic equity is defined as the transformed ways in which systems and individuals habitually operate to ensure that every learner-in whatever learning environment that learner is found-has the greatest opportunity to learn enhanced by the resources and supports necessary to achieve competence, excellence, independence, responsibility, and self-sufficiency for school and for life. (p. 6)

Scott's vision of systemic equity requires, according to Skrla, McKenzie, & Scheurich (2009), the use of equity audits as a practical tool for educators and leaders to promote equity across the entirety of the public school system.

A further, more personal, goal of equity audits, as suggested by McKenzie & Scheurich (2004) is to enable educators and leaders to avoid so-called "equity traps" in their thinking about students. Equity traps are defined as "patterns of thinking and behavior that trap the possibilities of creating equitable schools for children of color," an example being the attitudes often expressed by teachers that their students are failing because of poor attitude or cultural deficit (McKenzie & Scheurich, 2004, p. 603). The exposure of the systemic nature of inequity within a district goes a long way toward undermining these patterns of thought and opening the door to examinations of systemic equity.

**Measurement**

While there will be distinctions between districts as to the particular goals of their equity audit and hence differences on the things that they measure, Skrla, Scheurich, Garcia, & Nolly (2004) suggest three broad categories of performance indicators that ought to be examined in an equity audit, with 12 specific indicators spread across these categories. The three categories are "Teacher Quality Equity," "Programmatic Equity," and "Achievement Equity" (2004). All of these categories come to bear in one way or another on achievement, but they are grouped separately for simplicity.

Teacher quality is increasingly tied to student achievement, and there is strong evidence suggesting that high quality teachers are unevenly distributed across student populations (Ingersoll, 1999; Lankford, Loeb, & Wyckoff, 2002). Skrla, Scheurich, Garcia, & Nolly (2004) suggest four major variables which can be used to get a picture of teacher quality equity

throughout a district, namely teacher education, teacher experience, teacher mobility, and teachers teaching outside of certification area or without certification. Precisely which of these factors is selected for a given audit will depend on available data and the interpretation of which variables are most salient. Variables may be added or dropped accordingly, but it is critical in any equity audit to get a sense of the distribution of quality teachers across the population being served.

Programmatic equity refers to "the quality of the programs in which students are placed" (Skrla, Scheurich, Garcia, & Nolly 2004, p. 145), and perhaps more importantly, those from which certain students may be excluded. Skrla, Scheurich, Garcia, & Nolly (2004) and Skrla, McKenzie, & Scheurich (2009) cite literature on large-scale inequities in placement in gifted and talented programs, special education, and the like, both in terms of over assignment of certain groups to special education classes and under assignment of those same groups to gifted and talented classes, which suggests that equity in these areas is critical for districts to examine. The four specific sub-areas which are to be examined here are special education placement, gifted and talented placement, bilingual education, and student discipline (2004, 2009).

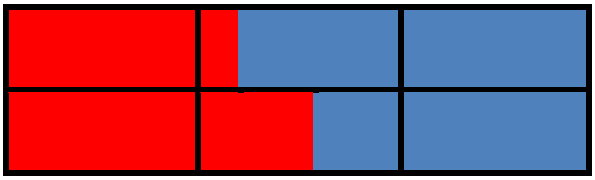
Finally, there is achievement equity. As mentioned, none of the above variables are isolated from achievement in any way, but the ones singled out as particularly salient by Skrla, Scheurich, Garcia, & Nolly (2004) are state achievement test results, dropout rates, graduation tracks, and SAT/ACT/AP results (Skrla, Scheurich, Garcia, & Nolly, 2004, p. 150). Again, these variables will differ from case to case, and it could be argued that AP class placement, for example, might be a better fit under the heading of programmatic equity, but nonetheless these are clearly important factors to examine in an equity audit of any kind.

## IV. Data and Methods

The two major sources of data for this equity audit are the 2012 American Community Survey (ACS) data from the US Census Bureau and administrative data from the 2012-13 school year provided by APS. The ACS provides detailed information on residents across the United States at the 'block group' level. While block groups vary in geographic size and population, these data

provide information on a representative sample of individuals in units smaller than the elementary school zones that exist within APS (Bureau of the Census, 1994).

For the community characteristics analysis, we utilized ESRI ArcMap 10.0 to overlay the APS attendance zone data with US Census Bureau Tiger Line files which designate block group boundaries. While many block groups are completely within the attendance zone boundary of particular schools, many block groups lie in more than one school zone. We used the overlapping geographic area of block group and school zone boundaries to attribute block group information to multiple school zones as appropriate. For example, if a 20 percent of a block group overlapped with school A and 80 percent with school B, we allocated 20 percent of the block group characteristics to school A and 80 percent to school B. This provided a geographic weight for block groups that overlapped multiple school zones. We then summed the resulting values within school zones to produce estimates of population characteristics that were weighted by the number of individuals within the block group. We created four different sets of estimates based on the boundaries of region, high school, middle school, and elementary school within the district.



For example, each rectangle represents a block group and the red and blue shaded areas represent the catchment zones for school A and B respectively. In order to simplify the calculations, each rectangle has 1,000 responses. In the first row, 20 percent of the center rectangle is attributed to school A and 80 percent to school B. Similarly, in the second row, 60 percent of the center rectangle is attributed to school A and 40 percent to school B. Thus, of the 6,000 responses from these block groups, 2,800 responses would be attributed to school A and 3,200 responses to school B. Following this methodology, elementary school catchment zones were summed to the appropriate middle school catchment zones, and so on for high schools and regions.

Because data for community characteristics portion of the analysis are organized geographically, the results for cluster and high school zone would be identical. Schools that operate without a

designated attendance zone boundary are not able to be included in this analysis (charter and alternative schools). In addition, to the extent that individual students attend schools outside their designated school zone, these data will not truly reflect the population of students within schools.

Data regarding school characteristics from APS are compiled from a variety of sources. Student characteristics include student demographic information, test score information, school location, course enrollment and roster information linked to the teacher of record, attendance, and discipline information. School personnel characteristics include an individual's years of experience, years of experience in the current school, student survey results, and value added scores when applicable. In addition to this administrative data on students and personnel working in schools as teachers and school leaders, APS provided information on Parent Teacher Association budgets and membership for some schools, the results of an audit of school playground equipment installed at schools, and school finance data.

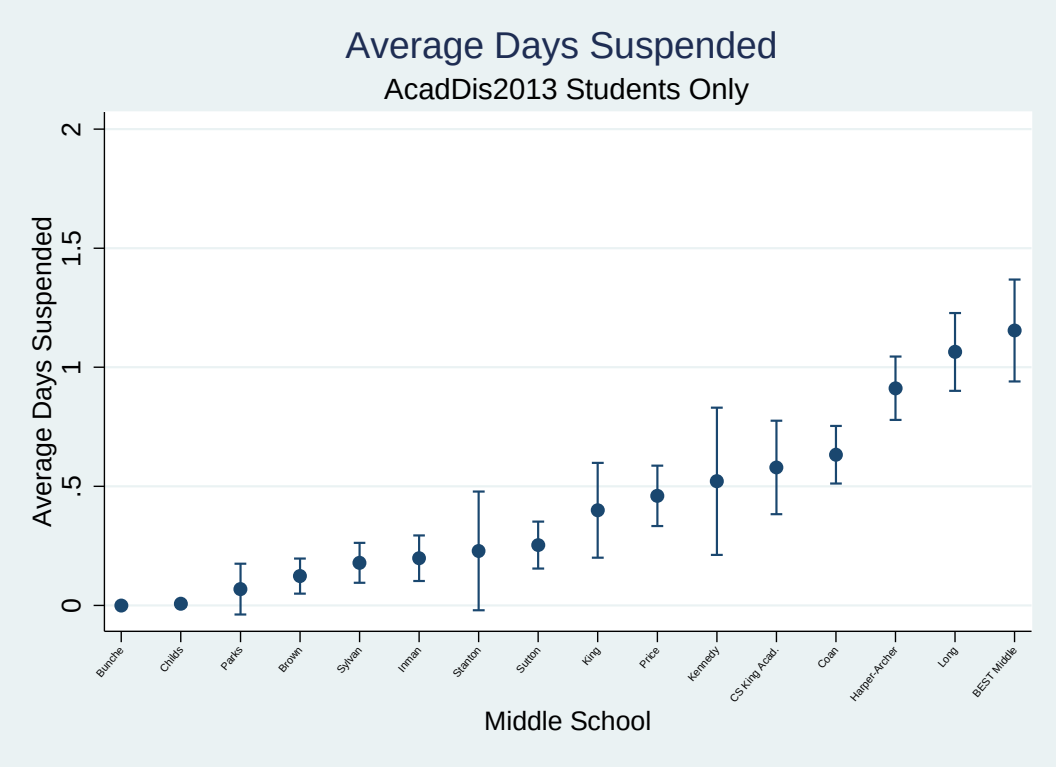



**Figure 1 Middle School Average Days Suspended (Academically Disadvantaged Students Only)**

This equity audit presents descriptive information from the various data sources described above. This information includes the means, standard deviations, and confidence intervals, in some

graphical displays, related to school level characteristics. Figure 1 above is an example of data presented with confidence intervals. Here, data are restricted to students categorized as Academically Disadvantaged Only (meaning students who scored not proficient on one or more state CRCT or EOCT exams in the 2012-13 academic year.) The dot element of the data point is the average number of suspension days served by academically disadvantaged students in the corresponding schools during the 2012-13 school year. In Coan Middle school academically disadvantaged students were suspended for about 0.60 school days, on average. The bars extending above and below this mean value represent the range of possible values that are similar considering the variation in the data within Coan Middle School and the number of student roster entries for academically disadvantaged students in the school. The bars represent values that are two standard errors above and below the average (mean) value within the school. Where there is an overlap between the bars for schools, we would conclude that there is not a statistically significant difference in the number of days suspended across academically disadvantaged students in the two schools. For example academically disadvantaged students in Harper-Archer Middle School experience similar rates of suspension days to students in four other middle schools: Long, BEST Middle, Coretta Scott King Academy, and Kennedy. Academically disadvantaged students in Bunche and Childs middle schools experience the lowest average suspension rates and the rate for these students is significantly lower (in a statistical sense) than the suspension rates compared to academically disadvantaged students in all other APS middle schools with the exception of Parks Middle School.

Judging whether or not the differences are practically or meaningfully different is largely a normative question beyond the scope of this report. It is, however, striking to note that the rates of remediation are three to four times higher in some schools compared to others. Equity audit approaches have not yet reached consensus on what constitutes a practical or meaningful difference between school means. Because data within the study are based on the population of persons within a school versus a random sample of individuals, the information presented frequently represents the true population mean. Confidence intervals rely on formulas intended to infer a statistically likely value range for a parameter in the population based on a random sample of individuals from that population. Here, we utilize the confidence interval approach in graphical displays to give an indication of the range of plausible values for a parameter based on the size of the population of individuals in the group. When confidence intervals do not overlap

values, they can be interpreted as situations where there is a statistically significant difference between values at one school compared to another. However, statistical significance does not indicate whether differences are meaningful or practically significant. Whether or not observed differences are of practical significance requires normative judgments about what amount and types of inequity between schools requires district action. While it is possible to look beyond descriptive information and utilize regression modeling to predict resource allocation to students based on individual characteristics as in Bastian, Henry, and Thompson (2012), time and resource constraints prevented an execution of this type of analysis.

## V. Community characteristics by school zone

Utilizing data from the US Census Bureau's 2012 American Community survey, this section provides descriptive characteristics on school attendance zones within the APS system. The method used to calculate the presented information is located in the Data and Methods section above. We present data on the racial and ethnic characteristics of school zone populations, as well as data on income, education levels, family configurations, and housing. As noted above, schools which function without catchment zones including charter schools and alternative schools are excluded from this analysis as data are grouped based on the attendance zones of schools with geographically defined attendance zones. The intent of these data is to provide information regarding the communities in which the Atlanta Public Schools reside and are not intended to reflect the actual demographics of a particular school. The data should be interpreted as the proportion of households providing a specific response, for example, for the entire school district, .4002 of all respondents indicated their race/ethnicity as White, .5362 as Black, and .0518 as Latino. These proportions can be converted to percents by multiplying them by 100, for example, 40.02 percent of respondents identified their race/ethnicity as White.

**Race/Ethnicity**

APS Overall

**Race/Ethnicity**

| | | White | Black | Latino |
|---|---|---|---|---|
| APS Overall | Proportion | .4002 | .5362 | .0518 |

Region

| | Race/Ethnicity | | |
|---|---|---|---|
| | White | Black | Latino |
| East | .5450 | .3632 | .0495 |
| North | .5914 | .3244 | .0846 |
| South | .1413 | .7971 | .0785 |
| West | .0378 | .9302 | .0251 |

High School/Cluster

| | Race/Ethnicity | | |
|---|---|---|---|
| | White | Black | Latino |
| Benjamin E. Mays High School | .0301 | .9358 | .0384 |
| Carver High School | .1314 | .8326 | .0443 |
| Frederick Douglass High School | .0629 | .8980 | .0483 |
| Henry W. Grady High School | .6521 | .2360 | .0470 |
| Maynard Jackson High School | .3713 | .5696 | .0535 |
| North Atlanta High School | .7749 | .1253 | .0971 |
| South Atlanta High School | .1517 | .7599 | .1145 |
| Therrell High School | .0246 | .9508 | .0203 |
| Washington High School | .0702 | .8867 | .0201 |

## Income

The tables in this section describe the income and poverty characteristics within the APS district. The values in the tables are proportions and may be converted to percentages by multiplying the listed values by 100. For example, the first table indicates that the proportion of households with an income that is less than $10,000 per year is .1404 or 14.04 percent. The next table indicates that of the households with income below the poverty level, the proportion of married couple households is .2366 and the proportion of single parent households is .7634. In addition, of the households with income at or above the poverty level, the proportion of married couple households is .6318 and the proportion of single parent households is .3682. The last table details the percent of households by the ratio of income to the poverty level. In 2013, the federal guidelines indicated that a family or household with four individuals with an annual income of $23,550 or less were considered to live in poverty. Thus, the last table indicates that within the APS district, the proportion of households with a ratio of income to poverty under 0.5 was .1242 which means that 12.42 percent (proportion x 100 = percent) of households had an income that was less than half of the federal poverty guideline (for example, a family of four would have an income of less than $11,775). Similarly, 57.70 percent of households had an income that was two

or more times the federal poverty guideline (i.e., a family of four with an income of $47,100 or more).

APS Overall

**Households by Income Ranges**

| | Less Than $10K | $10K to $25k | $25K to $50K | $50K to $100K | Over $100K |
|---|---|---|---|---|---|
| APS Overall | .1404 | .1792 | .2203 | .2281 | .2321 |

**Households by Poverty Status**

| | Below Poverty Level | | At or Above Poverty Level | |
|---|---|---|---|---|
| | Married Couple Households Below Poverty Level | Single Parent Households Below Poverty Level | Married Couple Households At or Above Poverty Level | Single Parent Households At or Above Poverty Level |
| APS Overall | .2366 | .7634 | .6318 | .3682 |

**Ratio of Income to Poverty Level**

| | Ratio Income to Poverty Under 0.5 | Ratio Income to Poverty 0.5 to 0.99 | Ratio Income to Poverty 1.00 to 1.84 | Ratio Income to Poverty 1.85 to 1.99 | Ratio Income to Poverty Over 2.0 |
|---|---|---|---|---|---|
| APS Overall | .1242 | .1151 | .1660 | .0186 | .5770 |

Region

**Households by Income Ranges**

| Region | Less Than $10K | $10K to $25k | $25K to $50K | $50K to $100K | Over $100K |
|---|---|---|---|---|---|
| East | .1199 | .1373 | .1928 | .2630 | .2869 |
| North | .0931 | .1337 | .1836 | .2481 | .3415 |
| South | .2193 | .2616 | .2804 | .1776 | .0611 |
| West | .1362 | .2113 | .2621 | .2596 | .1308 |

**Households by Poverty Status**

| | Below Poverty Level | | At or Above Poverty Level | |
|---|---|---|---|---|
| Region | Married Couple Households Below Poverty Level | Single Parent Households Below Poverty Level | Married Couple Households At or Above Poverty Level | Single Parent Households At or Above Poverty Level |
| East | .1750 | .8250 | .7235 | .2765 |
| North | .1776 | .8224 | .7627 | .2373 |
| South | .1976 | .8024 | .4148 | .5852 |
| West | .0970 | .9030 | .4821 | .5179 |

**Ratio of Income to Poverty**

| Region | Ratio Income to Poverty Under 0.5 | Ratio Income to Poverty 0.5 to 0.99 | Ratio Income to Poverty 1.00 to 1.84 | Ratio Income to Poverty 1.85 to 1.99 | Ratio Income to Poverty Over 2.0 |
|---|---|---|---|---|---|
| East | .1125 | .0909 | .1300 | .0183 | .6483 |
| North | .0905 | .0803 | .1310 | .0125 | .6857 |
| South | .1938 | .1841 | .2283 | .0267 | .3671 |
| West | .1066 | .1249 | .2147 | .0246 | .5292 |

High School/Cluster

**Households by Income Ranges**

| | Less Than $10K | $10K to $25k | $25K to $50K | $50K to $100K | Over $100K |
|---|---|---|---|---|---|
| Benjamin E. Mays High School | .1585 | .2593 | .3012 | .2002 | .0808 |
| Carver High School | .2328 | .2626 | .2554 | .1798 | .0694 |
| Frederick Douglass High School | .1997 | .2814 | .2249 | .1871 | .1068 |
| Henry W. Grady High School | .1146 | .1126 | .1812 | .2747 | .3170 |
| Maynard Jackson High School | .1293 | .1806 | .2132 | .2426 | .2343 |
| North Atlanta High School | .0660 | .0960 | .1731 | .2636 | .4013 |
| South Atlanta High School | .2059 | .2606 | .3054 | .1753 | .0528 |
| Therrell High School | .0741 | .1416 | .2543 | .3336 | .1964 |
| Washington High School | .2336 | .2945 | .2329 | .1807 | .0583 |

**Households by Poverty Status**

| | Below Poverty Level | | At or Above Poverty Level | |
|---|---|---|---|---|
| | Married Couple Households Below Poverty Level | Single Parent Households Below Poverty Level | Married Couple Households At or Above Poverty Level | Single Parent Households At or Above Poverty Level |
| Benjamin E. Mays High School | .0732 | .9268 | .4171 | .5829 |
| Carver High School | .1765 | .8235 | .4437 | .5563 |
| Frederick Douglass High School | .0922 | .9078 | .5014 | .4986 |
| Henry W. Grady High School | .1852 | .8148 | .8172 | .1828 |
| Maynard Jackson High School | .1889 | .8111 | .6485 | .3515 |
| North Atlanta High School | .4634 | .5366 | .8676 | .1324 |
| South Atlanta High School | .2682 | .7318 | .4708 | .5292 |
| Therrell High School | .1084 | .8916 | .5535 | .4465 |
| Washington High School | .0950 | .9050 | .3905 | .6095 |

**Ratio of Income to Poverty**

| | Ratio Income to Poverty Under 0.5 | Ratio Income to Poverty 0.5 to 0.99 | Ratio Income to Poverty 1.00 to 1.84 | Ratio Income to Poverty 1.85 to 1.99 | Ratio Income to Poverty Over 2.0 |
|---|---|---|---|---|---|
| Benjamin E. Mays High School | .1222 | .1611 | .2629 | .0279 | .4259 |
| Carver High School | .2167 | .1868 | .1906 | .0277 | .3782 |
| Frederick Douglass High School | .2122 | .1598 | .2468 | .0155 | .3657 |
| Henry W. Grady High School | .1136 | .0687 | .0955 | .0145 | .7077 |
| Maynard Jackson High School | .1109 | .1216 | .1777 | .0236 | .5662 |
| North Atlanta High School | .0489 | .0531 | .0914 | .0114 | .7952 |
| South Atlanta High School | .1722 | .1816 | .2638 | .0257 | .3567 |
| Therrell High School | .0667 | .0701 | .1765 | .0245 | .6622 |
| Washington High School | .1755 | .2005 | .2381 | .0206 | .3653 |

## Education

The next set of tables describes the education levels of adults over the age of 25 within the APS district. For example, within the district, the proportion of adults over 25 that has completed high school or less is .3556; the proportion that has completed an associate's degree or less is .2063; the proportion that has completed a bachelor's degree or less is .2619; and the proportion that has completed a graduate degree or more is .1762. Again, the values here are proportions and may be interpreted as percentages by multiplying the listed values by 100.

APS Overall

**Educational Attainment for Adults over 25**

| | High School or Less | Associate's Degree or Less | Bachelor's Degree or Less | Graduate Degree or Above |
|---|---|---|---|---|
| APS Overall | .3556 | .2063 | .2619 | .1762 |

Region

**Educational Attainment for Adults over 25**

| | High School or Less | Associate's Degree or Less | Bachelor's Degree or Less | Graduate Degree or Above |
|---|---|---|---|---|
| East | .2476 | .1904 | .3251 | .2368 |
| North | .2364 | .1690 | .3618 | .2328 |
| South | .6099 | .2493 | .0935 | .0472 |
| West | .4203 | .2728 | .1863 | .1206 |

High School/Cluster

**Educational Attainment for Adults over 25**

| | High School or Less | Associate's Degree or Less | Bachelor's Degree or Less | Graduate Degree or Above |
|---|---|---|---|---|
| Benjamin E. Mays High School | .5249 | .2605 | .1293 | .0853 |
| Carver High School | .6071 | .2363 | .1059 | .0507 |
| Frederick Douglass High School | .5602 | .2391 | .1315 | .0692 |
| Henry W. Grady High School | .1602 | .1771 | .3684 | .2943 |
| Maynard Jackson High School | .3766 | .2101 | .2613 | .1520 |
| North Atlanta High School | .1434 | .1489 | .4279 | .2798 |
| South Atlanta High School | .6131 | .2638 | .0797 | .0433 |
| Therrell High School | .2992 | .2971 | .2412 | .1625 |
| Washington High School | .5464 | .2363 | .1412 | .0761 |

## Family Configuration

The tables below represent data from two separate questions from the American Community Survey. The first question asks whether the householder's own children are living in the home. Within the APS district boundaries, of those households with their own children living at home, proportion of married couple households is .5310 and the proportion of single parent households is .4690. The second question asks the householder to identify the relationship between the householder and any children living in the home. Of those reporting that children live in the home, the proportion indicating their own children live in the home is .8413, the proportion indicating a grandchild lives in the home is .1123, and the proportion indicating a foster child lives in the home is .0115. As before, the values here are proportions and may be interpreted as percentages by multiplying the listed values by 100

APS Overall

**Children in Households**

| | Own Children in Household | | Children by Relationship to Householder | | |
|---|---|---|---|---|---|
| | Married Couple Households | Single Parent Households | Own Children | Grandchild | Foster Child |
| Proportion | .5310 | .4690 | .8413 | .1123 | .0115 |
| Std. Deviation | .36489 | .36489 | .19082 | .16157 | .05322 |

Region

**Children in Households**

| | Own Children in Household | | Children by Relationship to Householder | | |
|---|---|---|---|---|---|
| | Married Couple Households | Single Parent Households | Own Children | Grandchild | Foster Child |
| East | .6123 | .3877 | .8700 | .0870 | .0124 |
| North | .6586 | .3414 | .9070 | .0558 | .0110 |
| South | .3631 | .6369 | .7999 | .1558 | .0050 |
| West | .3599 | .6401 | .7630 | .1720 | .0094 |

High School/Cluster

**Children in Households**

| | Own Children in Household | | Children by Relationship to Householder | | |
|---|---|---|---|---|---|
| | Married Couple Households | Single Parent Households | Own Children | Grandchild | Foster Child |
| Benjamin E. Mays High School | .2141 | .7859 | .6974 | .2113 | .0203 |
| Carver High School | .2568 | .7432 | .7802 | .1762 | .0075 |
| Frederick Douglass High School | .2312 | .7688 | .7696 | .1523 | .0228 |
| Henry W. Grady High School | .6941 | .3059 | .9459 | .0358 | .0099 |
| Maynard Jackson High School | .5273 | .4727 | .8030 | .1321 | .0146 |
| North Atlanta High School | .8306 | .1694 | .9773 | .0065 | .0050 |
| South Atlanta High School | .4513 | .5487 | .8170 | .1381 | .0027 |
| Therrell High School | .4650 | .5350 | .8152 | .1442 | .0007 |
| Washington High School | .2604 | .7396 | .7240 | .1868 | .0162 |

## Housing

The Census Bureau also reports on the proportion of housing which is occupied or vacant across communities. The values here are proportions and may be interpreted as percentages by

multiplying the listed values by 100. For example, across APS overall, the percentage of housing estimated as occupied is about 80 percent. By cluster these values vary substantially where about 67 percent of housing in the Washington cluster is estimated to be occupied and over 85 percent of house is occupied in the geographic area covered by the North Atlanta cluster.

APS Overall

| | **Housing** | |
|---|---|---|
| | Occupied Housing | Vacant Housing |
| APS Overall | .7958 | .2042 |

Region

| | **Housing** | |
|---|---|---|
| | Occupied Housing | Vacant Housing |
| East | .8179 | .1821 |
| North | .8249 | .1751 |
| South | .7476 | .2524 |
| West | .7898 | .2102 |

High School/Cluster

| | **Housing** | |
|---|---|---|
| | Occupied Housing | Vacant Housing |
| Benjamin E. Mays High School | .8391 | .1609 |
| Carver High School | .7273 | .2727 |
| Frederick Douglass High School | .7281 | .2719 |
| Henry W. Grady High School | .8181 | .1819 |
| Maynard Jackson High School | .8176 | .1824 |
| North Atlanta High School | .8539 | .1461 |
| South Atlanta High School | .7691 | .2309 |
| Therrell High School | .8374 | .1626 |
| Washington High School | .6702 | .3298 |

# VI. School characteristics

## A. Introduction

This section presents information on school level characteristics that impact students including expenditures at the school level based on financial reporting data, playground and science lab information, PTA and Foundation information from schools, and finally the characteristics of individuals within schools at the leadership, teacher/classroom level, and individual student level. Guided by prior education policy research, equity audits, and discussions with APS leaders, we selected a variety of characteristics to examine across schools.

## B. Finance

APS provided finance data with detailed information on expenditures coded using the Georgia Department of Education's Uniform Chart of Accounts. This coding scheme allows expenditures to be categorized based on the intended use of the dollars expended. Fig. 2 below provides information on the total average per pupil expenditure amounts based on district region. Alternative and charter schools are separated into their own regions for the purposes of this audit. Regional data are averaged here without weighting so that each school contributes an equal amount to the regional average total per pupil expenditure amount. Central office expenditures are allocated to each school based on their share of the district's student population and school populations were calculated using student level demographic files from APS.

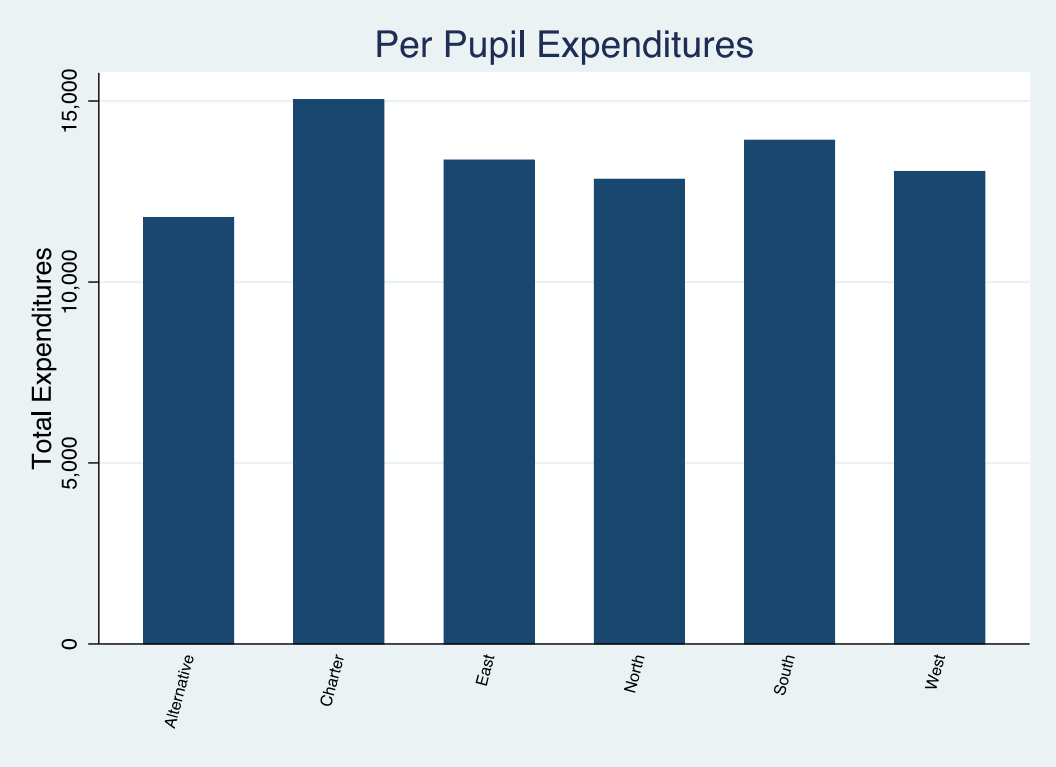



**Figure 2 Per Pupil Expenditures by Region**

The figure suggests that charter schools spend about $15,000 per student on educational expenses, while alternative schools provide the lowest levels of student expenditure per student. Some caution is warranted in the interpretation of this data as non-charter schools are more likely to receive some resources from items coded as central office expenditures. Among the four geographically based regions, schools in the South region appear to spend larger amounts per pupil compared to schools in the North region.

Figure 3 displays the per pupil expenditure amounts for schools based on their cluster designation. Here, the data for Charter and Alternative schools are repeated. Grady and North Atlanta high schools stand out as schools where spending in the cluster is lower than average, while Carver, Jackson, and Washington high schools clusters receive a greater than average share of resources based on total per pupil spending amounts.

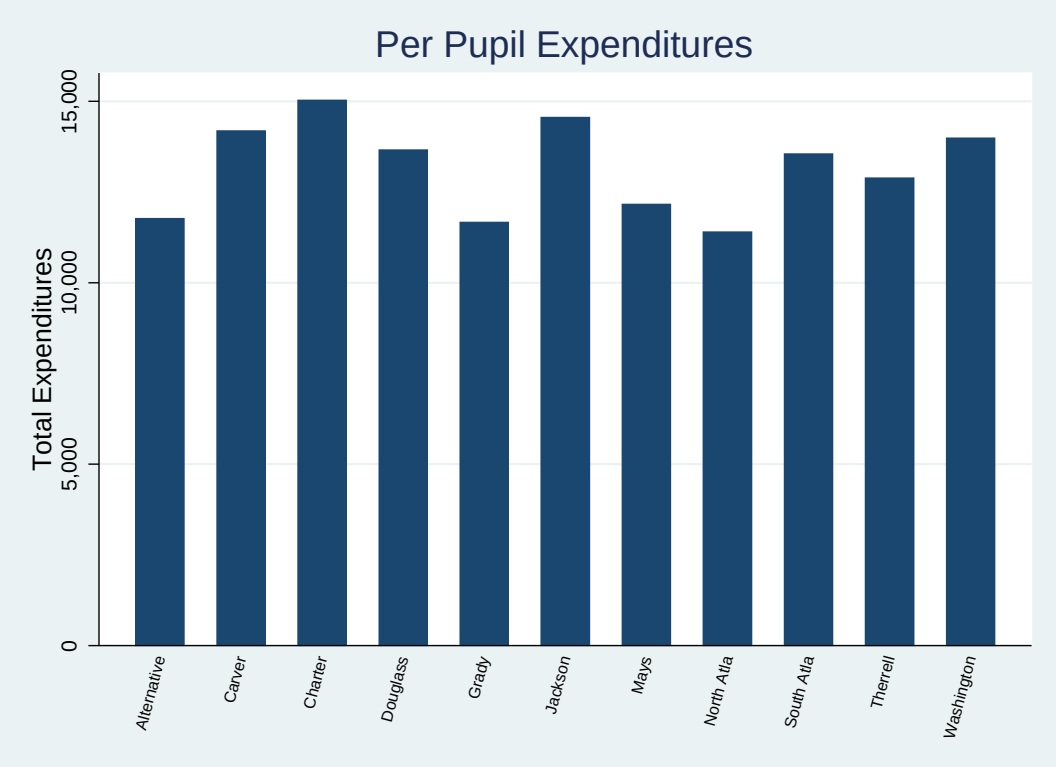



**Figure 3 Per Pupil Expenditures by Cluster**

Figures 4 and 5 present spending as a percentage of expenses separated into five broad categories: instruction, student support, school administration, operations (including transportation and nutrition), and central office (district) administration. Charter schools appear to spend a smaller share of resources on school administrative expenses, but caution should be noted as finance data from certain types of schools may be less reliable than others. While this audit is able to identify areas where further information would be beneficial, the reason for variations is not known. Determining an explanation for this difference would require additional investigation. In the Cluster expenditures figure we see that schools in the Jackson cluster appear to spend a larger proportion of resources on operations compared to other clusters and that the share of expenses devoted to instruction is highest in the Carver, Jackson, and South Atlanta clusters – among geographically based clusters. Additional figures with school comparisons can be found in the appendices, organized by school type.

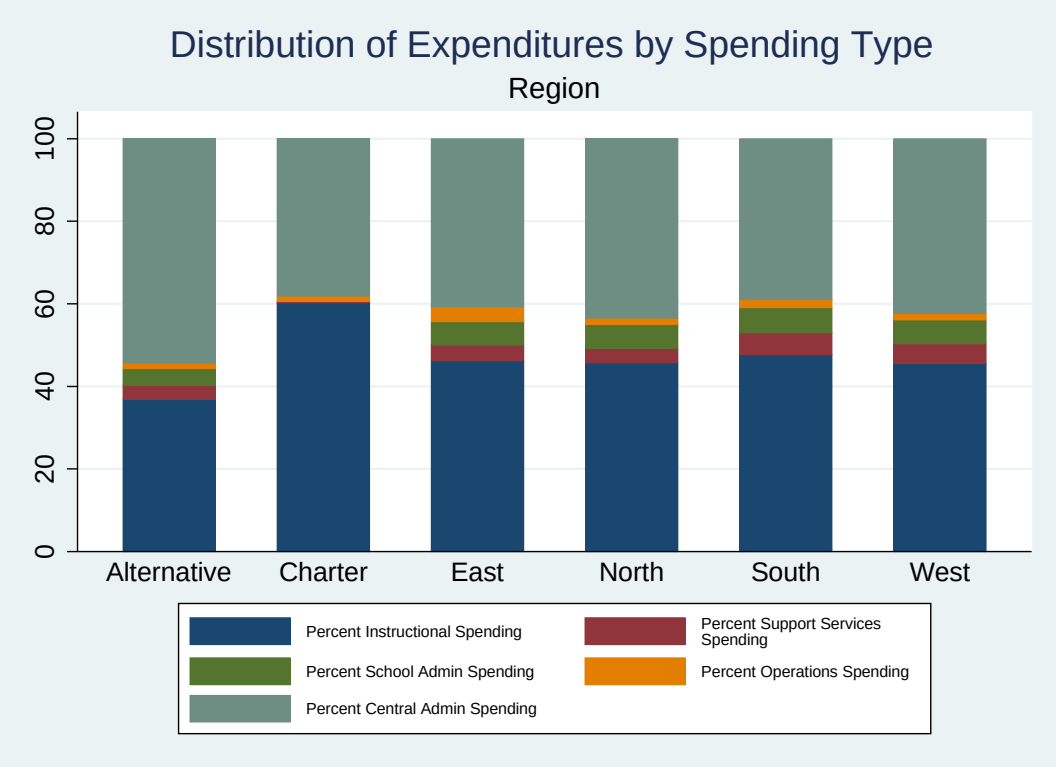



**Figure 4 Expenditures Distribution by Region**

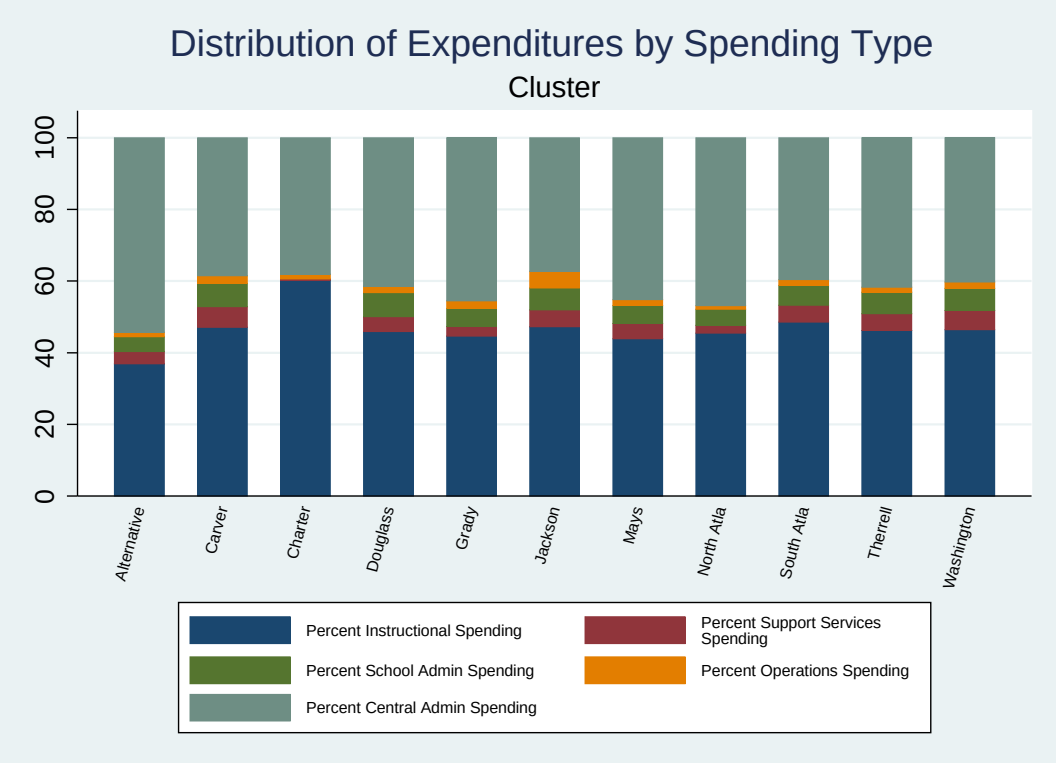



**Figure 5 Expenditures Distribution by Cluster**

## C. Facilities

### 1. Playgrounds

In 2011, a playground safety compliance audit was completed by an independent organization. Site visits were made to all schools and playground structures were scored according to industry standards. A primary concern across all sites was inadequate groundcover that serves as fall protection which could result in increased liability in the event of an accident. The report notes that this safety issue resulted in some playgrounds with acceptable equipment receiving lower ratings. As the report was completed in 2011, it is important to note that some of the playground deficiencies may have been corrected since that time.

The report also noted impalement hazards and choke/hang hazards on 6 playgrounds. Replacement or removal of at least some of the equipment was recommended from 4 playgrounds including Brandon Pre-K, Lin, Crim, and West Manor (playground #2). The pictures below show examples of impalement and choke/hang hazards that were noted in the report.

**Figure 6 Impalement Hazard**

**Figure 7 Choke/Hang Hazard**

Either or both impalement or choke/hang hazards were found on these playgrounds:

| | |
|---|---|
| Connally | Boyd (age 5 – 12) |
| Crim | Rivers (playground #2) |
| Grove Park (age 5 – 12) | Smith Intermediate |

In addition, the Garden Hills playground had an electrical panel and well pump house that could be accessed by children. More positively, the report noted that the equipment at both M. Agnes Jones and Venetian Hills elementary schools were in exceptionally good condition.

Separately, the 2013-14 playground roster from the APS facilities department indicates that the following 9 schools do not have playgrounds:

| | |
|---|---|
| Adamsville | Finch |
| Beecher Hills | Heritage |
| Cascade | Humphries |
| Continental Colony | Benteen |
| Hill/Hope | |

In the 2011 audit, playground safety in three areas was assessed: composite structures, free standing, and site amenities. For composite structures, individual elements, such as, crawl tunnels, hand rails, and slides, were rated. Free standing equipment includes merry-go-rounds, see-saws, sand boxes, swings, and so on. Playground amenities include bike racks, benches, litter containers and the play surface. Each element in these three categories was rated and these ratings were summed across the three categories resulting in an overall score with higher numbers indicating compliance with safety requirements.

Overall scores ranged from 4 to 118 and the average overall score was 55.79. In addition to the overall score, the average total percent compliance across all three categories was also calculated by dividing the number of inspected elements for each category by the number of substandard elements. A substandard element represents a non-compliant safety concern that could result in permanent disability and should be corrected immediately. Then, the percent compliance for each of the categories was averaged together to get the average total percent compliance which ranged from 19.44% compliance to 100% compliance. The number of substandard elements ranged from zero to 24 with an average number of substandard elements of 7 per playground.

| Playground | Region | Cluster or Other | Overall Score | Average Total Percent Compliance | Number of Substandard Elements |
|---|---|---|---|---|---|
| Beecher Hills* | West | Mays | 90 | 64.81 | 6 |
| Bolton Academy | North | North Atlanta | 45 | 66.35 | 15 |
| Boyd # 1 | North | Douglass | 37 | 32.46 | 13 |
| Boyd # 2, 5-12 | North | Douglass | 28 | 71.94 | 9 |
| Brandon | North | North Atlanta | 84 | 99.66 | 1 |
| Brandon Pre K | North | North Atlanta | 25 | 19.44 | 7 |
| Brandon Primary | North | North Atlanta | 95 | 96.67 | 1 |
| Burgess-Peterson | East | Maynard Jackson | 64 | 69.52 | 9 |
| Centennial | East | Grady | 58 | 75.26 | 16 |
| Cleveland | South | South Atlanta | 65 | 65.78 | 13 |
| Connally | West | Washington | 41 | 98.81 | 1 |
| Crim | East | Alternative School | 19 | 54.17 | 8 |
| D. H. Stanton | East | Maynard Jackson | 14 | 68.06 | 7 |
| Deerwood | West | Therrell | 66 | 51.15 | 9 |
| Dunbar | East | Maynard Jackson | 29 | 60.42 | 11 |
| F L Stanton | North | Douglass | 73 | 83.33 | 1 |
| Fain 5-12 | North | Douglass | 59 | 69.46 | 24 |
| Fain Pr K | North | Douglass | 44 | 72.96 | 12 |
| Fickett | West | Therrell | 60 | 87.96 | 2 |
| G A Towns | North | Douglass | 65 | 100.00 | 0 |
| Garden Hills | North | North Atlanta | 47 | 57.62 | 14 |
| Gideons | South | Carver | 74 | 91.88 | 2 |
| Grove Park | North | Douglass | 60 | 100.00 | 0 |
| Grove Park 5-12 | North | Douglass | 84 | 95.83 | 1 |
| Hutchinson | South | South Atlanta | 65 | 58.84 | 14 |
| Jackson # 1 | North | North Atlanta | 89 | 97.78 | 2 |
| Jackson # 2 | North | North Atlanta | 118 | 100.00 | 0 |
| Jackson Primary | North | North Atlanta | 50 | 100.00 | 0 |
| John F Kennedy | West | Alternative School | 65 | 100.00 | 0 |
| Kimberly 5-12 | West | Therrell | 54 | 65.59 | 6 |
| Kimberly Pre K 1 | West | Therrell | 36 | 82.01 | 4 |
| Lin | East | Grady | 75 | 84.39 | 10 |
| M A Jones | West | Washington | 94 | 91.67 | 1 |
| Miles | West | Mays | 71 | 97.53 | 2 |
| Morningside Elem | East | Grady | 31 | 63.10 | 7 |
| Morningside Elem 5 - 12 | East | Grady | 80 | 91.67 | 2 |
| Parkside | East | Maynard Jackson | 40 | 81.72 | 17 |
| Perkerson Elem | South | Carver | 4 | 78.89 | 13 |
| Peyton Forrest | West | Mays | 37 | 77.78 | 2 |
| Rivers # 1 | North | North Atlanta | 43 | 43.80 | 12 |
| Rivers # 2 | North | North Atlanta | 61 | 71.43 | 15 |
| Scott 5 - 12 | North | Douglass | 28 | 62.08 | 9 |
| Scott Pre K | North | Douglass | 78 | 91.67 | 1 |
| Slater | South | Carver | 100 | 92.80 | 2 |
| Smith intermediate | North | North Atlanta | 26 | 42.06 | 7 |
| Smith Primary # 1 | North | North Atlanta | 54 | 87.83 | 3 |
| Smith Primary # 2 | North | North Atlanta | 27 | 48.89 | 9 |
| Smith Primary # 3 | North | North Atlanta | 30 | 41.67 | 17 |

| | | | | | |
|---|---|---|---|---|---|
| Springdale Academy | East | Grady | 106 | 99.50 | 1 |
| Thomasville | South | Carver | 83 | 88.89 | 1 |
| Toomer | East | Maynard Jackson | 49 | 58.37 | 18 |
| Usher | North | Douglass | 50 | 100.00 | 0 |
| Venetian Hills | West | Washington | 82 | 100.00 | 0 |
| West Manor # 1 | West | Mays | 37 | 46.90 | 19 |
| West Manor # 2 | West | Mays | 4 | 33.33 | 4 |
| Whitefoord | East | Maynard Jackson | 72 | 81.54 | 16 |
| Woodson Elem | North | Douglass | 15 | 62.22 | 5 |

*The 2011 report described the playground equipment at Beecher Hills as a fitness center while the 2013-14 playground roster from APS indicated Beecher Hills does not have a playground. The discrepancy may arise from how the reports define playground equipment.

### 2. Science Labs

With regard to science labs, we received a report dated July 2013 from the Facilities department at APS. The report indicated the number of science labs for 83 schools in the district. High schools tend to have the greatest number of science labs per school with most high schools having 8 to 16 science labs. Middle schools tend to have a similar number of science labs with the number ranging from 6 to 12. The exception is Coan Middle School which has no science labs. At the elementary school level, 28 schools have one science lab and 24 schools do not have a science lab. The exception is E. Rivers Elementary which has 9 science labs; although the report indicates the facility was previously a middle school which may explain the higher number of science labs.

| School Name | School Level | Region | Science Labs |
|---|---|---|---|
| Grady | HS | East | 8 |
| Jackson, M. | HS | East | 12 |
| Coan (at former East Lake ES) | MS | East | 0 |
| Inman | MS | East | 7 |
| King, M.L. | MS | East | 8 |
| Benteen | ES | East | 0 |
| Burgess-Peterson | ES | East | 1 |
| Centennial Place | ES | East | 1 |
| Dunbar | ES | East | 1 |
| Hope - Hill | ES | East | 1 |
| Lin, Mary | ES | East | 0 |
| Morningside | ES | East | 0 |
| Parkside | ES | East | 1 |
| Springdale Park | ES | East | 1 |
| Stanton, D. H. | ES | East | 0 |

| | | | |
|---|---|---|---|
| Toomer | ES | East | 0 |
| Whitefoord | ES | East | 0 |
| Douglass | HS | North | 10 |
| North Atlanta (New) | HS | North | 16 |
| BEST (includes MS) | HS | North | 14 |
| BEST (see HS) | MS | | |
| King, C.S. (includes MS) | HS | North | 10 |
| King, C.S. (see HS) | MS | | |
| Harper - Archer | MS | North | 9 |
| Sutton (at former N. Atlanta HS) | MS | North | 10 |
| Bolton Academy | ES | North | 1 |
| Boyd | ES | North | 1 |
| Brandon | ES | North | 1 |
| Brandon Primary | ES | North | 0 |
| Fain | ES | North | 1 |
| Garden Hills | ES | North | 1 |
| Grove Park | ES | North | 0 |
| Jackson | ES | North | 0 |
| Jackson Primary | ES | North | 0 |
| Rivers (at former Sutton MS) | ES | North | 9 |
| Scott | ES | North | 0 |
| Smith Intermediate | ES | North | 1 |
| Smith, Sarah | ES | North | 0 |
| Stanton, F. L. | ES | North | 1 |
| Towns | ES | North | 0 |
| Usher - Collier | ES | North | 1 |
| Woodson | ES | North | 0 |
| Carver | HS | South | 10 |
| South Atlanta | HS | South | 11 |
| Long | MS | South | 9 |
| Price | MS | South | 9 |
| Sylvan (at former Parks MS) | MS | South | 6 |
| Cleveland | ES | South | 1 |
| Dobbs | ES | South | 1 |
| Finch | ES | South | 1 |
| Gideons | ES | South | 1 |
| Heritage Academy | ES | South | 1 |
| Humphries | ES | South | 0 |
| Hutchinson | ES | South | 0 |
| Perkerson | ES | South | 1 |
| Slater | ES | South | 1 |

| | | | |
|---|---|---|---|
| Thomasville Heights | ES | South | 0 |
| Mays | HS | West | 12 |
| Therrell | HS | West | 12 |
| Washington | HS | West | 12 |
| Brown | MS | West | 9 |
| Bunche (at former Archer HS) | MS | West | 12 |
| Kennedy | MS | West | 9 |
| Young | MS | West | 9 |
| Adamsville | ES | West | 0 |
| Beecher Hills | ES | West | 0 |
| Bethune | ES | West | 0 |
| Cascade | ES | West | 0 |
| Connally | ES | West | 1 |
| Continental Colony | ES | West | 1 |
| Deerwood Academy | ES | West | 1 |
| Fickett | ES | West | 1 |
| Jones, M. A. | ES | West | 1 |
| Kimberly | ES | West | 0 |
| Miles | ES | West | 1 |
| Peyton Forest | ES | West | 0 |
| Venetian Hills | ES | West | 1 |
| West Manor | ES | West | 0 |
| Crim | Alternative | East | 4 |
| Forrest Hill | Alternative | South | 0 |
| North Metro (Oglethorpe) | Alternative | West | 0 |
| South Metro (Marshall) | Alternative | East | 4 |
| West End Academy (Blalock) | Alternative | West | 1 |

## D. PTA and Foundation

We received membership and budget data for 61 schools in the North, East, and South regions. The South region did not provide any information regarding foundations and no information for either PTAs or foundations was received from the West region. In an effort to gain a better understanding of PTA and foundation support for schools, publicly available tax filing data were analyzed and the two separate data sources provided similar operating budget information.

For PTAs, 70 percent of the 61 schools for which we received data indicated they have an active PTA while 16 percent indicated they do not have a PTA. Approximately 12 percent of the schools responded that they were uncertain if they had an active PTA organization and frequently noted that there was no paperwork from the prior school year. Reported PTA membership ranges from 2 members to 800 members with 50 percent of the schools reporting fewer than 100 members. Additionally, 10 percent of the schools for which we received data reported fewer than 10 members. Similarly, the reported PTA operating budgets vary widely from $30 to $172,000 with 40 percent of the schools indicating a budget of $1000 or less.

With regard to school foundations, the data we received from the North and East regions indicate that about 50 percent of the schools do not have a foundation compared to 16 percent with a foundation. However, the data we received were incomplete and 34 percent of schools gave no response regarding a foundation. Only 8 schools provided information regarding the operating budget which varied widely from $550 to $260,000.

As aforementioned, caution is advised in interpreting these PTA and Foundation data due to the small numbers of schools providing these data and the amount of incomplete data.

## E. School Characteristics

The tables below display the experience characteristics of principals and the leadership team (assistant principals) in APS schools overall, by region, and by cluster respectively. APS principals, on average, have nearly 20 years of experience in schools and leadership team

members are nearly as experienced as principals. The tenure in position is longer for principals compared to assistant principals and the Grady cluster has the most experienced principals while the South Atlanta cluster has the most experienced assistant principals.

APS Overall

| | Principals | | Asst. Principals | |
|---|---|---|---|---|
| | Yrs in Position | Yrs Experience | Yrs in Position | Yrs Experience |
| Mean | 5.29 | 19.49 | 3.79 | 18.06 |
| N | 150 | 149 | 180 | 179 |
| Std. Deviation | 3.916 | 11.094 | 3.465 | 9.699 |

Region

| | | Principals | | Asst. Principals | |
|---|---|---|---|---|---|
| | | Yrs in Position | Yrs Experience | Yrs in Position | Yrs Experience |
| East Region | Mean | 6.03 | 20.15 | 3.83 | 17.89 |
| | N | 31 | 30 | 35 | 35 |
| | Std. Deviation | 3.979 | 10.167 | 3.339 | 8.605 |
| North Region | Mean | 5.38 | 18.41 | 3.89 | 17.64 |
| | N | 39 | 39 | 57 | 57 |
| | Std. Deviation | 4.121 | 11.121 | 3.731 | 10.25 |
| Alternative Schools | Mean | 4 | 22.5 | 4.45 | 14.77 |
| | N | 4 | 4 | 11 | 11 |
| | Std. Deviation | 2.708 | 14.012 | 2.876 | 8.401 |
| South Region | Mean | 5.24 | 19.31 | 3.59 | 19.6 |
| | N | 38 | 38 | 29 | 29 |
| | Std. Deviation | 3.679 | 11.743 | 3.859 | 10.264 |
| West Region | Mean | 4.79 | 19.94 | 3.63 | 18.54 |
| | N | 38 | 38 | 48 | 47 |
| | Std. Deviation | 4.055 | 11.299 | 3.207 | 9.868 |
| Total | Mean | 5.29 | 19.49 | 3.79 | 18.06 |
| | N | 150 | 149 | 180 | 179 |
| | Std. Deviation | 3.916 | 11.094 | 3.465 | 9.699 |

| Cluster | | Principals | | Asst. Principals | |
|---|---|---|---|---|---|
| | | Yrs in Position | Yrs Experience | Yrs in Position | Yrs Experience |
| Carver Cluster | Mean | 5.1 | 20.85 | 3.63 | 18.5 |
| | N | 20 | 20 | 16 | 16 |
| | Std. Deviation | 3.796 | 12.654 | 3.897 | 9.98 |
| Douglass Cluster | Mean | 4.89 | 18.98 | 3.53 | 15.97 |
| | N | 27 | 27 | 30 | 30 |
| | Std. Deviation | 3.955 | 10.635 | 3.511 | 9.727 |
| Grady Cluster | Mean | 7.33 | 22.6 | 4.8 | 19.7 |
| | N | 15 | 14 | 20 | 20 |
| | Std. Deviation | 3.658 | 10.56 | 3.778 | 8.523 |
| Jackson Cluster | Mean | 4.81 | 18 | 2.53 | 15.47 |
| | N | 16 | 16 | 15 | 15 |
| | Std. Deviation | 3.987 | 9.626 | 2.134 | 8.383 |
| Mays Cluster | Mean | 5.3 | 19.3 | 3.05 | 19.05 |
| | N | 10 | 10 | 21 | 21 |
| | Std. Deviation | 4.218 | 14.492 | 2.291 | 8.152 |
| North Atlanta Cluster | Mean | 6.5 | 17.13 | 4.3 | 19.5 |
| | N | 12 | 12 | 27 | 27 |
| | Std. Deviation | 4.442 | 12.542 | 3.989 | 10.675 |
| Alternative Schools | Mean | 4 | 22.5 | 4.45 | 14.77 |
| | N | 4 | 4 | 11 | 11 |
| | Std. Deviation | 2.708 | 14.012 | 2.876 | 8.401 |
| South Atlanta Cluster | Mean | 5.39 | 17.61 | 3.54 | 20.95 |
| | N | 18 | 18 | 13 | 13 |
| | Std. Deviation | 3.648 | 10.738 | 3.971 | 10.85 |
| Therrell Cluster | Mean | 5.6 | 19.77 | 4 | 19.45 |
| | N | 15 | 15 | 12 | 11 |
| | Std. Deviation | 4.306 | 9.745 | 3.885 | 10.113 |
| Washington Cluster | Mean | 3.46 | 20.63 | 4.13 | 17.14 |
| | N | 13 | 13 | 15 | 15 |
| | Std. Deviation | 3.573 | 11.156 | 3.777 | 12.2 |
| Total | Mean | 5.29 | 19.49 | 3.79 | 18.06 |
| | N | 150 | 149 | 180 | 179 |
| | Std. Deviation | 3.916 | 11.094 | 3.465 | 9.699 |

## F. Teacher Characteristics

Teacher data compiled for the equity audit includes information on teachers' years of experience and an indicator variable for teachers with less than three years of teaching experience. Inexperienced teachers demonstrate decreased effectiveness measured by student math and reading achievement tests (Boyd, Grossman, Langford, Loeb, & Wycoff, 2008; Henry, Fortner, and Bastian, 2012). Additional teacher characteristics include the proportion of students testing proficient on CRCT or EOCT exams, the teachers APS calculated value added score, the number of teacher absences during the 2012-13 school year, and four ratings of the classroom environment as rated by student surveys.

These tables represent the mean values weighted by unique student within subject observations. Because many students have multiple teachers during a school day, a simple average of teacher characteristics where each teacher represents an equal contribution to the average does not truly reflect the average student's experience in the classroom. This method counts each students entry in the system wide roster as a unique observation. If a student is listed six times, once for each course period during a typical day, the experience of each of the six unique teachers is averaged to reflect the average level of teacher experience encountered by a specific student over the course of the school day. In this way, a teacher who teaches 25 students provides more weight to the school's average experience level than a teacher who teaches only 20 unique students. This weighting scheme will bias estimates toward teachers with larger numbers of students, which is likely to be the case in middle and high schools. Estimates in the appendix which compare values across specific school types will not suffer from this limitation. Because school regions and clusters are relatively uniform in their distribution of students across grades, values for region and cluster should be comparable. Also, the tables presented here include all students enrolled in APS for which there are available data. The appendices include tables restricted to individual students based on specific characteristics, such as gender, race/ethnicity, or economic disadvantage.

The Teacher Experience tables below present information on the average number of years that teachers have been working in a particular school. Across the APS system, the average student is in a classroom with a teacher who has been working in a particular school for about 5.22 years.

The average student's teacher has about 12.7 years of teaching experience overall. Because prior literature indicates that inexperienced teachers (those with less than three years of teaching experience) are usually less effective at increasing student test score performance, we include an indication of the proportion of time that students are taught by an inexperienced teacher. Students in Alternative schools spent about 28 percent of their time in classrooms with inexperienced teachers (0.2844) in comparison to the Carver cluster where students had an inexperienced teacher about 36 percent of the school day (0.3611). A number of characteristics for teachers in charter schools were unavailable for this report and are omitted from these tables.

Teacher Experience - APS Overall

| | Teacher Years in Position | Teacher Total Years Experience | Inexperienced Teacher (Less than 3 years) |
|---|---|---|---|
| Mean | 5.22 | 12.73 | .2853 |
| N | 779075 | 767850 | 809481 |
| Std. Deviation | 3.663 | 8.587 | .45154 |

Teacher Experience - Region

| Region | | Teacher Years in Position | Teacher Total Years Experience | Inexperienced Teacher (Less than 3 years) |
|---|---|---|---|---|
| Alternative | Mean | 4.76 | 13.53 | .2844 |
| | N | 18280 | 18180 | 19727 |
| | Std. Deviation | 3.314 | 10.007 | .45113 |
| Charter | Mean | | | |
| | N | | | |
| | Std. Deviation | | | |
| East Region | Mean | 5.41 | 12.83 | .2877 |
| | N | 159300 | 155879 | 165496 |
| | Std. Deviation | 3.676 | 8.308 | .45268 |
| North Region | Mean | 5.55 | 13.36 | .2635 |
| | N | 220641 | 218423 | 227353 |
| | Std. Deviation | 3.713 | 8.606 | .44054 |
| South Region | Mean | 4.83 | 11.30 | .3377 |
| | N | 151269 | 148965 | 156469 |
| | Std. Deviation | 3.622 | 8.375 | .47293 |
| West Region | Mean | 5.07 | 12.92 | .2704 |
| | N | 229585 | 226403 | 240109 |
| | Std. Deviation | 3.622 | 8.666 | .44419 |
| Total | Mean | 5.22 | 12.73 | .2853 |
| | N | 779075 | 767850 | 809481 |
| | Std. Deviation | 3.663 | 8.587 | .45154 |

Teacher Experience - Cluster

| Cluster | | Teacher Years in Position | Teacher Total Years Experience | Inexperienced Teacher (Less than 3 years) |
|---|---|---|---|---|
| Alternative | Mean | 4.76 | 13.53 | .2844 |
| | N | 18280 | 18180 | 19727 |
| | Std. Deviation | 3.314 | 10.007 | .45113 |
| Carver Cluster | Mean | 4.94 | 11.59 | .3611 |
| | N | 81307 | 79709 | 84048 |
| | Std. Deviation | 3.721 | 8.886 | .48033 |
| Charter | Mean | | | |
| | N | | | |
| | Std. Deviation | | | |
| Douglass Cluster | Mean | 5.42 | 13.69 | .2427 |
| | N | 115740 | 114539 | 119450 |
| | Std. Deviation | 3.736 | 8.787 | .42870 |
| Grady Cluster | Mean | 5.46 | 12.56 | .3047 |
| | N | 80756 | 79524 | 82455 |
| | Std. Deviation | 3.564 | 7.751 | .46030 |
| Jackson Cluster | Mean | 5.36 | 13.11 | .2707 |
| | N | 78544 | 76355 | 83041 |
| | Std. Deviation | 3.787 | 8.842 | .44434 |
| Mays Cluster | Mean | 5.02 | 13.03 | .2463 |
| | N | 92037 | 90873 | 94151 |
| | Std. Deviation | 3.468 | 8.287 | .43086 |
| North Atlanta Cluster | Mean | 5.68 | 13.00 | .2866 |
| | N | 104901 | 103884 | 107903 |
| | Std. Deviation | 3.682 | 8.387 | .45217 |
| South Atlanta Cluster | Mean | 4.70 | 10.98 | .3106 |
| | N | 69962 | 69256 | 72421 |
| | Std. Deviation | 3.498 | 7.731 | .46273 |
| Therrell Cluster | Mean | 5.38 | 13.66 | .2587 |
| | N | 73297 | 72665 | 79596 |
| | Std. Deviation | 3.811 | 9.595 | .43793 |
| Washington Cluster | Mean | 4.81 | 11.92 | .3188 |
| | N | 64251 | 62865 | 66362 |
| | Std. Deviation | 3.592 | 7.947 | .46601 |
| Total | Mean | 5.22 | 12.73 | .2853 |
| | N | 779075 | 767850 | 809481 |
| | Std. Deviation | 3.663 | 8.587 | .45154 |

The next set of tables provides measures of teacher performance. The values are weighted similarly to the prior tables on experience, but include measures of teacher value added and the number of teacher absences during the 2012-13 school year. Teacher value added scores are calculated by APS and represent a teacher's influence on a student's CRCT or EOCT exam score after adjusting for a variety of student and classroom characteristics, including the student's prior test score performance in previous years. It should be noted that only teachers teaching a tested

grade or subject will have value added scores for a given year. A value added score of three is the score assigned to teachers whose value added score is at the average for the district. Scores above three are assigned to teachers whose student experience above average test score growth and scores below three are assigned to teachers whose students experience below average growth for the year. The Absences column indicates the number of teachers absences during the school year experienced by the average student in a region, cluster, or school. In the appendix, where data are restricted to specific subgroups of students, this value represents the average number of absences for teachers of students in the specific subgroup.

Focusing in the Teacher Performance – Cluster table, we see that students in the Washington Cluster were taught by teachers with the highest value added scores (about 3.2 on average). Students in Alternative School settings experienced teachers with the lowest value added scores across clusters (about 2.65 on average). During the 2012-13 school year, teacher absences were the lowest in the South Region (4.75 days) and highest in the West Region (6.08 days).

Teacher Performance – APS Overall

| | Value Added | Absences |
|---|---|---|
| Mean | 2.9786 | 5.54 |
| N | 315356 | 746490 |
| Std. Deviation | .73255 | 11.343 |

Teacher Performance - Region

| Region | | Value Added | Absences |
|---|---|---|---|
| Alternative | Mean | 2.6489 | 5.99 |
| | N | 11520 | 18271 |
| | Std. Deviation | .47140 | 11.739 |
| East Region | Mean | 2.9304 | 5.50 |
| | N | 60894 | 156161 |
| | Std. Deviation | .72974 | 8.704 |
| North Region | Mean | 3.0021 | 5.48 |
| | N | 83796 | 220481 |
| | Std. Deviation | .69406 | 10.211 |
| South Region | Mean | 3.0249 | 4.75 |
| | N | 66231 | 136250 |
| | Std. Deviation | .74874 | 6.434 |
| West Region | Mean | 2.9970 | 6.08 |
| | N | 92915 | 215327 |
| | Std. Deviation | .77033 | 15.678 |
| Total | Mean | 2.9786 | 5.54 |
| | N | 315356 | 746490 |
| | Std. Deviation | .73255 | 11.343 |

Teacher Performance - Cluster

| Cluster | | Value Added | Absences |
|---|---|---|---|
| Alternative | Mean | 2.6489 | 5.99 |
| | N | 11520 | 18271 |
| | Std. Deviation | .47140 | 11.739 |
| Carver Cluster | Mean | 3.0314 | 5.25 |
| | N | 37660 | 74169 |
| | Std. Deviation | .69493 | 7.246 |
| Douglass Cluster | Mean | 2.9765 | 5.53 |
| | N | 47947 | 115590 |
| | Std. Deviation | .68266 | 11.106 |
| Grady Cluster | Mean | 2.9530 | 5.28 |
| | N | 28800 | 80644 |
| | Std. Deviation | .80482 | 7.994 |
| Jackson Cluster | Mean | 2.9101 | 5.74 |
| | N | 32094 | 75517 |
| | Std. Deviation | .65443 | 9.397 |
| Mays Cluster | Mean | 2.8053 | 6.19 |
| | N | 39364 | 85932 |
| | Std. Deviation | .69458 | 11.378 |
| North Atlanta Cluster | Mean | 3.0362 | 5.42 |
| | N | 35849 | 104891 |
| | Std. Deviation | .70758 | 9.123 |
| South Atlanta Cluster | Mean | 3.0163 | 4.16 |
| | N | 28571 | 62081 |
| | Std. Deviation | .81419 | 5.241 |
| Therrell Cluster | Mean | 3.0741 | 7.18 |
| | N | 28260 | 65144 |
| | Std. Deviation | .70798 | 20.639 |
| Washington Cluster | Mean | 3.2092 | 4.80 |
| | N | 25291 | 64251 |
| | Std. Deviation | .87193 | 14.691 |
| Total | Mean | 2.9786 | 5.54 |
| | N | 315356 | 746490 |
| | Std. Deviation | .73255 | 11.343 |

The final set of tables linked to teachers is a classroom level measure of the climate within APS schools. During the 2012-13 school year, students in non-charter schools completed surveys regarding the characteristics of teacher's classrooms. These data were linked to teachers and is displayed here in table format. The survey focuses on four characteristics of classrooms described as Instructional Strategy, Differentiated Instruction, Positive Learning Environment, and Challenging Learning Environment. Student survey responses were completed using a Likert scale where students indicated their disagreement or agreement with specific statements about

the classroom environment using a four point scale ranging from Strongly Disagree, to Strongly Agree. Responses of Strongly Disagree were coded as zero (0) and responses of Strongly Agree were coded as three (3). Each teacher whose students completed the survey receives a single indicator of performance in each of the four categories described above. Student responses are averaged across a teacher's students. Higher values represent student agreement that the teacher's classroom better represented the targeted area of instruction. More information regarding the survey and specific items is available from the Georgia Department of Education (2013).

Students in the East and South Regions indicate the highest levels of Differentiated Instruction and the most Challenging Learning Environments among the APS school regions.

Classroom Climate – APS Overall

| | Instructional Strategy | Differentiated Instruction | Positive Learning Environment | Challenging Learning Environment |
|---|---|---|---|---|
| Mean | 1.9347 | 1.9305 | 1.9841 | 1.9799 |
| N | 373992 | 373992 | 373992 | 373992 |
| Std. Deviation | .52026 | .49368 | .44402 | .47461 |

Classroom Climate - Region

| Region | | Instructional Strategy | Differentiated Instruction | Positive Learning Environment | Challenging Learning Environment |
|---|---|---|---|---|---|
| Alternative | Mean | 1.7675 | 1.8275 | 1.8275 | 1.8288 |
| | N | 4162 | 4162 | 4162 | 4162 |
| | Std. Deviation | .42151 | .41075 | .41075 | .40486 |
| East Region | Mean | 1.9896 | 1.9864 | 2.0431 | 2.0347 |
| | N | 73497 | 73497 | 73497 | 73497 |
| | Std. Deviation | .53467 | .50337 | .43932 | .47408 |
| North Region | Mean | 1.8744 | 1.8820 | 1.9432 | 1.9369 |
| | N | 126939 | 126939 | 126939 | 126939 |
| | Std. Deviation | .51401 | .48897 | .43776 | .46011 |
| South Region | Mean | 2.0140 | 1.9978 | 2.0446 | 2.0501 |
| | N | 66085 | 66085 | 66085 | 66085 |
| | Std. Deviation | .52645 | .48884 | .43379 | .48072 |
| West Region | Mean | 1.9257 | 1.9113 | 1.9598 | 1.9550 |
| | N | 103309 | 103309 | 103309 | 103309 |
| | Std. Deviation | .50555 | .48972 | .45313 | .48157 |
| Total | Mean | 1.9347 | 1.9305 | 1.9841 | 1.9799 |

| | | | | | |
|---|---|---|---|---|---|
| | N | 373992 | 373992 | 373992 | 373992 |
| | Std. Deviation | .52026 | .49368 | .44402 | .47461 |

Classroom Climate - Cluster

| Cluster | | Instructional Strategy | Differentiated Instruction | Positive Learning Environment | Challenging Learning Environment |
|---|---|---|---|---|---|
| Alternative | Mean | 1.7675 | 1.8275 | 1.8275 | 1.8288 |
| | N | 4162 | 4162 | 4162 | 4162 |
| | Std. Deviation | .42151 | .41075 | .41075 | .40486 |
| Carver Cluster | Mean | 2.0507 | 2.0252 | 2.0751 | 2.0786 |
| | N | 42843 | 42843 | 42843 | 42843 |
| | Std. Deviation | .51913 | .48453 | .42211 | .48136 |
| Douglass Cluster | Mean | 1.9554 | 1.9466 | 1.9818 | 1.9881 |
| | N | 66288 | 66288 | 66288 | 66288 |
| | Std. Deviation | .51851 | .49574 | .46094 | .48116 |
| Grady Cluster | Mean | 1.9587 | 1.9743 | 2.0397 | 2.0104 |
| | N | 31340 | 31340 | 31340 | 31340 |
| | Std. Deviation | .55594 | .54169 | .47221 | .49113 |
| Jackson Cluster | Mean | 2.0125 | 1.9953 | 2.0457 | 2.0527 |
| | N | 42157 | 42157 | 42157 | 42157 |
| | Std. Deviation | .51711 | .47267 | .41316 | .46018 |
| Mays Cluster | Mean | 1.9491 | 1.9097 | 1.9560 | 1.9627 |
| | N | 41366 | 41366 | 41366 | 41366 |
| | Std. Deviation | .42245 | .41401 | .38292 | .40329 |
| North Atlanta Cluster | Mean | 1.7859 | 1.8114 | 1.9011 | 1.8809 |
| | N | 60651 | 60651 | 60651 | 60651 |
| | Std. Deviation | .49409 | .47144 | .40677 | .42901 |
| South Atlanta Cluster | Mean | 1.9464 | 1.9475 | 1.9884 | 1.9977 |
| | N | 23242 | 23242 | 23242 | 23242 |
| | Std. Deviation | .53309 | .49274 | .44916 | .47512 |
| Therrell Cluster | Mean | 1.8396 | 1.8404 | 1.9050 | 1.8841 |
| | N | 37264 | 37264 | 37264 | 37264 |
| | Std. Deviation | .48560 | .45787 | .40288 | .43819 |
| Washington Cluster | Mean | 2.0166 | 2.0209 | 2.0489 | 2.0493 |
| | N | 24679 | 24679 | 24679 | 24679 |
| | Std. Deviation | .62796 | .61682 | .59680 | .62585 |
| Total | Mean | 1.9347 | 1.9305 | 1.9841 | 1.9799 |
| | N | 373992 | 373992 | 373992 | 373992 |
| | Std. Deviation | .52026 | .49368 | .44402 | .47461 |

## G. Individual student characteristics

Individual student characteristics tables begin with tables organized by gender and race/ethnicity characteristics. Students are equally weighted with one observation for each unique student within APS. The Mean values represent the proportion of students within APS who are coded as belonging to the designated group. For example, in APS overall about five percent of students are identified as Hispanic (0.05). Tables by region and cluster designations follow below and these tables represent all students within the APS system.

Student Race/Ethnicity - APS Overall

| | Male | Black | White | Hispanic | Other |
|---|---|---|---|---|---|
| Mean | .50 | .76 | .15 | .05 | .0356 |
| N | 49852 | 49852 | 49852 | 49852 | 49852 |
| Std. Deviation | .500 | .428 | .358 | .228 | .18521 |

Student Race/Ethnicity - Region

| Region | | Male | Black | White | Hispanic | Other |
|---|---|---|---|---|---|---|
| Alternative | Mean | .60 | .96 | .00 | .03 | .0054 |
| | N | 1112 | 1112 | 1112 | 1112 | 1112 |
| | Std. Deviation | .491 | .184 | .067 | .157 | .07329 |
| Charter | Mean | .47 | .81 | .13 | .01 | .0455 |
| | N | 4612 | 4612 | 4612 | 4612 | 4612 |
| | Std. Deviation | .499 | .394 | .340 | .114 | .20849 |
| East | Mean | .50 | .63 | .27 | .04 | .0591 |
| | N | 10009 | 10009 | 10009 | 10009 | 10009 |
| | Std. Deviation | .500 | .482 | .442 | .198 | .23591 |
| North | Mean | .50 | .52 | .30 | .12 | .0559 |
| | N | 14213 | 14213 | 14213 | 14213 | 14213 |
| | Std. Deviation | .500 | .499 | .457 | .329 | .22980 |
| South | Mean | .51 | .95 | .00 | .03 | .0100 |
| | N | 8229 | 8229 | 8229 | 8229 | 8229 |
| | Std. Deviation | .500 | .213 | .054 | .183 | .09933 |
| West | Mean | .50 | .98 | .00 | .02 | .0075 |
| | N | 11677 | 11677 | 11677 | 11677 | 11677 |
| | Std. Deviation | .500 | .155 | .032 | .126 | .08649 |
| Total | Mean | .50 | .76 | .15 | .05 | .0356 |
| | N | 49852 | 49852 | 49852 | 49852 | 49852 |
| | Std. Deviation | .500 | .428 | .358 | .228 | .18521 |

Student Race/Ethnicity - Cluster

| Cluster | | Male | Black | White | Hispanic | Other |
|---|---|---|---|---|---|---|
| Alternative | Mean | .60 | .96 | .00 | .03 | .0054 |
| | N | 1112 | 1112 | 1112 | 1112 | 1112 |
| | Std. Deviation | .491 | .184 | .067 | .157 | .07329 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Carver | Mean | .51 | .98 | .00 | .01 | .0079 |
| | N | 4534 | 4534 | 4534 | 4534 | 4534 |
| | Std. Deviation | .500 | .150 | .042 | .114 | .08876 |
| Charter | Mean | .47 | .81 | .13 | .01 | .0455 |
| | N | 4612 | 4612 | 4612 | 4612 | 4612 |
| | Std. Deviation | .499 | .394 | .340 | .114 | .20849 |
| Douglass | Mean | .51 | .96 | .00 | .03 | .0083 |
| | N | 5425 | 5425 | 5425 | 5425 | 5425 |
| | Std. Deviation | .500 | .202 | .027 | .180 | .09071 |
| Grady | Mean | .49 | .43 | .45 | .03 | .0847 |
| | N | 5431 | 5431 | 5431 | 5431 | 5431 |
| | Std. Deviation | .500 | .496 | .497 | .180 | .27846 |
| Jackson | Mean | .51 | .87 | .05 | .05 | .0288 |
| | N | 4578 | 4578 | 4578 | 4578 | 4578 |
| | Std. Deviation | .500 | .335 | .218 | .218 | .16736 |
| Mays | Mean | .51 | .97 | .00 | .03 | .0046 |
| | N | 4547 | 4547 | 4547 | 4547 | 4547 |
| | Std. Deviation | .500 | .172 | .026 | .157 | .06781 |
| North Atlanta | Mean | .50 | .26 | .48 | .18 | .0853 |
| | N | 8788 | 8788 | 8788 | 8788 | 8788 |
| | Std. Deviation | .500 | .436 | .500 | .384 | .27941 |
| South Atlanta | Mean | .50 | .92 | .00 | .06 | .0124 |
| | N | 3695 | 3695 | 3695 | 3695 | 3695 |
| | Std. Deviation | .500 | .269 | .066 | .240 | .11089 |
| Therrell | Mean | .50 | .98 | .00 | .01 | .0078 |
| | N | 3584 | 3584 | 3584 | 3584 | 3584 |
| | Std. Deviation | .500 | .147 | .041 | .111 | .08805 |
| Washington | Mean | .49 | .98 | .00 | .01 | .0110 |
| | N | 3546 | 3546 | 3546 | 3546 | 3546 |
| | Std. Deviation | .500 | .140 | .029 | .090 | .10431 |
| Total | Mean | .50 | .76 | .15 | .05 | .0356 |
| | N | 49852 | 49852 | 49852 | 49852 | 49852 |
| | Std. Deviation | .500 | .428 | .358 | .228 | .18521 |

The next set of tables indicates the proportions of students identified as economically disadvantaged, English learners, or homeless across APS overall, by region, and by school cluster. Overall, about 72 percent of APS students are eligible for free or reduced priced lunches indicating an economically disadvantaged household. These values range from a low of 34 percent in the Grady cluster and a high of 95 percent in the Carver cluster. English learner status is primarily located in the East region where approximately six percent of students are identified as English learners. Students educated in Alternative schools had the highest reported rates of homelessness at about nine percent (0.09).

Student Characteristics - APS Overall

| | Economic Disadvantage | English Learner | Homeless |
|---|---|---|---|
| Mean | .72 | .03 | .04 |
| N | 49852 | 49852 | 49852 |
| Std. Deviation | .450 | .163 | .196 |

Student Characteristics - Region

| Region | | Economic Disadvantage | English Learner | Homeless |
|---|---|---|---|---|
| Alternative | Mean | .84 | .01 | .09 |
| | N | 1112 | 1112 | 1112 |
| | Std. Deviation | .368 | .073 | .284 |
| Charter | Mean | .61 | .00 | .01 |
| | N | 4612 | 4612 | 4612 |
| | Std. Deviation | .487 | .069 | .118 |
| East | Mean | .58 | .02 | .04 |
| | N | 10009 | 10009 | 10009 |
| | Std. Deviation | .494 | .138 | .200 |
| North | Mean | .57 | .06 | .02 |
| | N | 14213 | 14213 | 14213 |
| | Std. Deviation | .494 | .240 | .151 |
| South | Mean | .94 | .02 | .05 |
| | N | 8229 | 8229 | 8229 |
| | Std. Deviation | .230 | .123 | .227 |
| West | Mean | .89 | .01 | .05 |
| | N | 11677 | 11677 | 11677 |
| | Std. Deviation | .317 | .107 | .225 |
| Total | Mean | .72 | .03 | .04 |
| | N | 49852 | 49852 | 49852 |
| | Std. Deviation | .450 | .163 | .196 |

Student Characteristics - Cluster

| Cluster | | Economic Disadvantage | English Learner | Homeless |
|---|---|---|---|---|
| Alternative | Mean | .84 | .01 | .09 |
| | N | 1112 | 1112 | 1112 |
| | Std. Deviation | .368 | .073 | .284 |
| Carver | Mean | .95 | .00 | .05 |
| | N | 4534 | 4534 | 4534 |
| | Std. Deviation | .213 | .047 | .212 |
| Charter | Mean | .61 | .00 | .01 |
| | N | 4612 | 4612 | 4612 |
| | Std. Deviation | .487 | .069 | .118 |
| Douglass | Mean | .94 | .02 | .05 |
| | N | 5425 | 5425 | 5425 |
| | Std. Deviation | .244 | .140 | .210 |
| Grady | Mean | .35 | .02 | .04 |
| | N | 5431 | 5431 | 5431 |
| | Std. Deviation | .478 | .132 | .198 |
| Jackson | Mean | .85 | .02 | .04 |

| | | | | |
|---|---|---|---|---|
| | N | 4578 | 4578 | 4578 |
| | Std. Deviation | .360 | .144 | .201 |
| Mays | Mean | .86 | .02 | .04 |
| | N | 4547 | 4547 | 4547 |
| | Std. Deviation | .349 | .130 | .194 |
| North Atlanta | Mean | .35 | .09 | .01 |
| | N | 8788 | 8788 | 8788 |
| | Std. Deviation | .477 | .281 | .096 |
| South Atlanta | Mean | .93 | .03 | .06 |
| | N | 3695 | 3695 | 3695 |
| | Std. Deviation | .248 | .175 | .244 |
| Therrell | Mean | .87 | .01 | .04 |
| | N | 3584 | 3584 | 3584 |
| | Std. Deviation | .337 | .106 | .188 |
| Washington | Mean | .94 | .00 | .09 |
| | N | 3546 | 3546 | 3546 |
| | Std. Deviation | .238 | .069 | .285 |
| Total | Mean | .72 | .03 | .04 |
| | N | 49852 | 49852 | 49852 |
| | Std. Deviation | .450 | .163 | .196 |

The next set of tables provides information about the proportion of students identified as academically disadvantaged (scoring not proficient on 2012-13 CRCT or EOCT exams) across each region and cluster. In addition, the table provides information on the proportion of students identified as gifted or receiving special education services across these region and cluster designations. We exclude students in grades less than three from the calculation of academic disadvantage as they are not yet tested using these exams. The Academic Program - Region table below indicates that about 18 percent of students enrolled in Alternative schools are designated as receiving special education services. This rate is about double that of the East, North, South, and West regions of the district and more than double the rate for students enrolled in charter schools. Almost half of students enrolled in APS overall in grades 3 – 12 scored not proficient on at least one state administered exam in the 2012-13 school year. By cluster, academically disadvantaged students are most prevalent in Alternative schools and occur at the lowest rates in Charter schools. Nearly 20 percent of students in the East and North Regions are identified by APS as gifted. Gifted identification rates for students in the South, West, and Charter schools are less than ten percent.

Academic Program - APS Overall

| | Academic Disadvantage | Gifted | Special Education |
|---|---|---|---|
| Mean | .4957 | .1347 | .09 |
| N | 34033 | 49852 | 49819 |
| Std. Deviation | .49999 | .34140 | .288 |

Academic Program - Region

| Region | | Academic Disadvantage | Gifted | Special Education |
|---|---|---|---|---|
| Alternative | Mean | .7642 | .0198 | .18 |
| | N | 1111 | 1112 | 1112 |
| | Std. Deviation | .42470 | .13932 | .386 |
| Charter | Mean | .3499 | .0913 | .07 |
| | N | 3184 | 4612 | 4602 |
| | Std. Deviation | .47700 | .28804 | .257 |
| East | Mean | .4162 | .1930 | .10 |
| | N | 6605 | 10009 | 10006 |
| | Std. Deviation | .49296 | .39469 | .295 |
| North | Mean | .4297 | .1998 | .09 |
| | N | 9403 | 14213 | 14205 |
| | Std. Deviation | .49505 | .39988 | .282 |
| South | Mean | .6137 | .0651 | .09 |
| | N | 5610 | 8229 | 8222 |
| | Std. Deviation | .48694 | .24678 | .289 |
| West | Mean | .5756 | .0826 | .09 |
| | N | 8120 | 11677 | 11672 |
| | Std. Deviation | .49428 | .27522 | .286 |
| Total | Mean | .4957 | .1347 | .09 |
| | N | 34033 | 49852 | 49819 |
| | Std. Deviation | .49999 | .34140 | .288 |

Academic Program - Cluster

| Cluster | | Academic Disadvantage | Gifted | Special Education |
|---|---|---|---|---|
| Alternative | Mean | .7642 | .0198 | .18 |
| | N | 1111 | 1112 | 1112 |
| | Std. Deviation | .42470 | .13932 | .386 |
| Carver | Mean | .6120 | .0688 | .09 |
| | N | 3188 | 4534 | 4533 |
| | Std. Deviation | .48738 | .25316 | .287 |
| Charter | Mean | .3499 | .0913 | .07 |
| | N | 3184 | 4612 | 4602 |
| | Std. Deviation | .47700 | .28804 | .257 |
| Douglass | Mean | .6887 | .0450 | .10 |
| | N | 3649 | 5425 | 5424 |
| | Std. Deviation | .46310 | .20727 | .301 |
| Grady | Mean | .2761 | .2987 | .07 |
| | N | 3789 | 5431 | 5428 |
| | Std. Deviation | .44711 | .45771 | .255 |

| | | | | |
|---|---|---|---|---|
| Jackson | Mean | .6048 | .0677 | .13 |
| | N | 2816 | 4578 | 4578 |
| | Std. Deviation | .48899 | .25128 | .334 |
| Mays | Mean | .5659 | .1095 | .09 |
| | N | 3271 | 4547 | 4546 |
| | Std. Deviation | .49572 | .31233 | .285 |
| North Atlanta | Mean | .2654 | .2954 | .08 |
| | N | 5754 | 8788 | 8781 |
| | Std. Deviation | .44157 | .45625 | .269 |
| South Atlanta | Mean | .6160 | .0606 | .09 |
| | N | 2422 | 3695 | 3689 |
| | Std. Deviation | .48645 | .23867 | .293 |
| Therrell | Mean | .5508 | .0737 | .08 |
| | N | 2380 | 3584 | 3584 |
| | Std. Deviation | .49751 | .26125 | .267 |
| Washington | Mean | .6124 | .0570 | .10 |
| | N | 2469 | 3546 | 3542 |
| | Std. Deviation | .48730 | .23181 | .304 |
| Total | Mean | .4957 | .1347 | .09 |
| | N | 34033 | 49852 | 49819 |
| | Std. Deviation | .49999 | .34140 | .288 |

The next set of tables provides information on the curricular experiences of students in APS. The Advanced Class, AP Class, and Remedial Class values indicate the proportion of student time spent in these various classroom settings. Observations are weighted such that each student counts one time and a student taking 1/5 of their classes on a remedial level is coded as a 0.2. We can interpret the result as indicating that about 4.3 percent of student time, on average, across APS is spent in advanced classroom settings. Here, the values for AP Class include students across all grades in APS. Direct comparisons across high schools will be the most relevant comparisons for this indicator of curricular equity across schools. Students in the Charter, East, and North regions (about 0.063 or 6.3 percent in charters and about seven percent in the East and North regions) experience the lowest rates of remedial coursework compared to students in other regions. In the South and West regions remedial classroom settings average over ten percent. The rates of remedial classroom settings are highest in Alternative schools at nearly 14 percent of student time.

Curriculum - APS Overall

| | Advanced Class | AP Class | Remedial Class |
|---|---|---|---|
| Mean | .0434 | .0065 | .0905 |
| N | 47019 | 47019 | 47019 |
| Std. Deviation | .11527 | .04005 | .16714 |

Curriculum - Region

| Region | | Advanced Class | AP Class | Remedial Class |
|---|---|---|---|---|
| Alternative | Mean | .0128 | .0020 | .1394 |
| | N | 1074 | 1074 | 1074 |
| | Std. Deviation | .06680 | .01771 | .25539 |
| Charter | Mean | .0340 | .0014 | .0631 |
| | N | 4378 | 4378 | 4378 |
| | Std. Deviation | .10231 | .01352 | .15391 |
| East | Mean | .0556 | .0113 | .0790 |
| | N | 9284 | 9284 | 9284 |
| | Std. Deviation | .12165 | .05796 | .16606 |
| North | Mean | .0421 | .0035 | .0783 |
| | N | 13429 | 13429 | 13429 |
| | Std. Deviation | .10404 | .02716 | .14703 |
| South | Mean | .0341 | .0076 | .1118 |
| | N | 7744 | 7744 | 7744 |
| | Std. Deviation | .10380 | .04095 | .17289 |
| West | Mean | .0481 | .0080 | .1061 |
| | N | 11110 | 11110 | 11110 |
| | Std. Deviation | .13562 | .04213 | .17668 |
| Total | Mean | .0434 | .0065 | .0905 |
| | N | 47019 | 47019 | 47019 |
| | Std. Deviation | .11527 | .04005 | .16714 |

Curriculum - Cluster

| Cluster | | Advanced Class | AP Class | Remedial Class |
|---|---|---|---|---|
| Alternative | Mean | .0128 | .0020 | .1394 |
| | N | 1074 | 1074 | 1074 |
| | Std. Deviation | .06680 | .01771 | .25539 |
| Carver | Mean | .0164 | .0094 | .0991 |
| | N | 4353 | 4353 | 4353 |
| | Std. Deviation | .07355 | .04752 | .16020 |
| Charter | Mean | .0340 | .0014 | .0631 |
| | N | 4378 | 4378 | 4378 |
| | Std. Deviation | .10231 | .01352 | .15391 |
| Douglass | Mean | .0282 | .0070 | .1206 |
| | N | 5170 | 5170 | 5170 |
| | Std. Deviation | .11004 | .03985 | .17539 |
| Grady | Mean | .0745 | .0175 | .0568 |
| | N | 5156 | 5156 | 5156 |
| | Std. Deviation | .13221 | .07433 | .13561 |
| Jackson | Mean | .0319 | .0036 | .1067 |

| | | | | |
|---|---|---|---|---|
| | N | 4128 | 4128 | 4128 |
| | Std. Deviation | .10221 | .02342 | .19409 |
| Mays | Mean | .0695 | .0123 | .0974 |
| | N | 4347 | 4347 | 4347 |
| | Std. Deviation | .14021 | .04903 | .15869 |
| North Atlanta | Mean | .0508 | .0013 | .0518 |
| | N | 8259 | 8259 | 8259 |
| | Std. Deviation | .09911 | .01386 | .11866 |
| South Atlanta | Mean | .0569 | .0051 | .1282 |
| | N | 3391 | 3391 | 3391 |
| | Std. Deviation | .12941 | .03034 | .18668 |
| Therrell | Mean | .0282 | .0070 | .1129 |
| | N | 3387 | 3387 | 3387 |
| | Std. Deviation | .12289 | .04677 | .18370 |
| Washington | Mean | .0405 | .0035 | .1105 |
| | N | 3376 | 3376 | 3376 |
| | Std. Deviation | .13793 | .02256 | .19054 |
| Total | Mean | .0434 | .0065 | .0905 |
| | N | 47019 | 47019 | 47019 |
| | Std. Deviation | .11527 | .04005 | .16714 |

Here, we present average test score outcomes for students on CRCT and EOCT exams. CRCT exam scores occur in grades three through eight and grade ten. Charter school students, on average, score highest compared to students in other regions. Student test score performance is lowest in Alternative school settings.

Test Scores - APS Overall

| | CRCT Scale Score 2013 | EOCT Scale Score 2013 |
|---|---|---|
| Mean | 822.1038 | 414.0726 |
| N | 19737 | 8662 |
| Std. Deviation | 66.18786 | 36.78362 |

Test Scores - Region

| Region | | CRCT Scale Score 2013 | EOCT Scale Score 2013 |
|---|---|---|---|
| Alternative | Mean | 737.6420 | 387.4600 |
| | N | 140 | 523 |
| | Std. Deviation | 119.36823 | 25.28642 |
| Charter | Mean | 833.6368 | 422.7319 |
| | N | 2724 | 317 |
| | Std. Deviation | 53.98294 | 31.20102 |
| East | Mean | 831.7522 | 421.6127 |
| | N | 3654 | 1672 |
| | Std. Deviation | 69.68354 | 41.73097 |
| North | Mean | 831.8050 | 418.0996 |
| | N | 5805 | 2106 |
| | Std. Deviation | 60.49545 | 36.96754 |
| South | Mean | 802.1165 | 413.4505 |

| | | | |
|---|---|---|---|
| | N | 3031 | 1640 |
| | Std. Deviation | 69.17998 | 35.54940 |
| West | Mean | 810.5638 | 410.3728 |
| | N | 4383 | 2404 |
| | Std. Deviation | 65.88561 | 33.28536 |
| Total | Mean | 822.1038 | 414.0726 |
| | N | 19737 | 8662 |
| | Std. Deviation | 66.18786 | 36.78362 |

Test Scores - Cluster

| Cluster | | CRCT Scale Score 2013 | EOCT Scale Score 2013 |
|---|---|---|---|
| Alternative | Mean | 737.6420 | 387.4600 |
| | N | 140 | 523 |
| | Std. Deviation | 119.36823 | 25.28642 |
| Carver | Mean | 799.5438 | 415.3819 |
| | N | 1679 | 1003 |
| | Std. Deviation | 72.39954 | 36.48426 |
| Charter | Mean | 833.6368 | 422.7319 |
| | N | 2724 | 317 |
| | Std. Deviation | 53.98294 | 31.20102 |
| Douglass | Mean | 800.9266 | 406.0806 |
| | N | 2237 | 953 |
| | Std. Deviation | 64.53182 | 30.72328 |
| Grady | Mean | 851.5568 | 434.6144 |
| | N | 2150 | 963 |
| | Std. Deviation | 57.08280 | 44.14006 |
| Jackson | Mean | 803.4412 | 403.9532 |
| | N | 1504 | 709 |
| | Std. Deviation | 76.02515 | 30.34172 |
| Mays | Mean | 813.9294 | 409.3313 |
| | N | 1672 | 1212 |
| | Std. Deviation | 62.45233 | 33.23909 |
| North Atlanta | Mean | 851.1646 | 428.0338 |
| | N | 3568 | 1153 |
| | Std. Deviation | 48.69824 | 38.71441 |
| South Atlanta | Mean | 805.3115 | 410.4093 |
| | N | 1352 | 637 |
| | Std. Deviation | 64.84458 | 33.83053 |
| Therrell | Mean | 815.4975 | 409.8834 |
| | N | 1261 | 581 |
| | Std. Deviation | 60.95678 | 33.79827 |
| Washington | Mean | 802.3921 | 412.9043 |
| | N | 1450 | 611 |
| | Std. Deviation | 72.78459 | 32.80460 |
| Total | Mean | 822.1038 | 414.0726 |
| | N | 19737 | 8662 |
| | Std. Deviation | 66.18786 | 36.78362 |

Individual student attendance and discipline data include these variables: attendance rate, out-of-school suspensions (OSS), in-school suspensions (ISS), bus suspensions (BUS), total

suspensions (Days Suspended) of all types and expulsion. Attendance Rates are the proportion of time in attendances where a value of 1.00 indicates perfect student attendance. The APS average of about 0.937 indicates that the average student in APS attended school about 93.7 percent of school days in the 2012-13 school year. The suspension days values indicate the average number of days of suspension across all students. Since most students do not experience this type of discipline, the values are typically very small. Also, suspensions are uncommon in lower grade levels further depressing the values in tables that combine students across all grades. The Days Suspended value represents the average number of suspension days across all students in the category. Below we see that the average student across the Douglass cluster is suspended for about 0.3 school days. North Atlanta students experience the lowest rates of suspension by cluster in the district, only about 0.04 school days in suspension, on average.

Student Attendance and Discipline - APS Overall

| | Attendance Rate | OSS | ISS | BUS | Days Suspended | Expulsion |
|---|---|---|---|---|---|---|
| Mean | .936804 | .1018 | .0304 | .0097 | .1666 | .0004 |
| N | 46200 | 49852 | 49852 | 49852 | 49852 | 49852 |
| Std. Deviation | .0805675 | .30236 | .17166 | .09805 | .67932 | .02003 |

Student Attendance and Discipline - Region

| Region | | Attendance Rate | OSS | ISS | BUS | Days Suspended | Expulsion |
|---|---|---|---|---|---|---|---|
| Alternative | Mean | .766732 | .2842 | .0845 | .0108 | .5557 | .0117 |
| | N | 960 | 1112 | 1112 | 1112 | 1112 | 1112 |
| | Std. Deviation | .1485666 | .45122 | .27831 | .10337 | 1.27937 | .10754 |
| Charter | Mean | .965819 | .0757 | .0085 | .0000 | .0850 | .0004 |
| | N | 4409 | 4612 | 4612 | 4612 | 4612 | 4612 |
| | Std. Deviation | .0424869 | .26450 | .09158 | .00000 | .58178 | .02082 |
| East | Mean | .941217 | .0870 | .0441 | .0136 | .1649 | .0001 |
| | N | 9122 | 10009 | 10009 | 10009 | 10009 | 10009 |
| | Std. Deviation | .0737073 | .28188 | .20524 | .11578 | .64418 | .01000 |
| North | Mean | .943290 | .0849 | .0375 | .0072 | .1409 | .0001 |
| | N | 13085 | 14213 | 14213 | 14213 | 14213 | 14213 |
| | Std. Deviation | .0708009 | .27878 | .18999 | .08482 | .61619 | .01186 |
| South | Mean | .931568 | .1233 | .0292 | .0074 | .2017 | .0001 |
| | N | 7707 | 8229 | 8229 | 8229 | 8229 | 8229 |
| | Std. Deviation | .0788955 | .32885 | .16828 | .08578 | .71553 | .01102 |
| West | Mean | .932279 | .1127 | .0144 | .0147 | .1697 | .0001 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | N | 10917 | 11677 | 11677 | 11677 | 11677 | 11677 |
| | Std. Deviation | .0828958 | .31624 | .11909 | .12047 | .69536 | .00925 |
| Total | Mean | .936804 | .1018 | .0304 | .0097 | .1666 | .0004 |
| | N | 46200 | 49852 | 49852 | 49852 | 49852 | 49852 |
| | Std. Deviation | .0805675 | .30236 | .17166 | .09805 | .67932 | .02003 |

Student Attendance and Discipline - Cluster

| Cluster | | Attendance Rate | OSS | ISS | BUS | Days Suspended | Expulsion |
|---|---|---|---|---|---|---|---|
| Alternative | Mean | .766732 | .2842 | .0845 | .0108 | .5557 | .0117 |
| | N | 960 | 1112 | 1112 | 1112 | 1112 | 1112 |
| | Std. Deviation | .1485666 | .45122 | .27831 | .10337 | 1.27937 | .10754 |
| Carver | Mean | .925944 | .1255 | .0245 | .0112 | .1919 | .0000 |
| | N | 4318 | 4534 | 4534 | 4534 | 4534 | 4534 |
| | Std. Deviation | .0860740 | .33132 | .15456 | .10547 | .70313 | .00000 |
| Charter | Mean | .965819 | .0757 | .0085 | .0000 | .0850 | .0004 |
| | N | 4409 | 4612 | 4612 | 4612 | 4612 | 4612 |
| | Std. Deviation | .0424869 | .26450 | .09158 | .00000 | .58178 | .02082 |
| Douglass | Mean | .923763 | .1932 | .0570 | .0160 | .3047 | .0004 |
| | N | 5171 | 5425 | 5425 | 5425 | 5425 | 5425 |
| | Std. Deviation | .0856641 | .39483 | .23178 | .12563 | .89521 | .01920 |
| Grady | Mean | .951353 | .0490 | .0366 | .0138 | .1125 | .0002 |
| | N | 4980 | 5431 | 5431 | 5431 | 5431 | 5431 |
| | Std. Deviation | .0535934 | .21584 | .18790 | .11671 | .56839 | .01357 |
| Jackson | Mean | .929029 | .1322 | .0529 | .0133 | .2270 | .0000 |
| | N | 4142 | 4578 | 4578 | 4578 | 4578 | 4578 |
| | Std. Deviation | .0907777 | .33869 | .22378 | .11467 | .71901 | .00000 |
| Mays | Mean | .930565 | .0968 | .0022 | .0062 | .1898 | .0000 |
| | N | 4363 | 4547 | 4547 | 4547 | 4547 | 4547 |
| | Std. Deviation | .0880099 | .29567 | .04685 | .07824 | .73400 | .00000 |
| North Atlanta | Mean | .956049 | .0181 | .0255 | .0018 | .0398 | .0000 |
| | N | 7914 | 8788 | 8788 | 8788 | 8788 | 8788 |
| | Std. Deviation | .0555157 | .13329 | .15761 | .04263 | .30434 | .00000 |
| South Atlanta | Mean | .938733 | .1207 | .0349 | .0027 | .2137 | .0003 |
| | N | 3389 | 3695 | 3695 | 3695 | 3695 | 3695 |
| | Std. Deviation | .0680127 | .32583 | .18358 | .05196 | .73038 | .01645 |
| Therrell | Mean | .937850 | .1378 | .0324 | .0259 | .0725 | .0000 |
| | N | 3219 | 3584 | 3584 | 3584 | 3584 | 3584 |
| | Std. Deviation | .0712627 | .34477 | .17700 | .15900 | .45173 | .00000 |
| Washington | Mean | .929145 | .1077 | .0118 | .0144 | .2422 | .0003 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | N | 3335 | 3546 | 3546 | 3546 | 3546 | 3546 |
| | Std. Deviation | .0861373 | .31008 | .10820 | .11908 | .82467 | .01679 |
| Total | Mean | .936804 | .1018 | .0304 | .0097 | .1666 | .0004 |
| | N | 46200 | 49852 | 49852 | 49852 | 49852 | 49852 |
| | Std. Deviation | .0805675 | .30236 | .17166 | .09805 | .67932 | .02003 |

While this section of the report has focused on data for all students within APS at the region and cluster level, the included appendices provide further characteristics for all students at the school level separated by type of school: high schools, middle schools, elementary schools, charter school, and alternative schools. In addition, school characteristics are repeated for specific subgroups of students that may be of interest to APS stakeholders including categorical subgroups based on race/ethnicity, gender, academic disadvantage, etc.

## VII. Additional Appendices

The report Appendices provide further descriptive data on the characteristics of students by school and include tables and graphs for specific subgroups of students. We present information on groups of students who research shows frequently lag behind their peers in terms of achievement including students scoring as not proficient on end-of-grade or end-of-course exams in the prior school year, female students, students enrolled in special education services, economically disadvantaged students (based on eligibility for free or reduced price lunch), English learner students, and students by race/ethnicity categories according to district records. In cases where fewer than ten students are present in a particular category, all data elements for that school are omitted. For example, in the listing for English learners if only six English learner students are enrolled in a specific school, that school's data are omitted from reports on the characteristics of this specific group of students.

The Appendices are organized by school type, but in this section, we present some examples of the graphs found in the various Appendices to aid in interpretation of their meaning. To locate a specific graph of interest to readers, please refer to the Appendix containing data on the school type of interest: Alternative Schools, Charter Schools, Elementary Schools, High Schools, or Middle Schools.

Figure 8 below displays information on the percentage of students by race in APS high schools. Clearly, the most racially diverse schools in APS are North Atlanta, Grady, and, to a lesser extent, Jackson. This stacked bar graph conveys information regarding the distribution of race for all students in APS high schools. Similar graphs exist for the other school levels and graphs which display race characteristics by specific subgroups of students (i.e. English learners, female students, etc.).

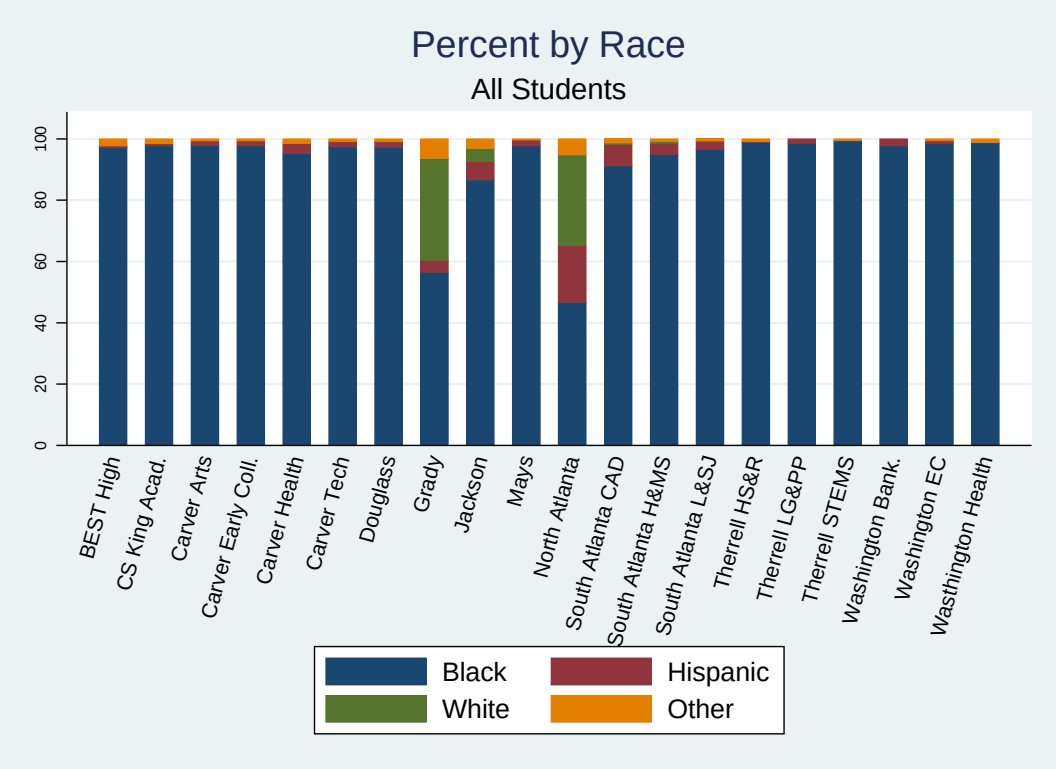



**Figure 8 High School Race/Ethnicity (All Students)**

Figure 9 below describes APS middle schools and the percentages of students by Male, Gifted designation, and Special Education designation. BEST Middle is a gender specific school for boys and Coretta Scott King Academy is a gender specific school for girls. Inman and Sutton middle schools appear to have rates of Gifted designation approaching 40 percent, and Bunche and Coretta Scott King Academy appear to have lower than average rates of students designated as eligible for Special Education services. Again, this graph includes data for all students in APS middle schools.

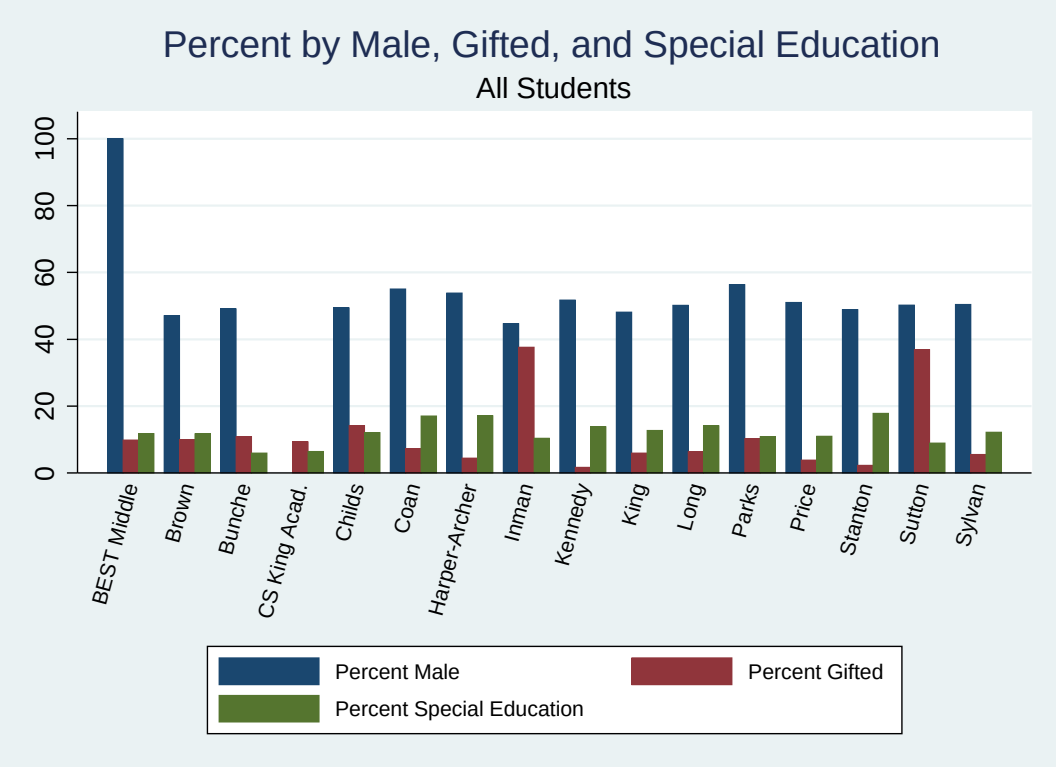



**Figure 9 Middle School Demographics (All Students)**

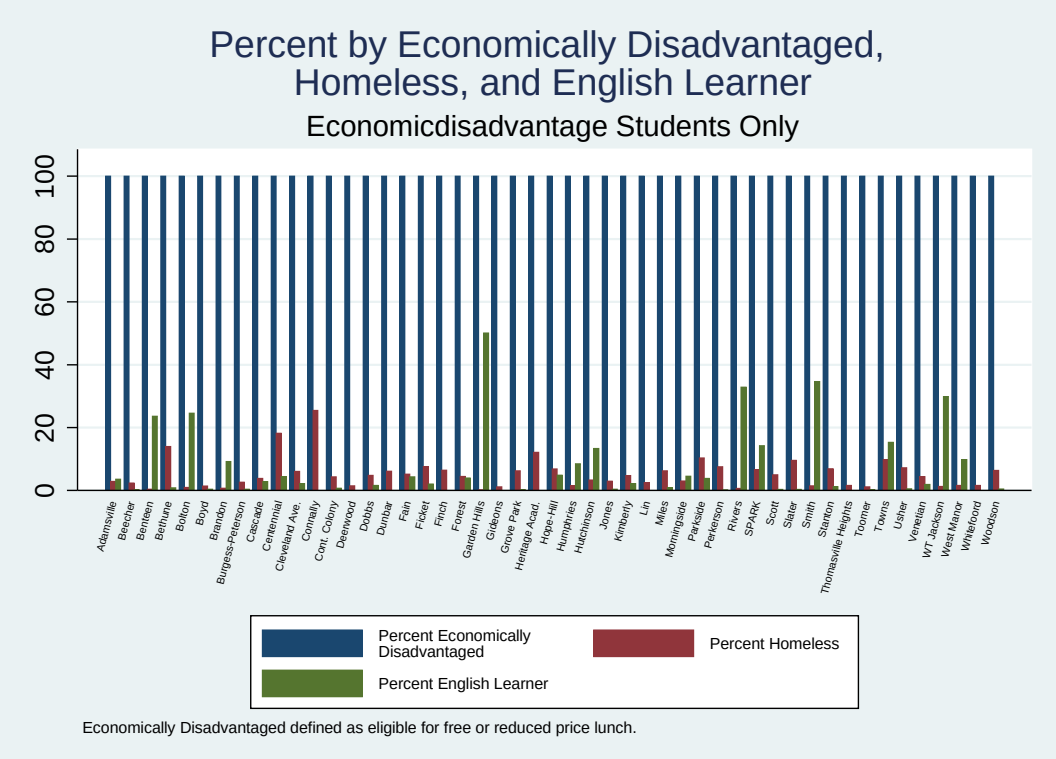



**Figure 10 Elementary School Student Characteristics (Economically Disadvantaged Students Only)**

Figure 10 above restricts data to economically disadvantaged students only and displays the percentage of economically disadvantaged, homeless, and English learner students in APS elementary schools. The first thing to note about this graph is that all schools show a one hundred percent rate of economically disadvantaged students. This is because the table is restricted to only include this specific group of students. We would have a similar graph for race Hispanic when viewing the race graph restricted to only Hispanic identified students. Here, we see higher rates of English learners at Garden Hills Elementary. Somewhat higher rates exist at selected schools and similarly, the rate of homeless children is higher at some particular schools within APS.

Figure 11 below is limited to academically disadvantaged students in APS high schools. Here we see wide variations in the proportion of inexperienced teachers (teachers with less than three years of teaching experience) matched to academically disadvantaged students across the APS system in high schools. One should note that the scaling of the graph only rises to the 60 percent mark and not 100 as in some other graphs. There are substantial variations across schools on this characteristic and the between school differences easily meet tests of statistical significance. While this graph does not show a confidence interval band for values, some caterpillar plots do show confidence intervals based on standard error calculations. When the confidence intervals overlap, we conclude that while two means or averages are similar in value, they cannot be statistically differentiated from each other. See the data and methods section for a discussion of the confidence interval calculations and an example graph.

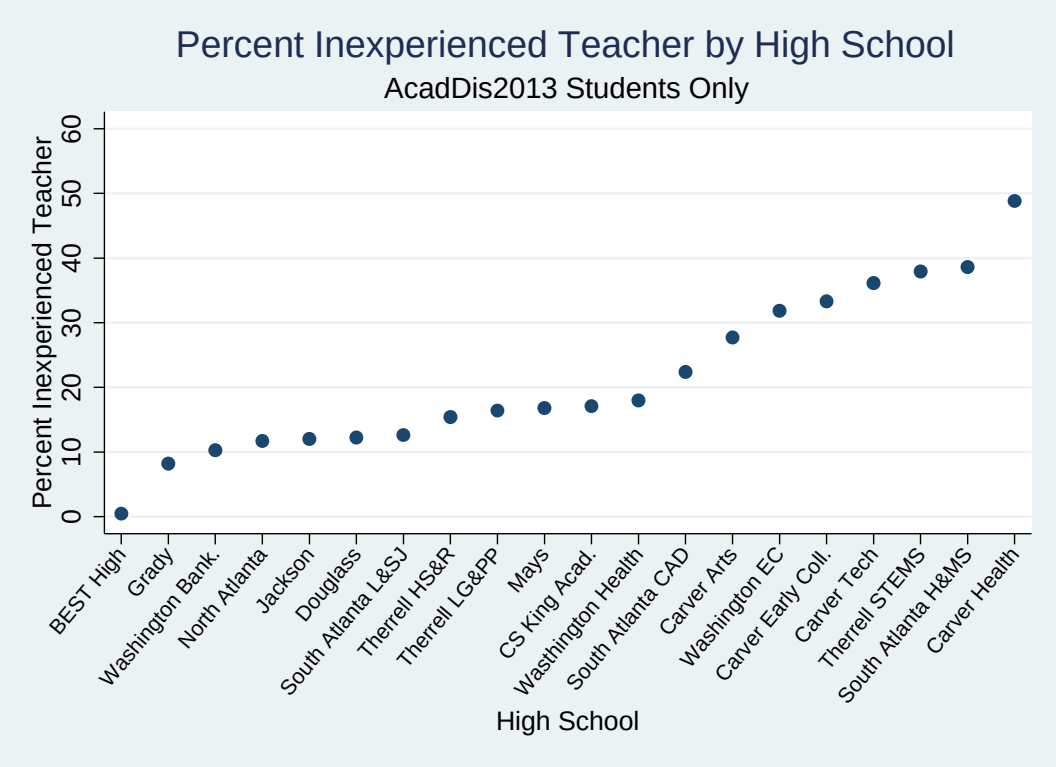



**Figure 11 High School Inexperienced Teacher Percentage (Academically Disadvantaged Students Only)**

In Figure 12 below one can visually see the wide confidence interval for the average teacher value added mean for teachers in Stanton Middle School. Long Middle school is the first school where one should conclude that the mean value added scores between Stanton and Long are statistically different from each other. Similarly Long, Sutton and Brown cannot be distinguished from one another based on the selected confidence intervals for the value added mean estimate.

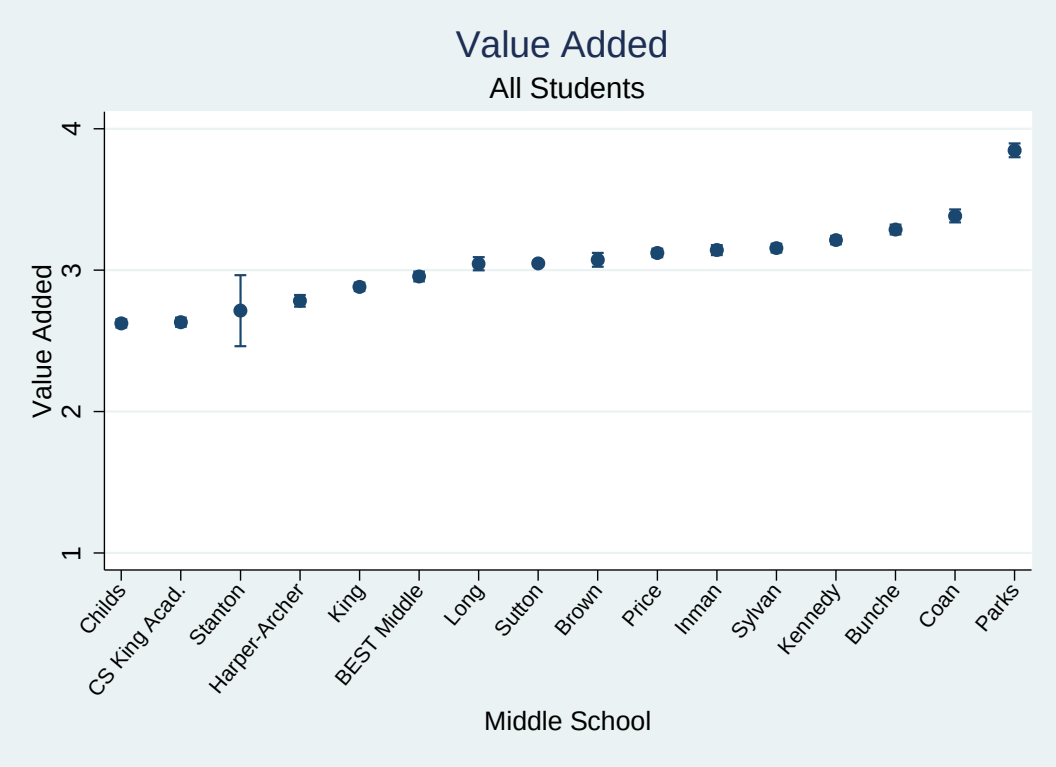



**Figure 12 Middle School Value Added (All Students)**

Figure 13 describes the level of academic disadvantage and the proportions of student class time spent in advanced or remedial course among male students in APS elementary schools. The highest percentages of academically disadvantaged males students are located in Grove Park and Miles elementary schools. Male students spend a minimal amount of time in advanced curriculum education courses across elementary schools in the district. Finally, there is substantial variation in the proportion of coursework in remedial courses for male elementary school students.

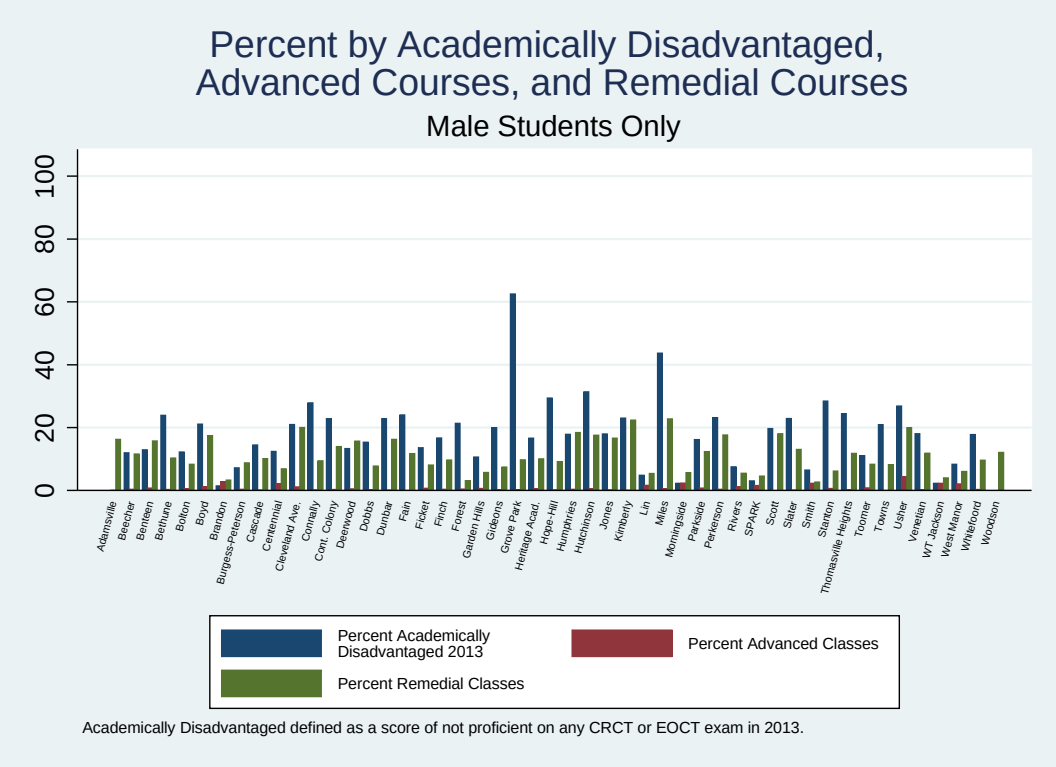



**Figure 13 Elementary School Academic Program (Male Students Only)**

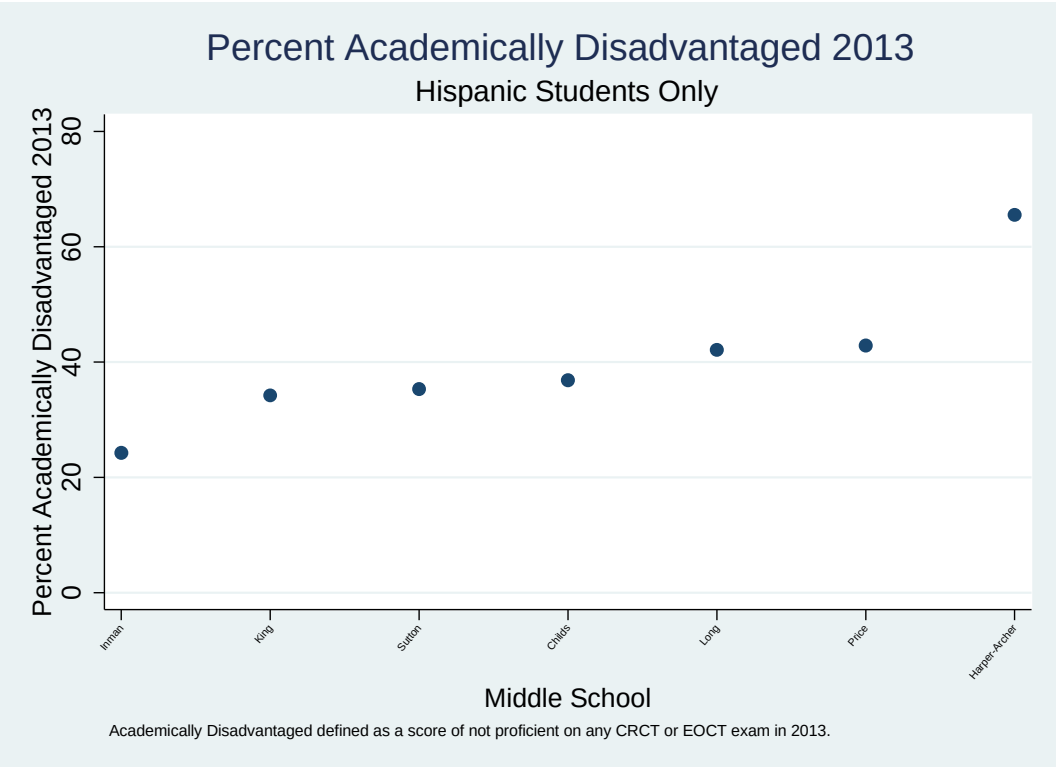



**Figure 14 Percent Academically Disadvantaged (Hispanic Students Only)**

Figure 14 above displays the proportion of Hispanic students classified as academically disadvantaged in APS middle schools. Only schools with more than 10 Hispanic students are reported across figures. We note here that more than 60 percent of Hispanic students attending Harper-Archer Middle School score not proficient on at least one CRCT exam during the 2013-14 school year. This rate of academic disadvantaged is higher than the rate at other APS middle schools with a sufficient number of students for reporting and nearly three times higher than the rate at Inman Middle School where approximately 22 percent of Hispanic students were identified as academically disadvantaged.

Figures 15 and 16 report on the characteristics of high school students in two different subgroups. Figure 15 restricts the data to only students identified as homeless according to APS administrative records. Among these students, more than 10 percent of course time is spent in Advanced Placement (AP) courses for students at Carver Health High School. AP course participation rates among homeless students are approximately similar across other APS system high schools.

Figure 16 restricts data to students identified as economically disadvantaged (eligible for free or reduced price lunches). Attendance rates here are reported as the percentage of time that students were marked in attendance during the 2012-13 school year. Attendance rates among economically disadvantaged students were lowest at Douglass and Washington Health high schools.

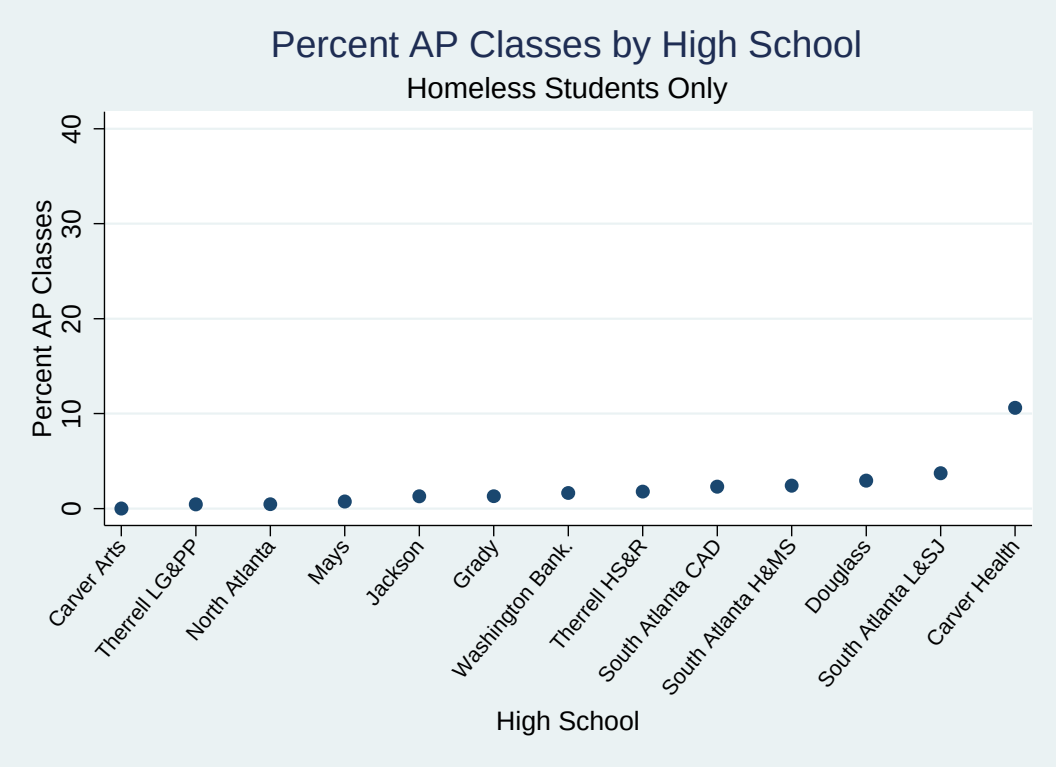



**Figure 15 Percent Advanced Placement Coursework (Homeless Students Only)**

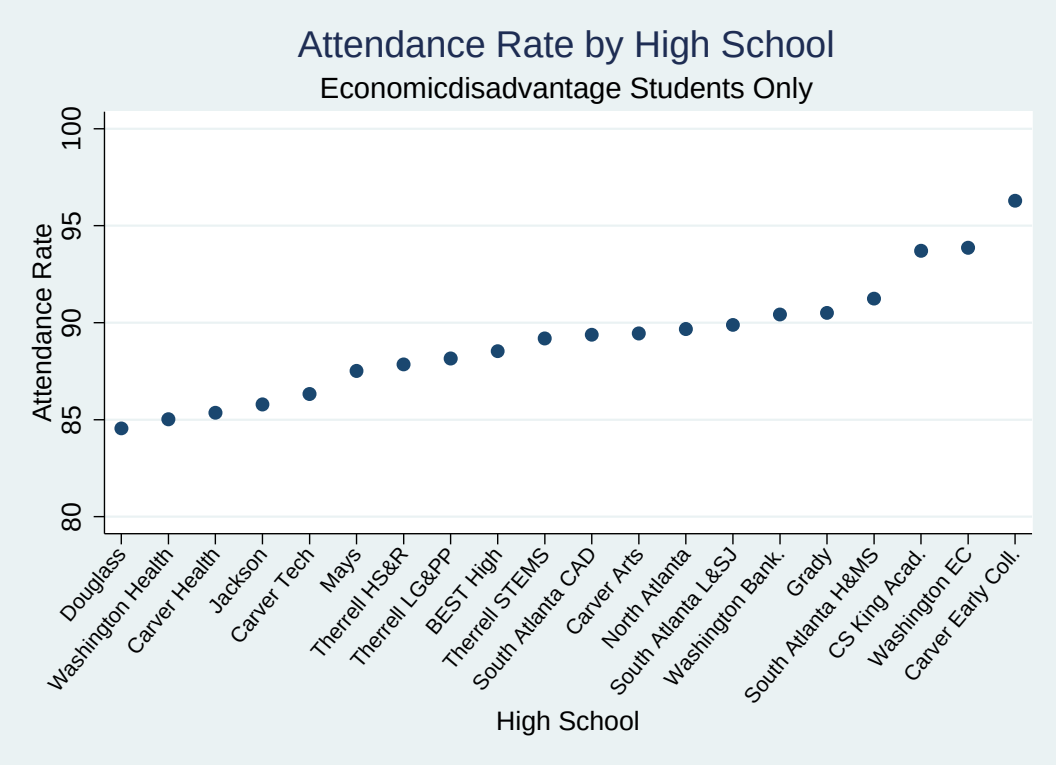



**Figure 16 High School Attendance Rates (Economically Disadvantaged Students Only)**

Figure 17 displays the average classroom environment experienced by female students in APS high schools. Classroom characteristics are linked to specific teachers and then restricted here to only female students. We first note that ratings of classroom environment across the four characteristics of classrooms are largely consistent with each school. There are, however, differences in the classroom environment ratings across schools. Female students attend classes with higher ratings of the classroom environment in Washington Banking and Washington Early College. The lowest ratings of the classroom environment occurred with female students in two high schools: Therrell LG&PP and Therrell STEMS.

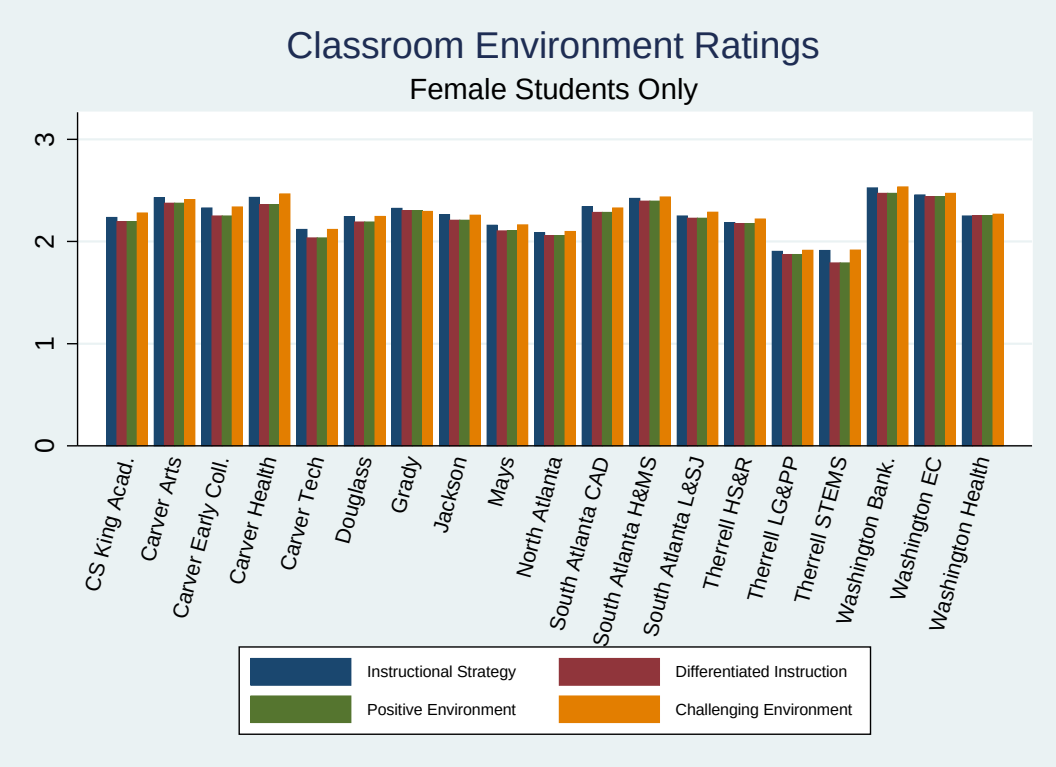



**Figure 17 High School Classroom Environment Ratings (Female Students Only)**

The figures described above are representative of those contained in the various appendices that accompany this report. The appendices are organized by school level and contain both tables and descriptive figures which describe the characteristics of schools across the APS system for all students and for selected subgroups of students based on a variety of characteristics.

## VIII. Discussion

We find substantial variation in a variety of student, personnel, and community characteristics across schools. In this main report, the focus is on comparisons across regions and clusters for all students in APS, but a close examination across schools in the district will provide additional information on the high degree of variability that exists across schools in the district on the included indicators of equity. We hope that this document can guide interested individuals in understanding the information presented in the appendices and provides a framework to easily locate specific information desired by APS stakeholders. The appendices also provide data presented on specific subgroups defined by a single characteristic – i.e. males only, economically disadvantaged students only, Hispanic students only, etc. These tables and figures will also be of interest to stakeholders across the district and speak to between school differences that exist for subgroups of students. In this way, this document and the five appendices are intended as a resource for those interested in equity across schools in the APS system.

In short, there exist substantial variations across schools in the APS system in all of the areas where equity was examined. These include differences in indicators of teacher quality, academic programming, financial resources (particularly represented by PTA and foundation funds), playgrounds, student academic achievement, and classroom instruction. This equity audit may prove useful in facilitating a discussion of the current state of equity in the district. While we fully expect that there will be disagreements over what might be the best measures for any particular characteristics of communities, schools, classrooms, or students, we hope that the focus will remain on the usefulness of data within.

While this equity audit will provide useful information to those interested in comparisons across schools in the APS system, it does possess a number of important limitations. First, the information enclosed comes from a single year, the 2012-13 school year. This limitation is significant in that we cannot make a determination of the magnitude or direction of any changes in equity over time between schools within the district. Similarly, this report's focus on between school measures of equity may mask important differences in outcomes, resource access, or classroom assignment practices that potentially result in *within-school* differences in equity. The information contained within this report may be used to compare measures associated with

particular subgroups of students and comparing their values to the overall school means may provide some indication of differences across subgroups within schools, but within-school comparisons were not a focus of this report.

This report documents a number of differences, sometimes dramatic, in observable community, school personnel, and student characteristics across schools within the APS system. The context of neighborhood settings within the APS system varies substantially with regard to measures of income, education, and ethnic composition. Between school differences also exist based on a variety of personnel and student characteristics within the district. Whether and how to address observed differences involve highly contentious tradeoffs of resource allocation and will also involve questions regarding the goals and purposes of public education. Stakeholders are likely to disagree about any preferred response to these findings. Should the district implement changes in reaction to the information contained in this report, a plan to evaluate the effectiveness of any reforms is strongly recommended.

# References

Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher preparation and student achievement. *Educational Evaluation and Policy Analysis*, 31, 416–444.

Brown, K. M. (2010). Schools of excellence and equity? Using equity audits as a tool to expose a flawed system of recognition. *International Journal of Education Policy and Leadership*, *5*(5), 1–12.

Bureau of the Census. (1994). *Geographic areas reference manual*. Washington, DC: United States Department of Commerce, Economics and Statistics Administration, Bureau of the Census.

Childress, S.M., Doyle, D.P., & Thomas, D.A. (2009). *Leading for equity: The pursuit of excellence in montgomery county public schools*. Cambridge: Harvard Education Press.

English, F.W. (1988). Curriculum auditing. Lancaster, PA: Technomic.

Georgia Department of Education. (2013). *Teacher Keys Effectiveness System*. Accessed from http://www.gadoe.org/School-Improvement/Teacher-and-Leader-Effectiveness/Documents/TKES%20Handbook%20FINAL%207-18-2013.pdf.

Groenke, S.L. (2010). Seeing, inquiring, witnessing: Using equity audits in practitioner inquiry to rethink inequity in public schools. *English Education*, 43(1), 83-96.

Henry, G.T., Bastian, K.C., & Fortner, C.K. (2011). Stayers and leavers early-career teacher effectiveness and attrition. *Educational Researcher*, 40(6), 271-280.

Ingersoll, R.M. (1999). The problem of underqualified teachers in american secondary schools. *Educational Researcher*, 28(2), 26-37.

Lankford, H., Loeb, S., & Wyckoff, J. (2002). Teacher sorting and the plight of urban schools: A descriptive analysis. *Educational Evaluation and Policy Analysis*, 24, 37-62.

McKenzie, K.B., & Scheurich, J.J. (2004). Equity traps: A useful construct for preparing principals to lead schools that are successful with racially diverse students. *Educational Administration Quarterly* 40(5), 601-632.

Mitchell, J. K., & Poston, W. K. (1992). The equity audit in school reform: Three case studies of educational disparity and incongruity. *International Journal of Educational Reform*, 1(3), 242–247.

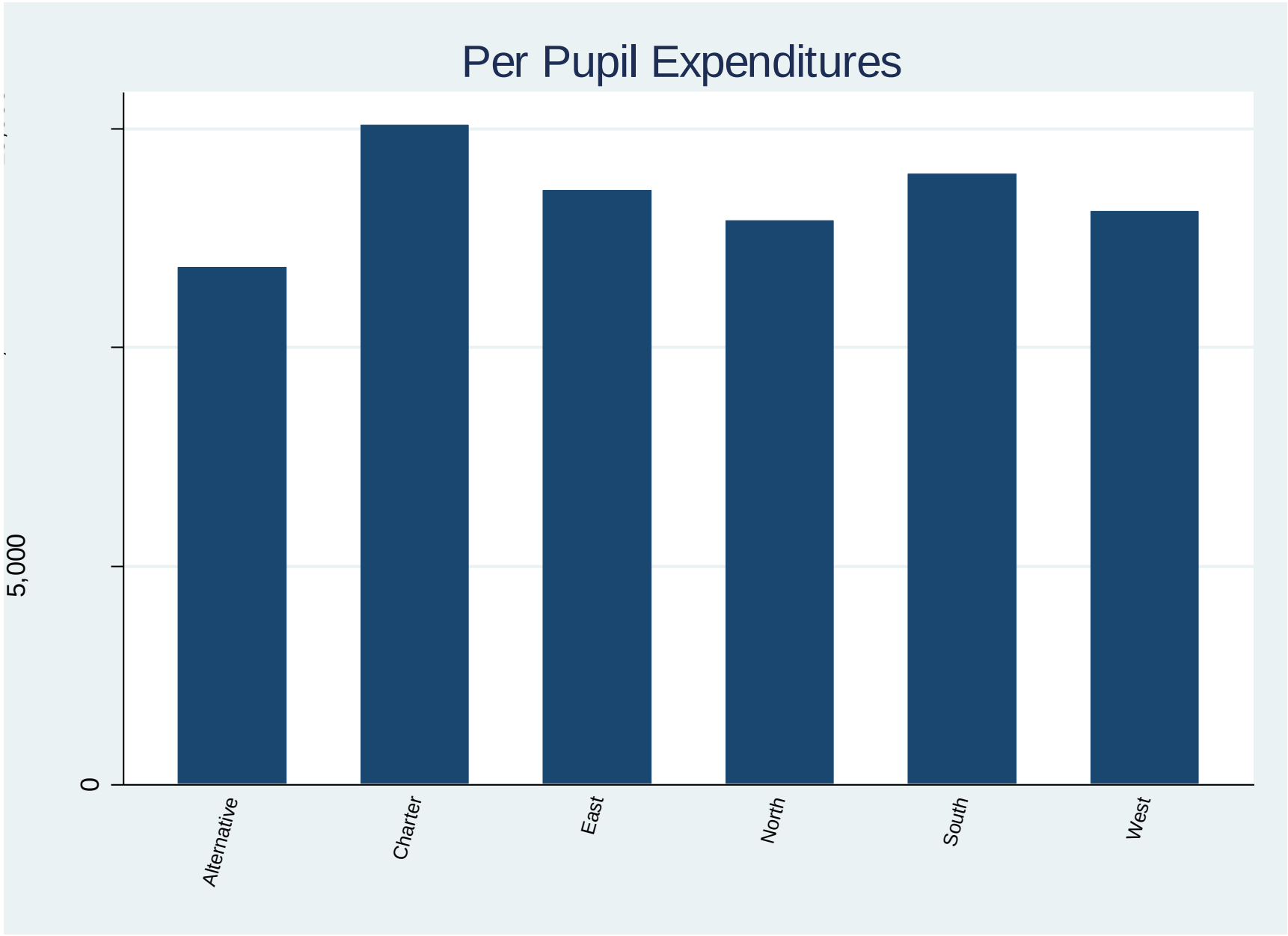
Scott, B. (2001). Coming of age. IDRA Newsletter. Retrieved from http://www.idra.org/Newslttr/2001/Mar/Bradley.htm

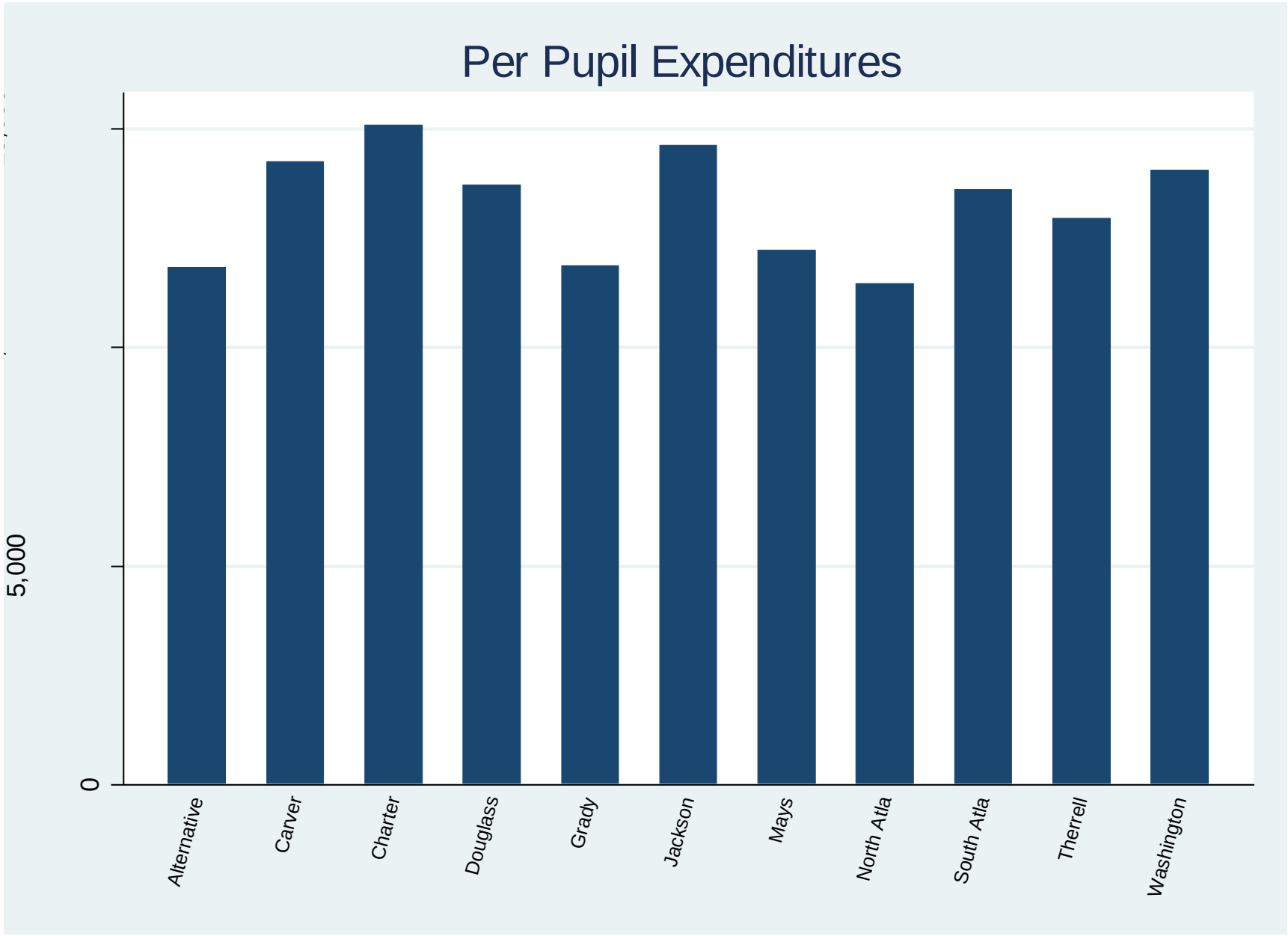
Skrla, L., Scheurich, J. J., Garcia, J., & Nolly, G. (2004). Equity audits: A practical leadership tool for developing equitable and excellent schools. *Educational Administration Quarterly*, 40(1), 133-161.

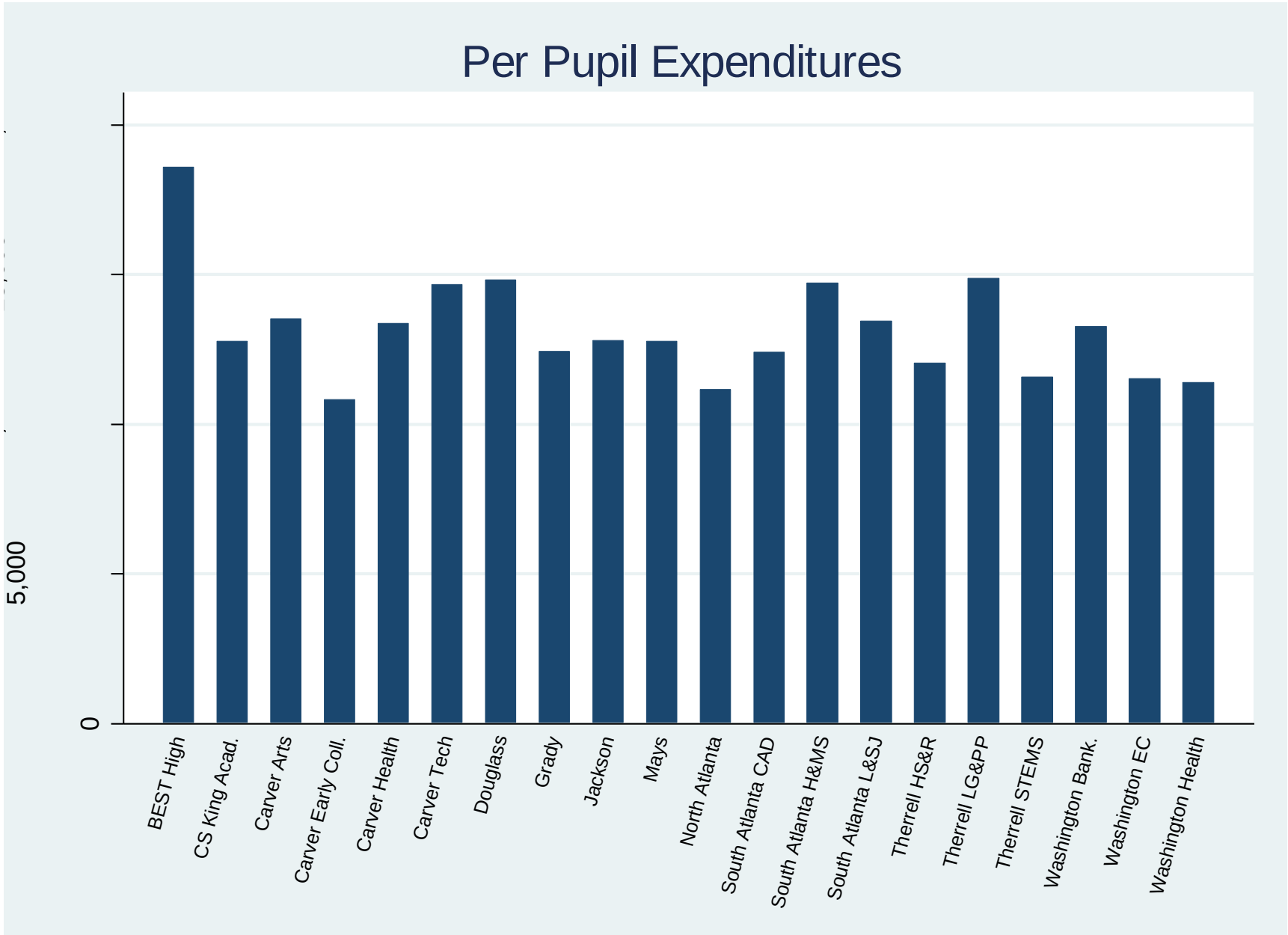
Skrla, L., McKenzie, K. B., & Scheurich, J. J. (2009). *Using equity audits to create equitable and excellent schools*. New York: SAGE Publications.

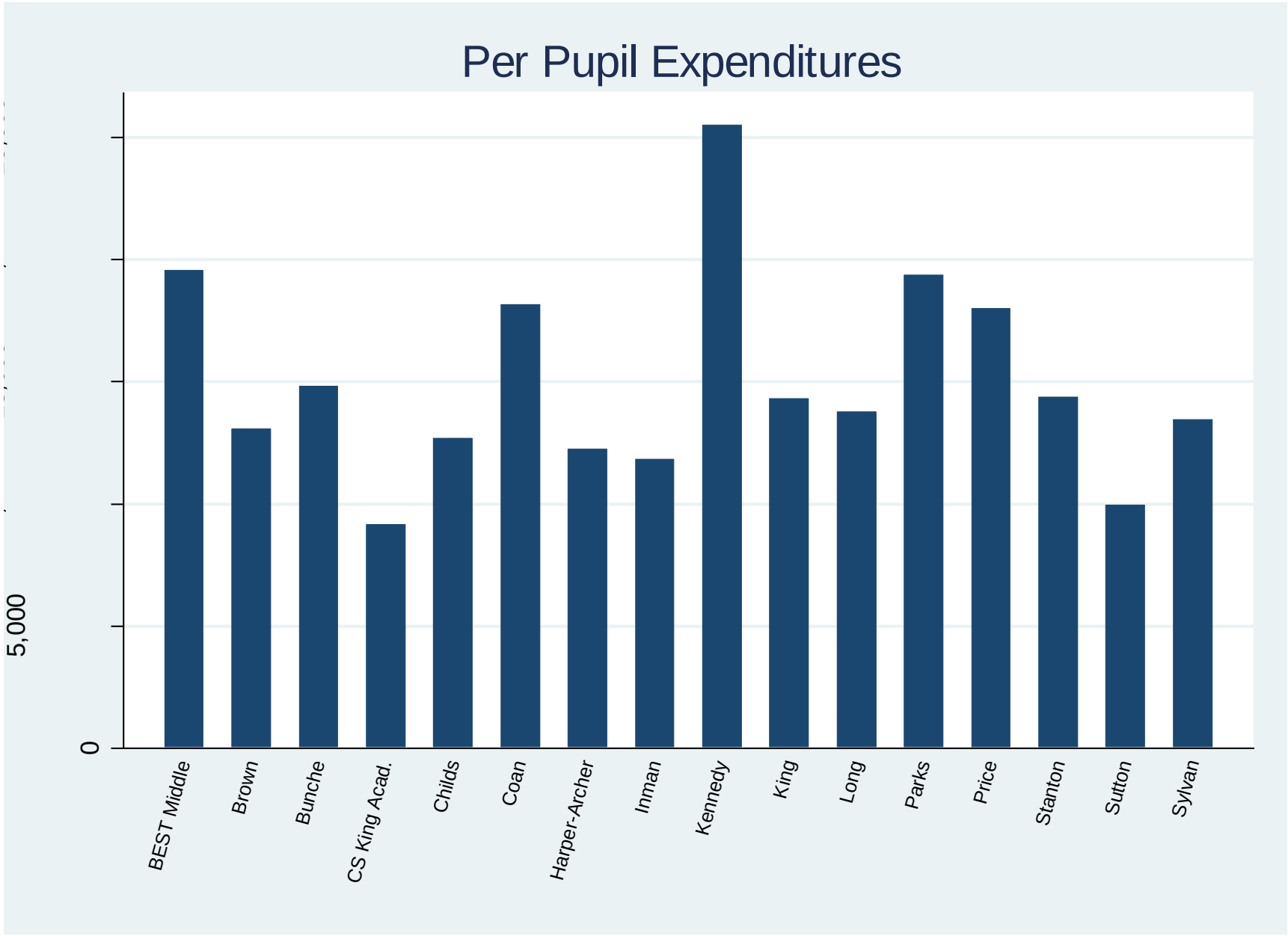
# IX. Appendix A

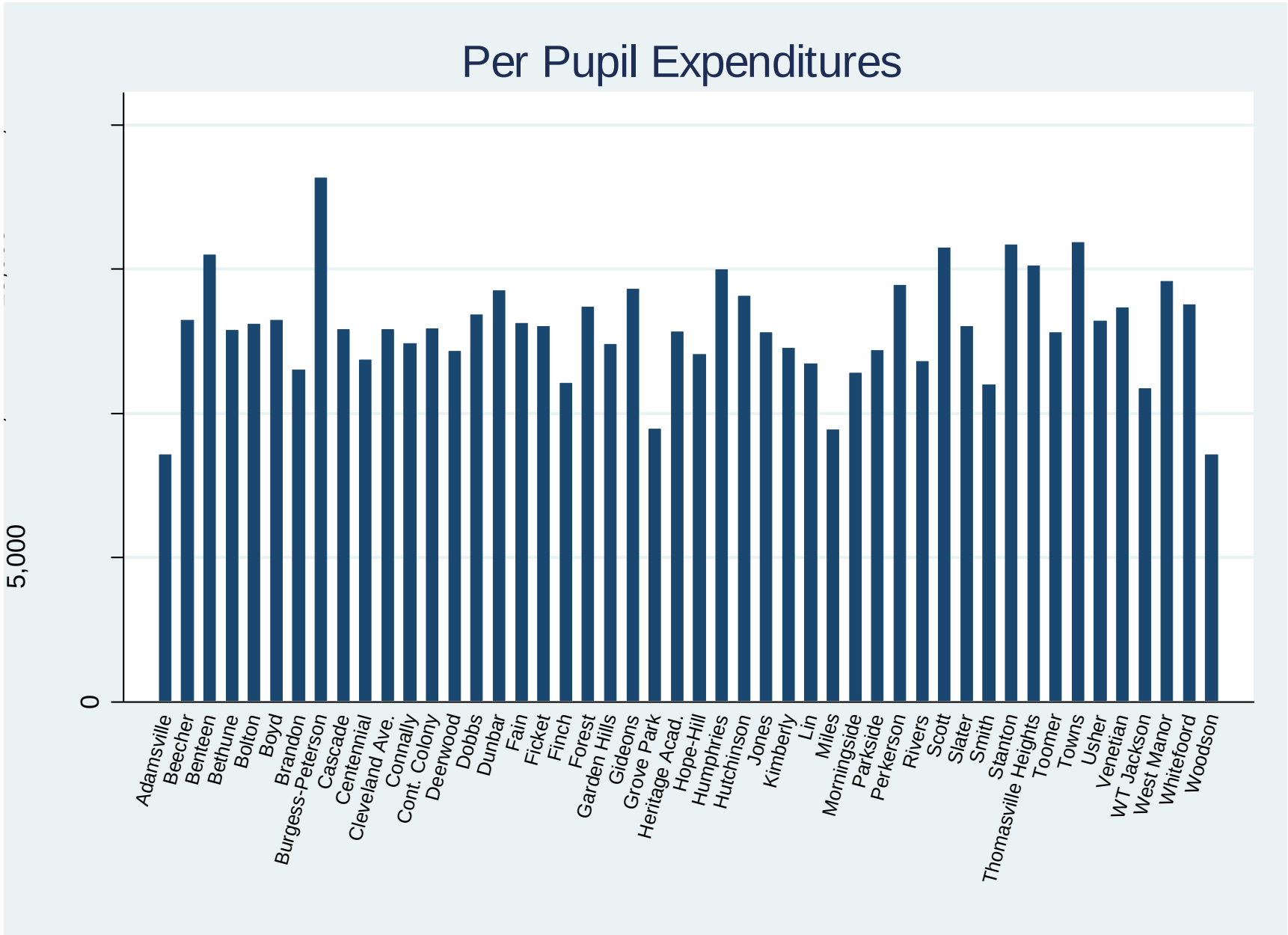
## A. Finance Figures

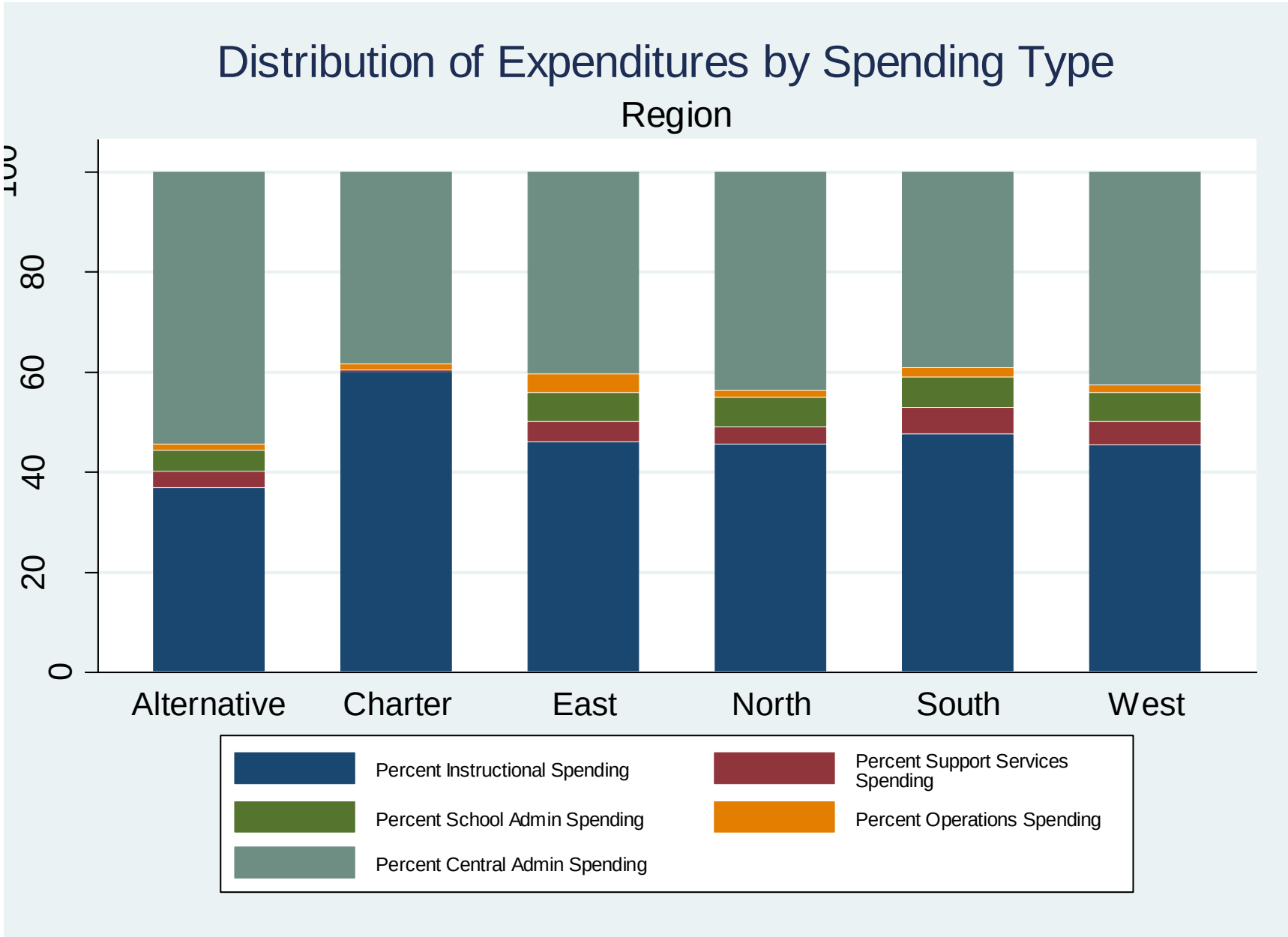

Per Pupil Expenditures
5,000
0
Alternative
Charter
East
North
South
West

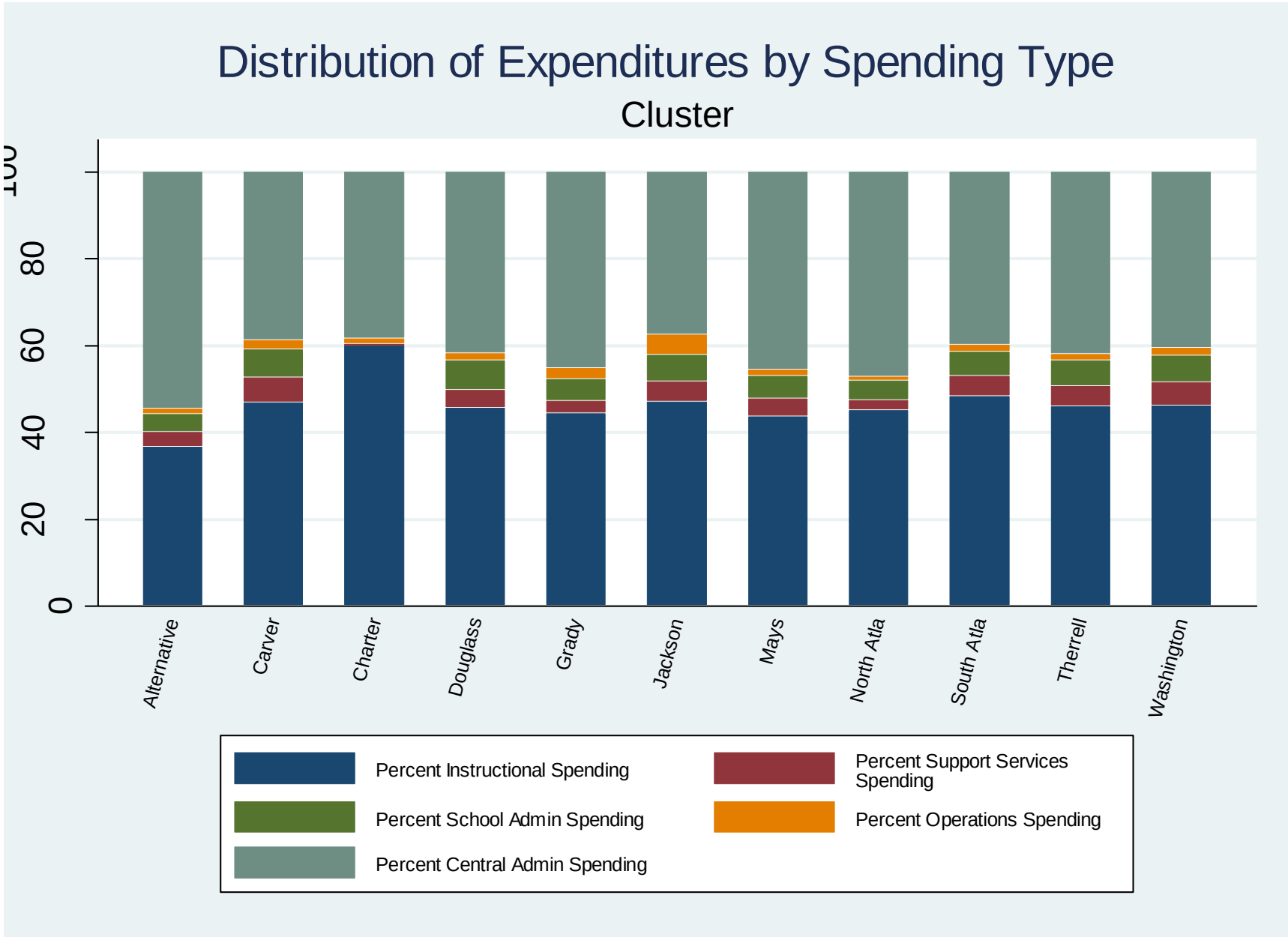

Per Pupil Expenditures
0
5,000
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington

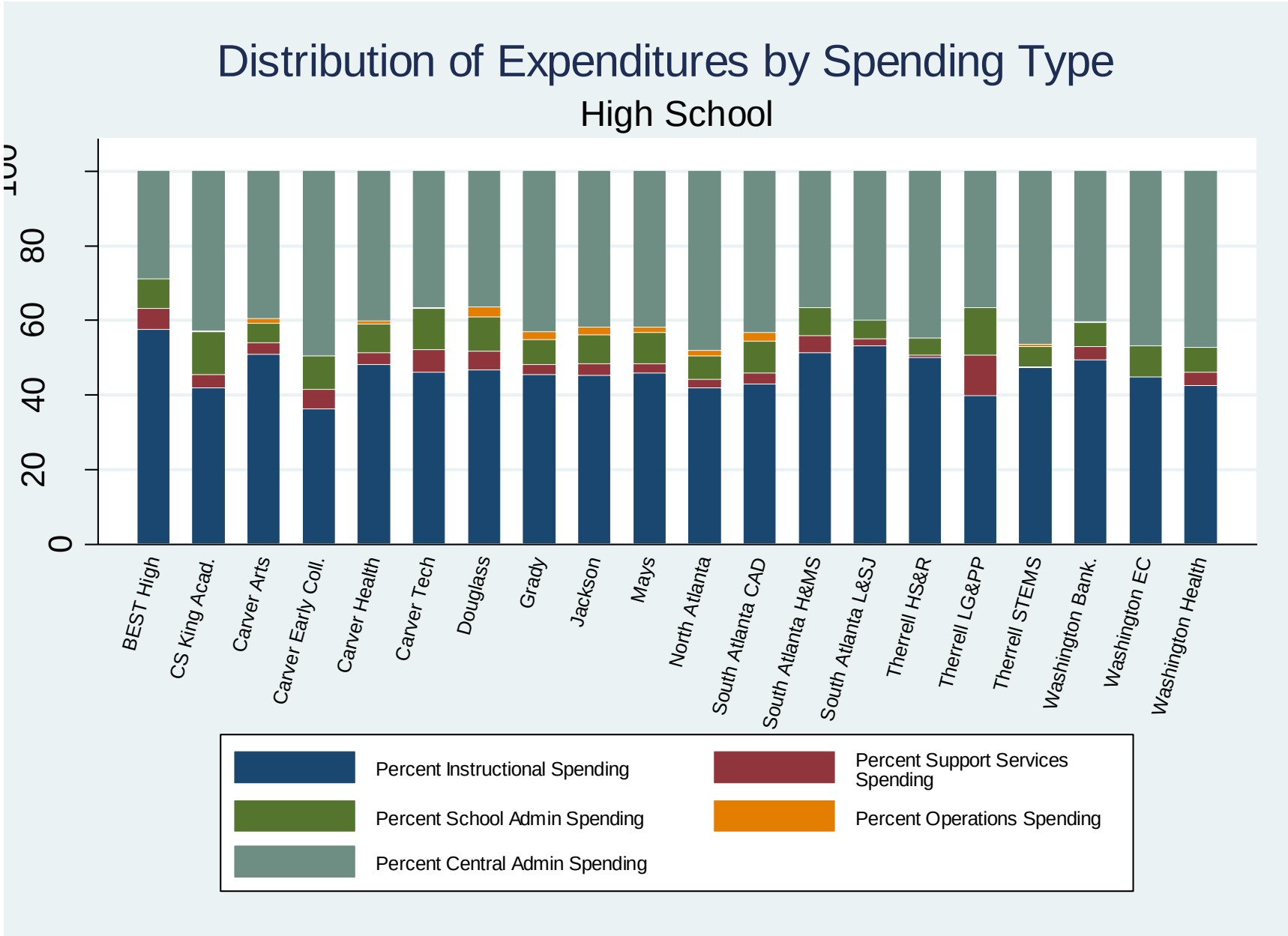

Per Pupil Expenditures
0
5,000
BEST High
CS King Acad.
Carver Arts
Carver Early Coll.
Carver Health
Carver Tech
Douglass
Grady
Jackson
Mays
North Atlanta
South Atlanta CAD
South Atlanta H&MS
South Atlanta L&SJ
Therrell HS&R
Therrell LG&PP
Therrell STEMS
Washington Bank.
Washington EC
Washington Health

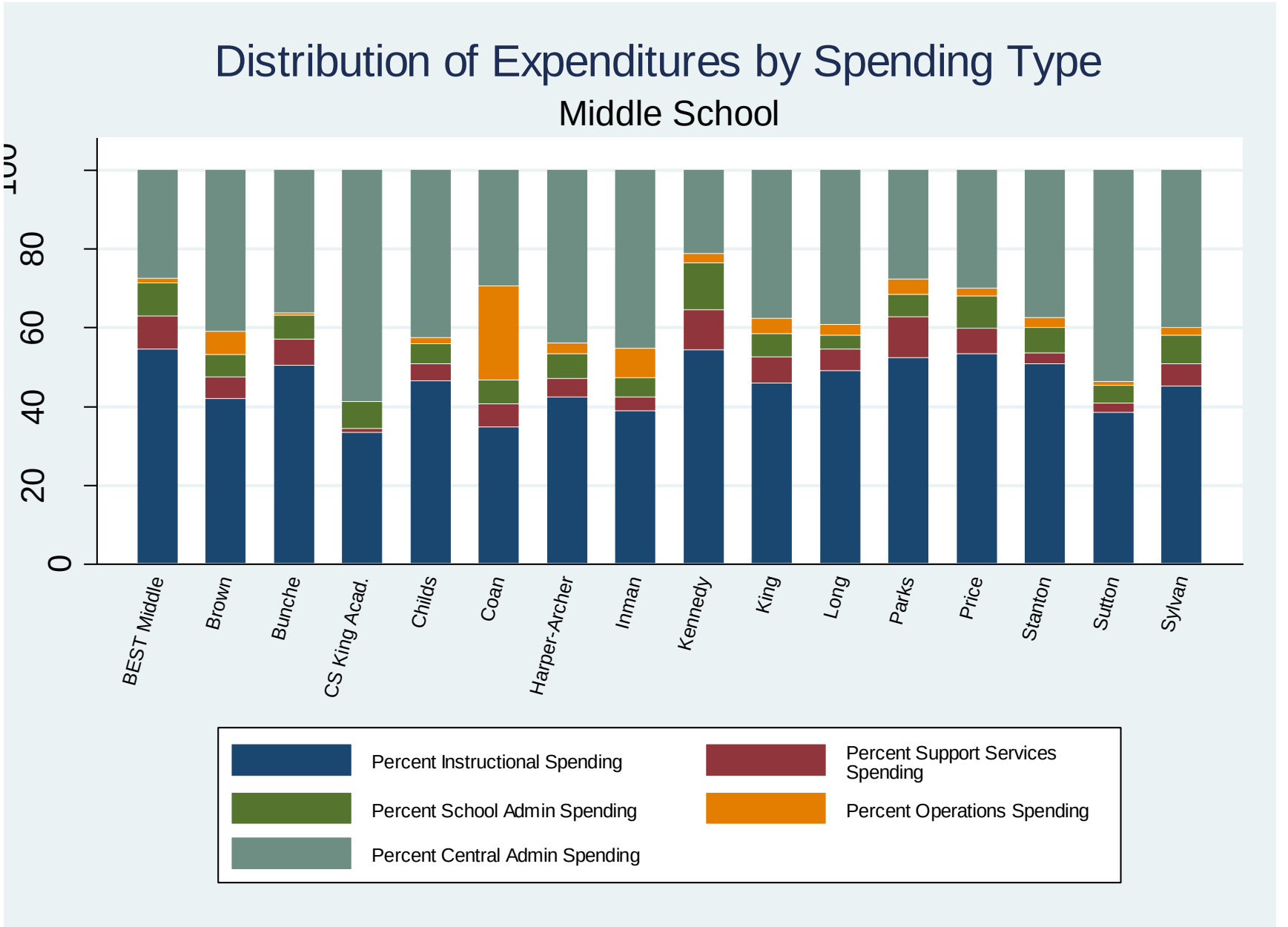

Per Pupil Expenditures
0
5,000
BEST Middle
Brown
Bunche
CS King Acad.
Childs
Coan
Harper-Archer
Inman
Kennedy
King
Long
Parks
Price
Stanton
Sutton
Sylvan

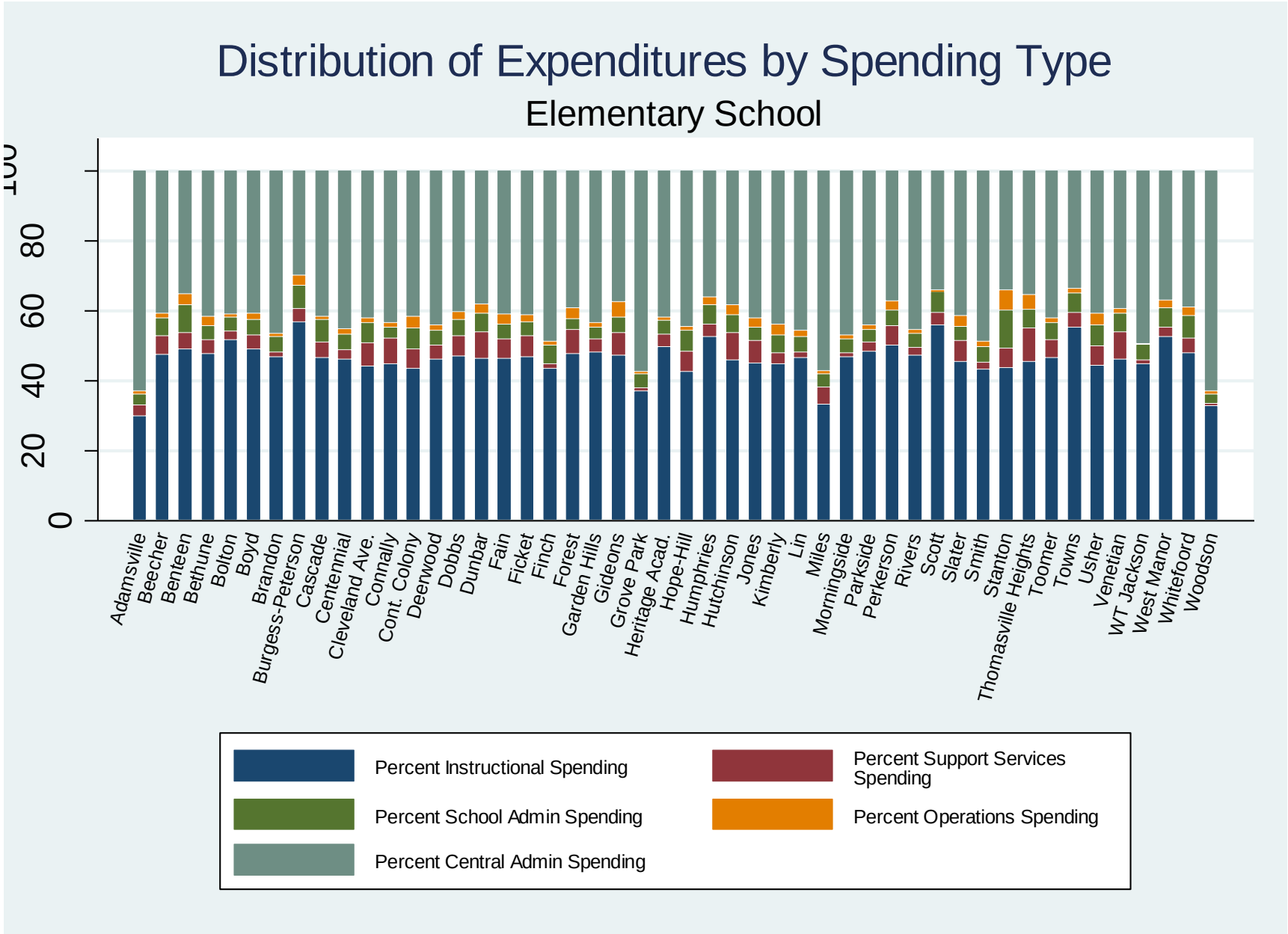

Per Pupil Expenditures
0
5,000
Adamsville
Beecher
Benteen
Bethune
Bolton
Boyd
Brandon
Burgess-Peterson
Cascade
Centennial
Cleveland Ave.
Connally
Cont. Colony
Deerwood
Dobbs
Dunbar
Fain
Ficket
Finch
Forest
Garden Hills
Gideons
Grove Park
Heritage Acad.
Hope-Hill
Humphries
Hutchinson
Jones
Kimberly
Lin
Miles
Morningside
Parkside
Perkerson
Rivers
Scott
Slater
Smith
Stanton
Thomasville Heights
Toomer
Towns
Usher
Venetian
WT Jackson
West Manor
Whitefoord
Woodson


Distribution of Expenditures by Spending Type
Region
0
20
40
60
80
100
Alternative
Charter
East
North
South
West
Percent Instructional Spending
Percent Support Services Spending
Percent School Admin Spending
Percent Operations Spending
Percent Central Admin Spending

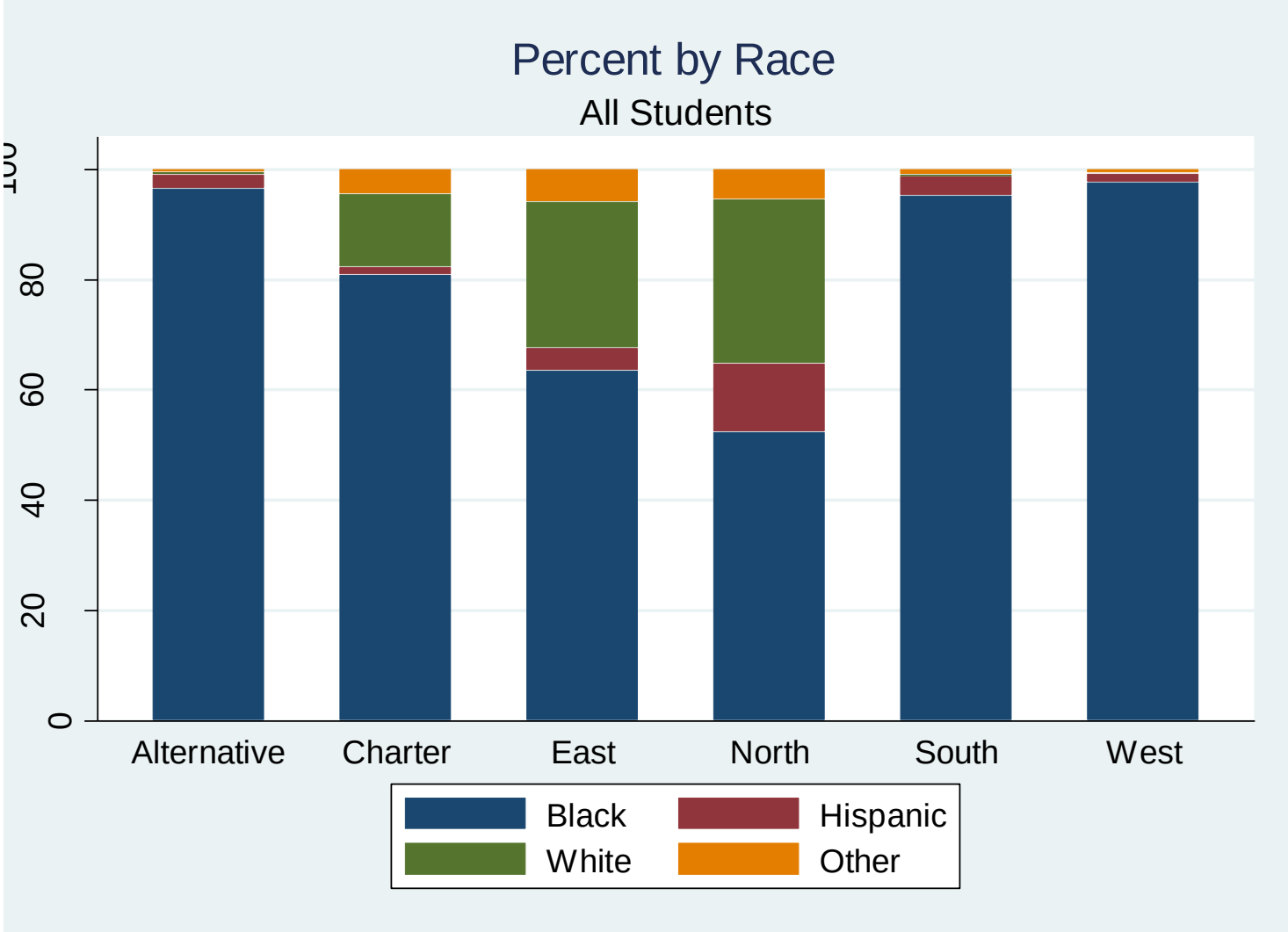

Distribution of Expenditures by Spending Type
Cluster
0
20
40
60
80
100
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington
Percent Instructional Spending
Percent Support Services Spending
Percent School Admin Spending
Percent Operations Spending
Percent Central Admin Spending

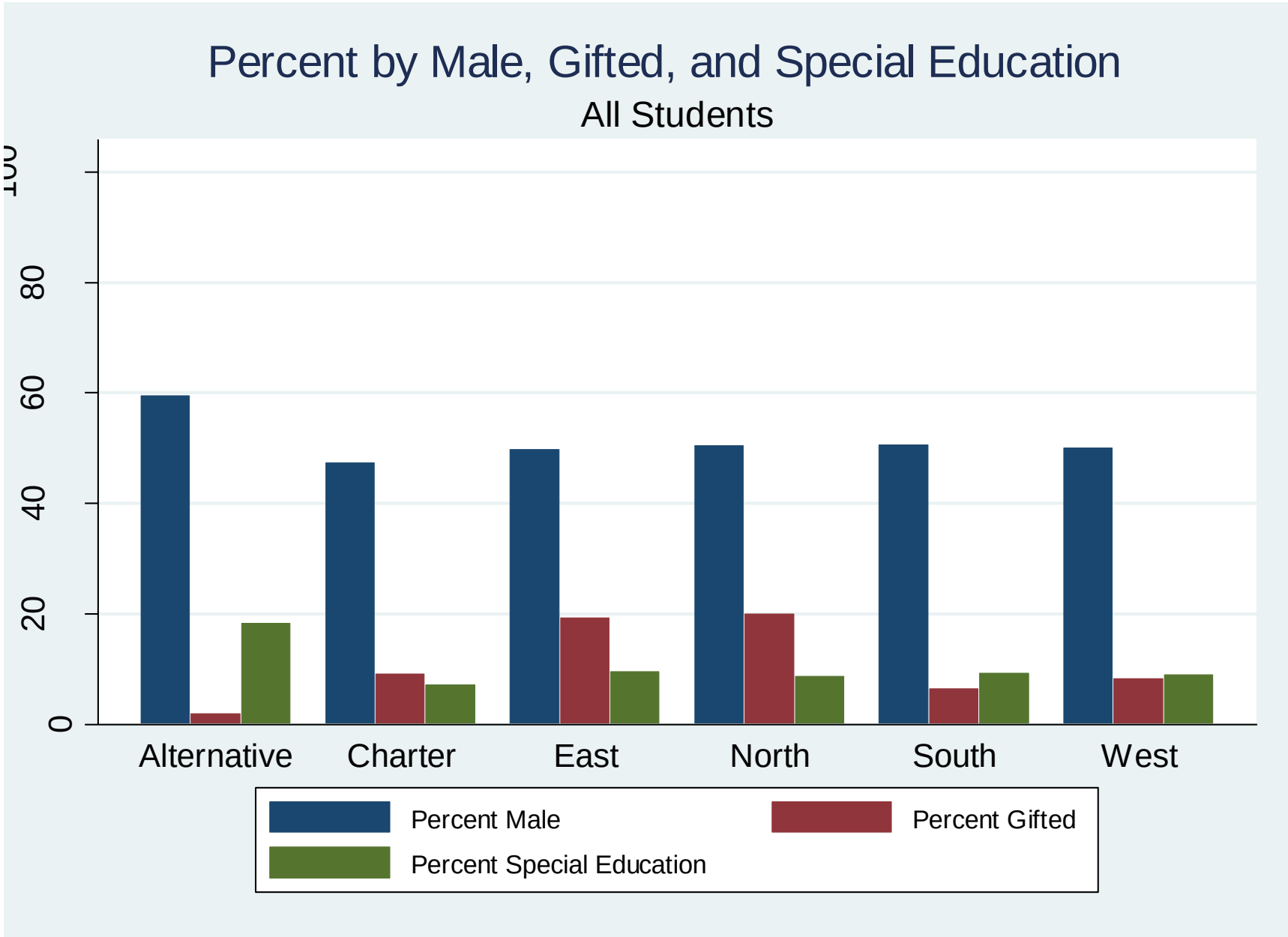

Distribution of Expenditures by Spending Type
High School
0
20
40
60
80
100
BEST High
CS King Acad.
Carver Arts
Carver Early Coll.
Carver Health
Carver Tech
Douglass
Grady
Jackson
Mays
North Atlanta
South Atlanta CAD
South Atlanta H&MS
South Atlanta L&SJ
Therrell HS&R
Therrell LG&PP
Therrell STEMS
Washington Bank.
Washington EC
Washington Health
Percent Instructional Spending
Percent Support Services Spending
Percent School Admin Spending
Percent Operations Spending
Percent Central Admin Spending

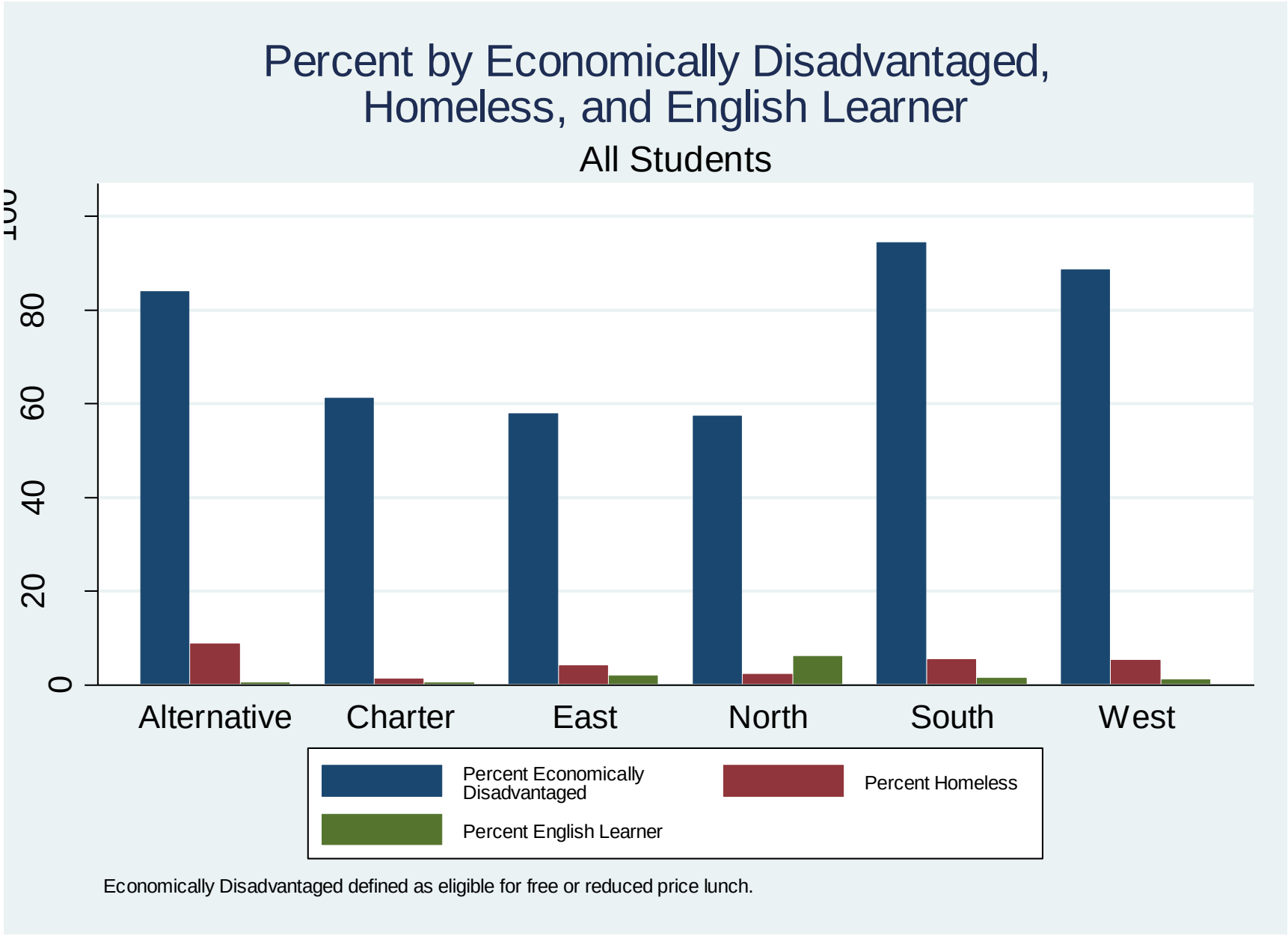

Distribution of Expenditures by Spending Type
Middle School
0
20
40
60
80
100
BEST Middle
Brown
Bunche
CS King Acad.
Childs
Coan
Harper-Archer
Inman
Kennedy
King
Long
Parks
Price
Stanton
Sutton
Sylvan
Percent Instructional Spending
Percent Support Services Spending
Percent School Admin Spending
Percent Operations Spending
Percent Central Admin Spending

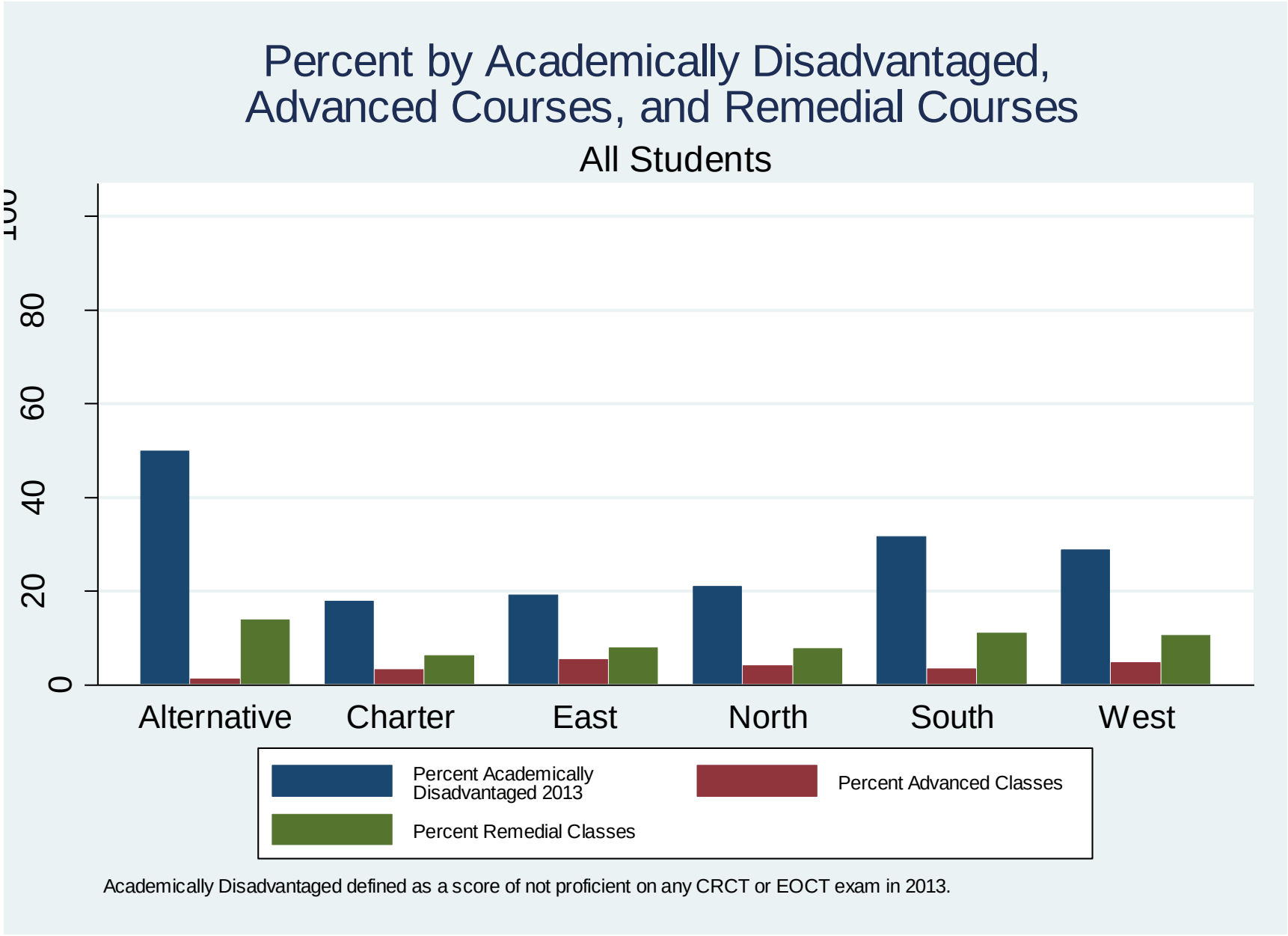

Distribution of Expenditures by Spending Type
Elementary School
0
20
40
60
80
100
Adamsville
Beecher
Benteen
Bethune
Bolton
Boyd
Brandon
Burgess-Peterson
Cascade
Centennial
Cleveland Ave.
Connally
Cont. Colony
Deerwood
Dobbs
Dunbar
Fain
Ficket
Finch
Forest
Garden Hills
Gideons
Grove Park
Heritage Acad.
Hope-Hill
Humphries
Hutchinson
Jones
Kimberly
Lin
Miles
Morningside
Parkside
Perkerson
Rivers
Scott
Slater
Smith
Stanton
Thomasville Heights
Toomer
Towns
Usher
Venetian
WT Jackson
West Manor
Whitefoord
Woodson
Percent Instructional Spending
Percent Support Services Spending
Percent School Admin Spending
Percent Operations Spending
Percent Central Admin Spending

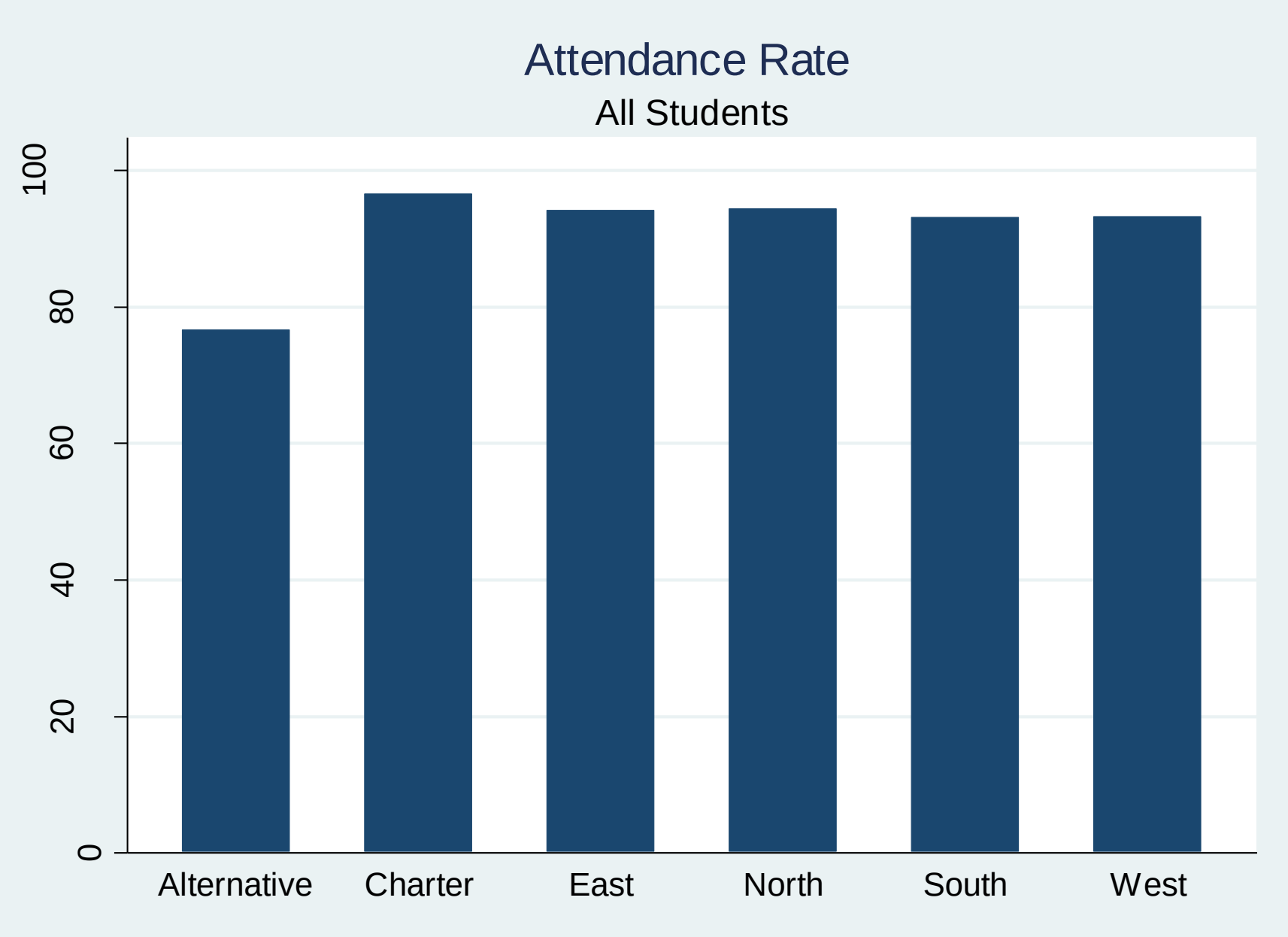
## B. Region Figures

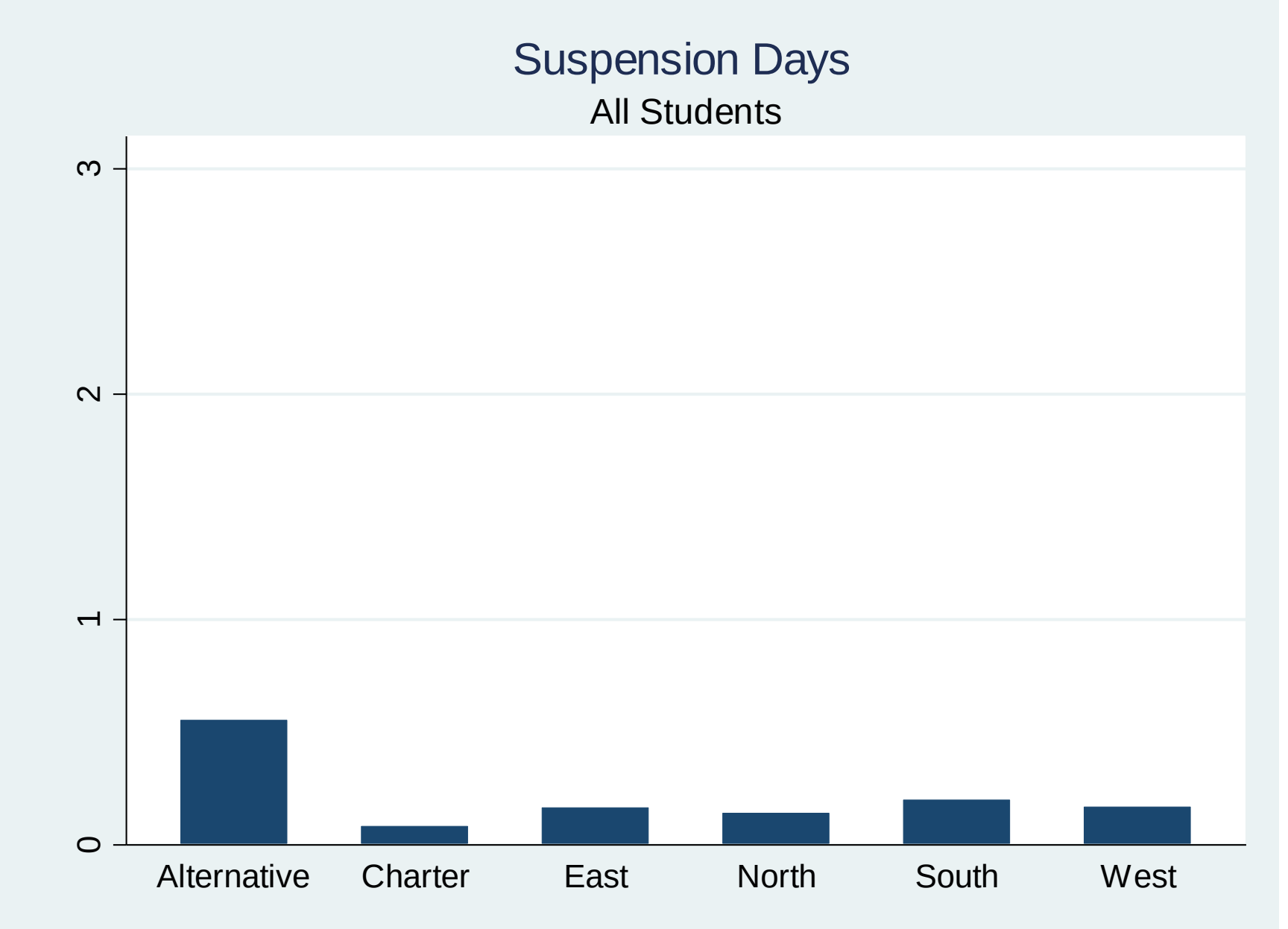


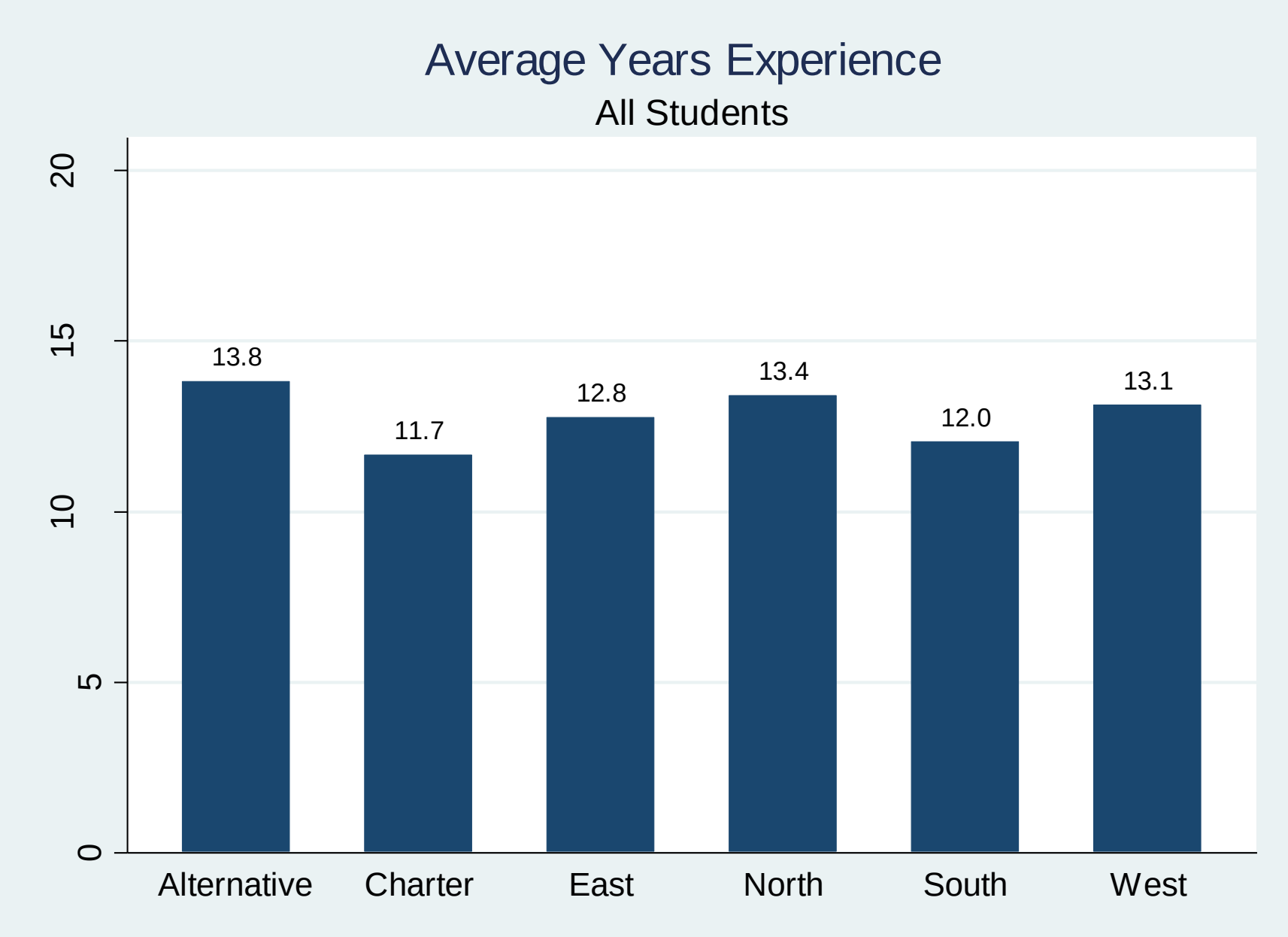

Percent by Male, Gifted, and Special Education
All Students
0
20
40
60
80
Alternative
Charter
East
North
South
West
Percent Male
Percent Gifted
Percent Special Education

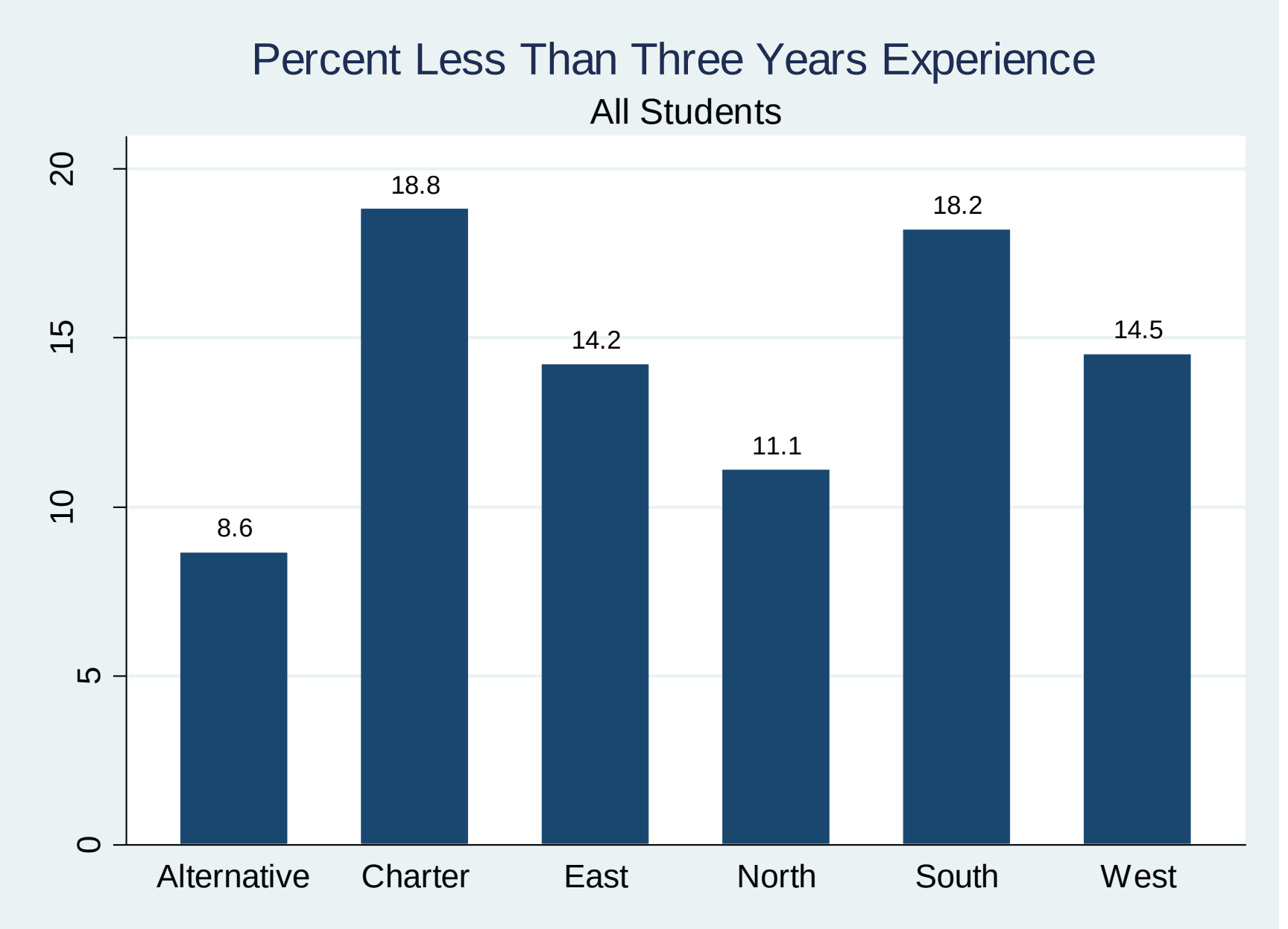

Percent by Economically Disadvantaged, Homeless, and English Learner
All Students
0
20
40
60
80
100
Alternative
Charter
East
North
South
West
Percent Economically Disadvantaged
Percent Homeless
Percent English Learner
Economically Disadvantaged defined as eligible for free or reduced price lunch.

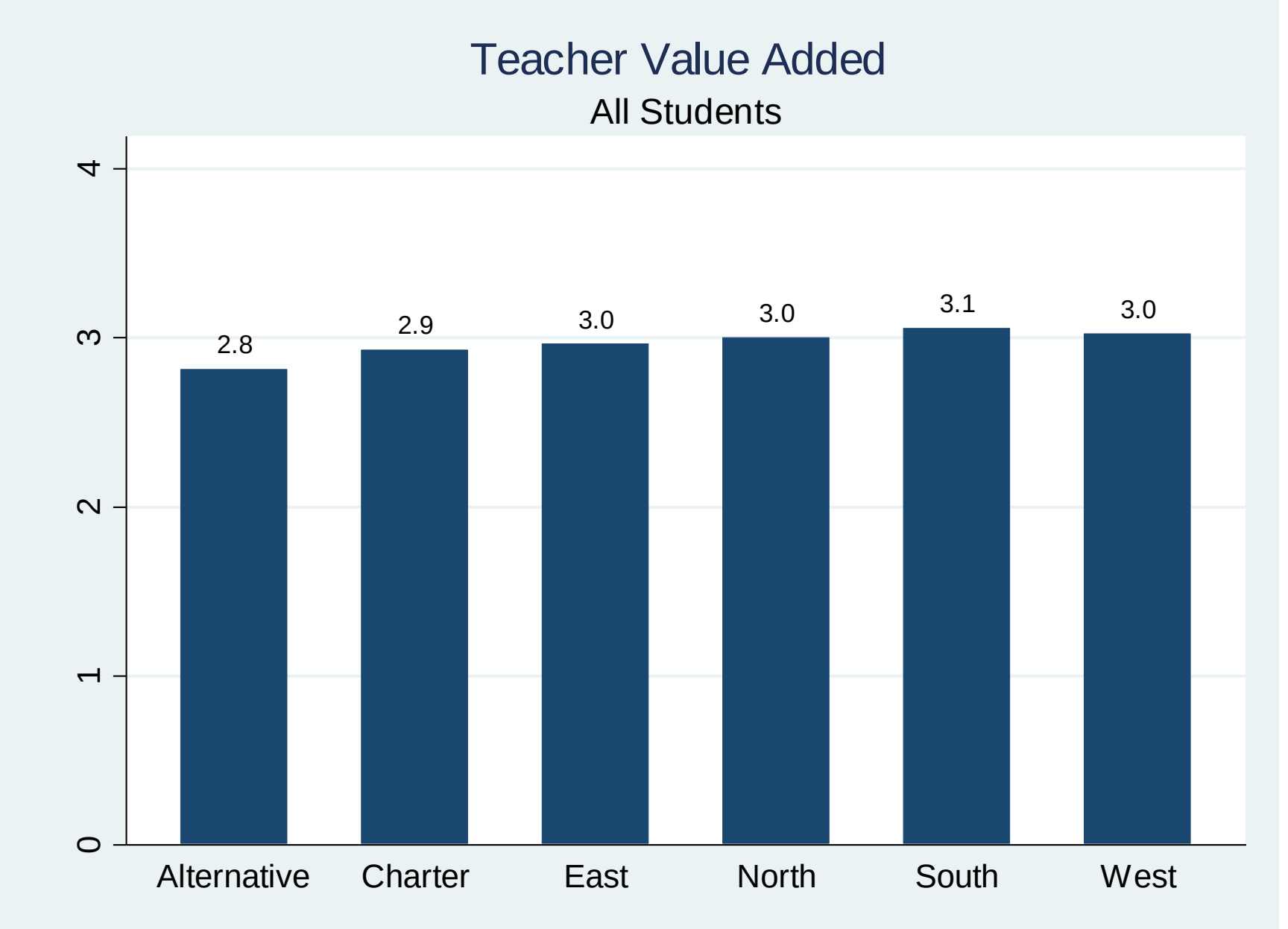

Percent by Academically Disadvantaged, Advanced Courses, and Remedial Courses
All Students
0
20
40
60
80
100
Alternative
Charter
East
North
South
West
Percent Academically Disadvantaged 2013
Percent Advanced Classes
Percent Remedial Classes
Academically Disadvantaged defined as a score of not proficient on any CRCT or EOCT exam in 2013.

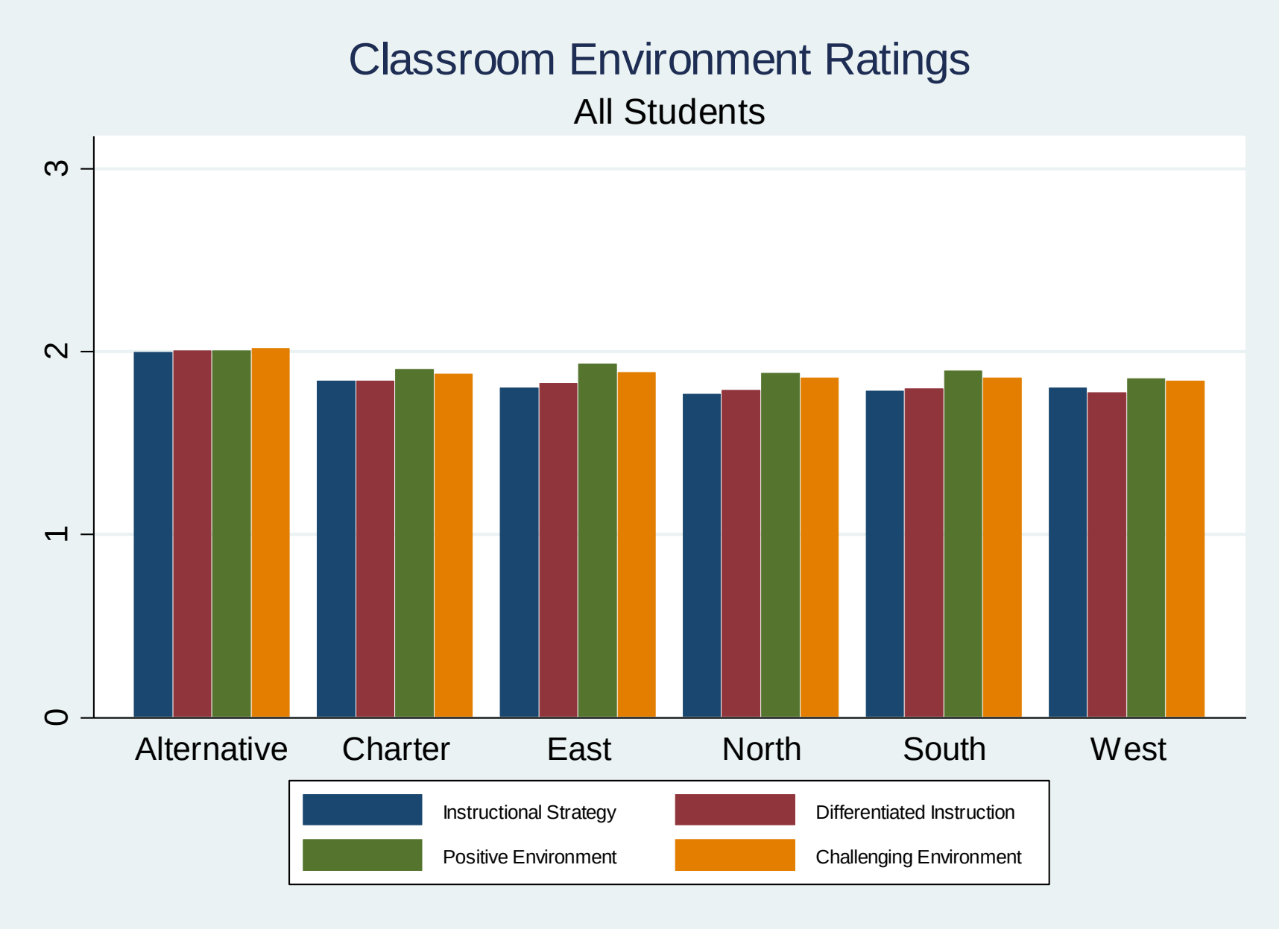

Attendance Rate
All Students
100
80
60
40
20
0
Alternative
Charter
East
North
South
West


Suspension Days
All Students
3
2
1
0
Alternative
Charter
East
North
South
West

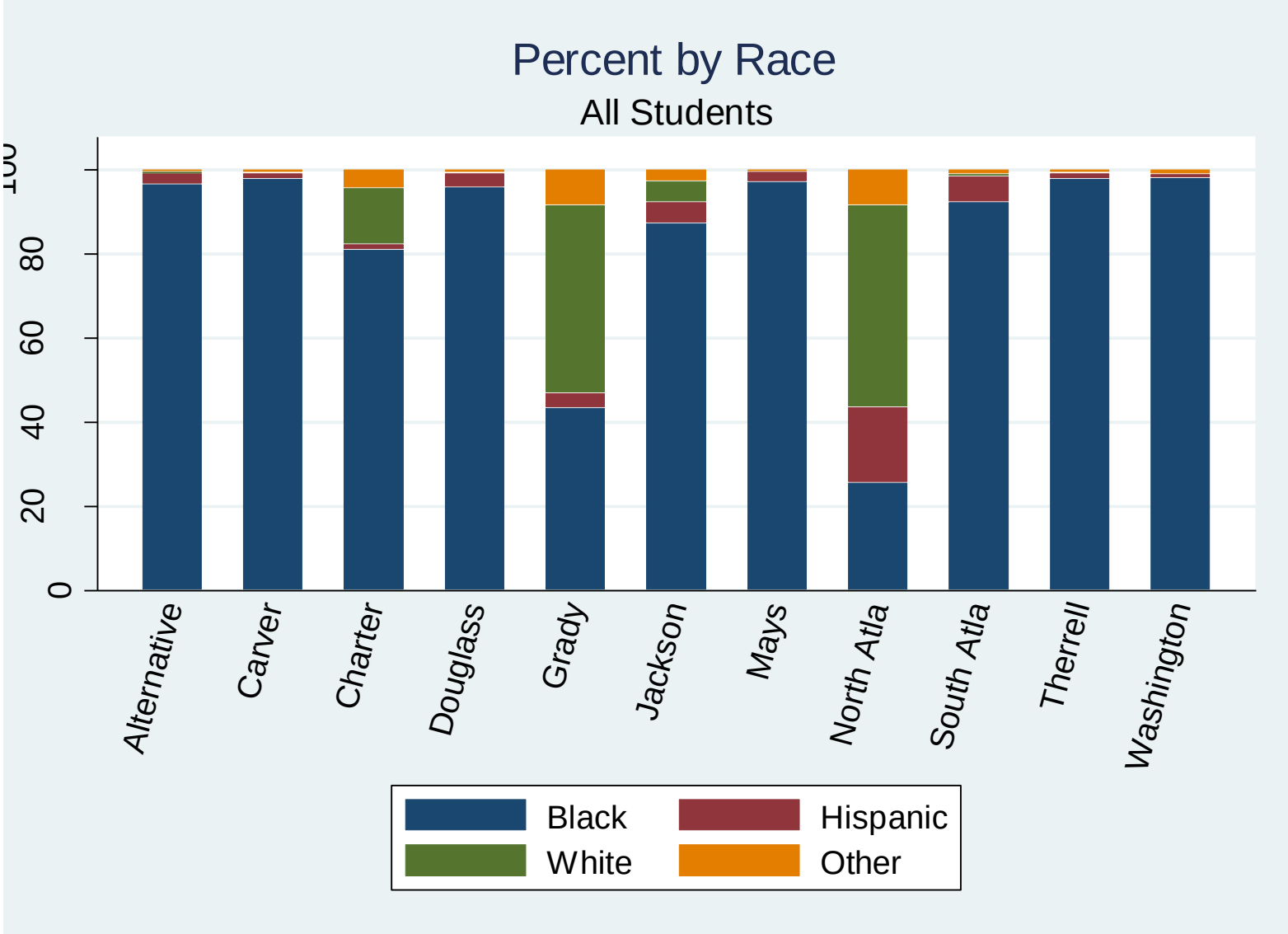

Average Years Experience
All Students
20
15
10
5
0
13.8
11.7
12.8
13.4
12.0
13.1
Alternative
Charter
East
North
South
West

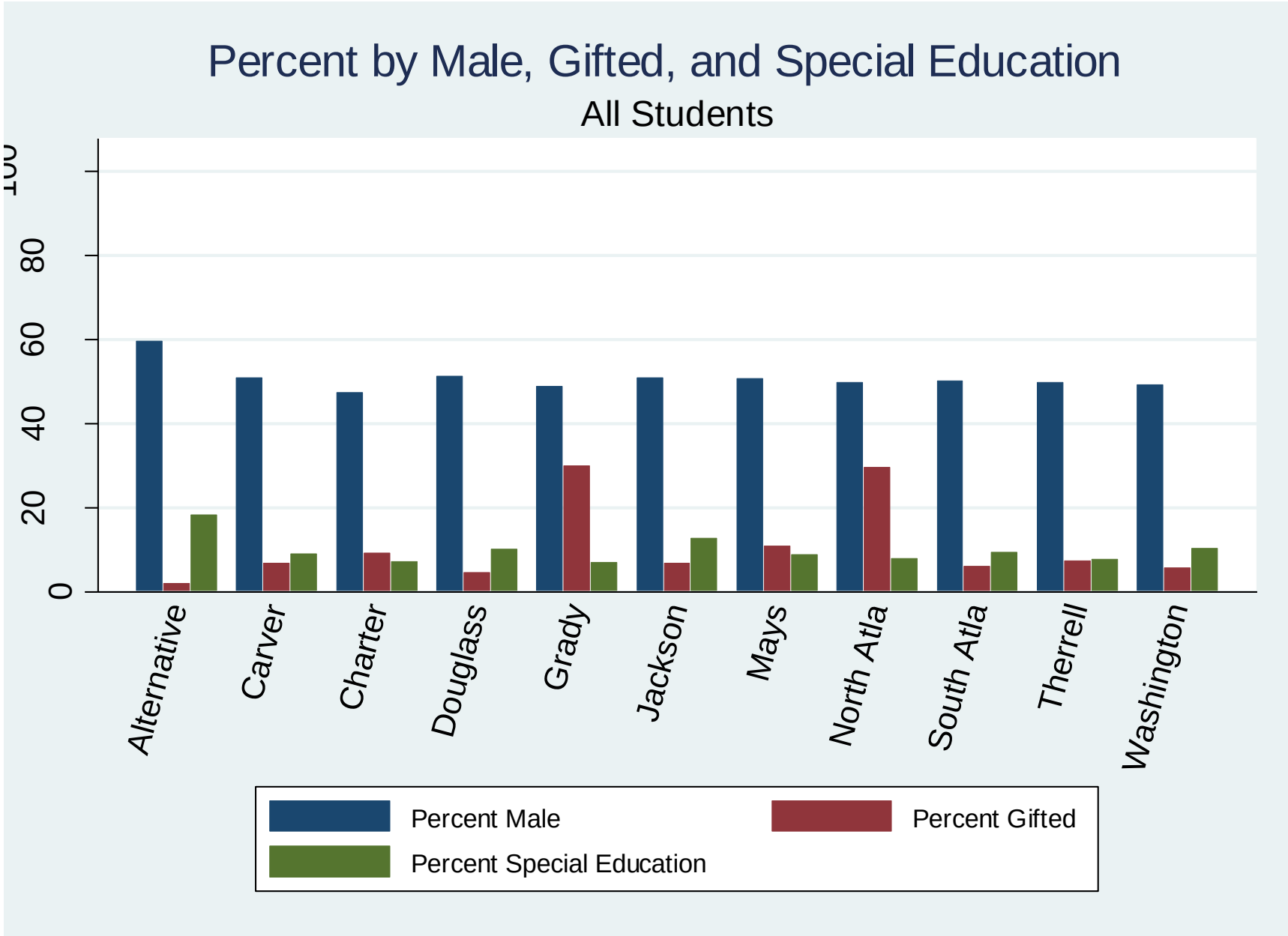

Percent Less Than Three Years Experience
All Students
0
5
10
15
20
8.6
18.8
14.2
11.1
18.2
14.5
Alternative
Charter
East
North
South
West

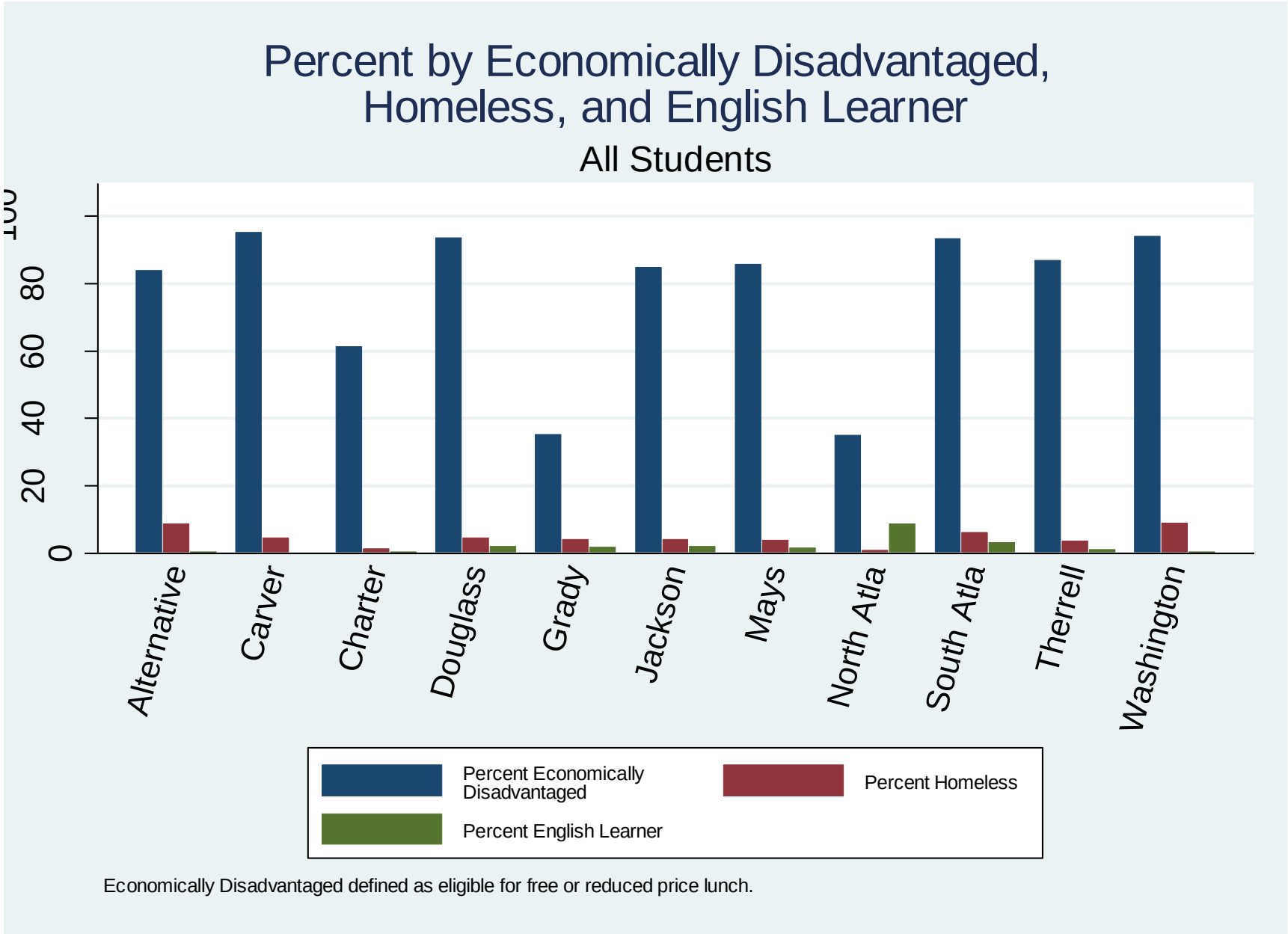

Teacher Value Added
All Students
4
3
2
1
0
2.8
2.9
3.0
3.0
3.1
3.0
Alternative
Charter
East
North
South
West

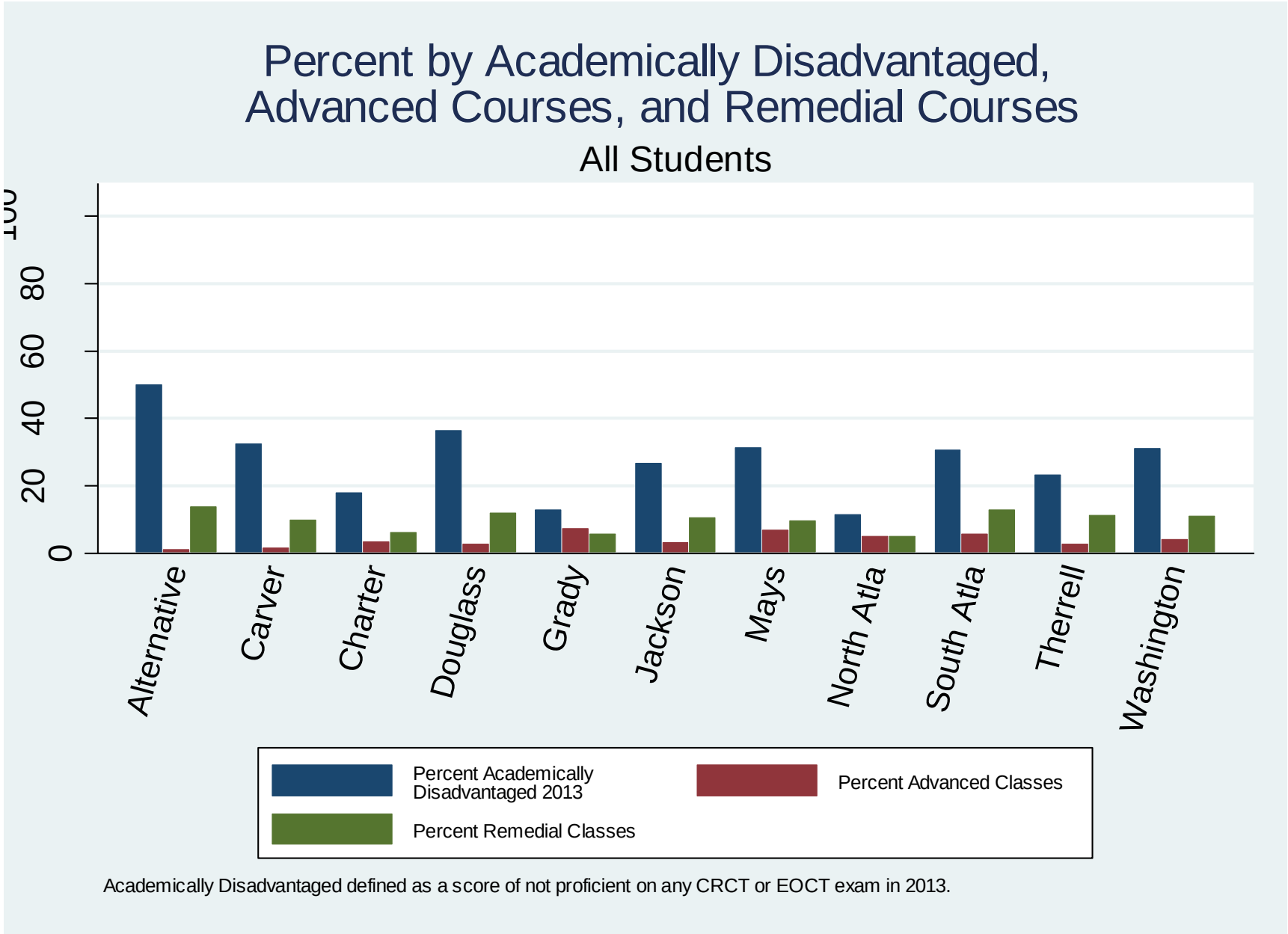

Classroom Environment Ratings
All Students
0
1
2
3
Alternative
Charter
East
North
South
West
Instructional Strategy
Differentiated Instruction
Positive Environment
Challenging Environment

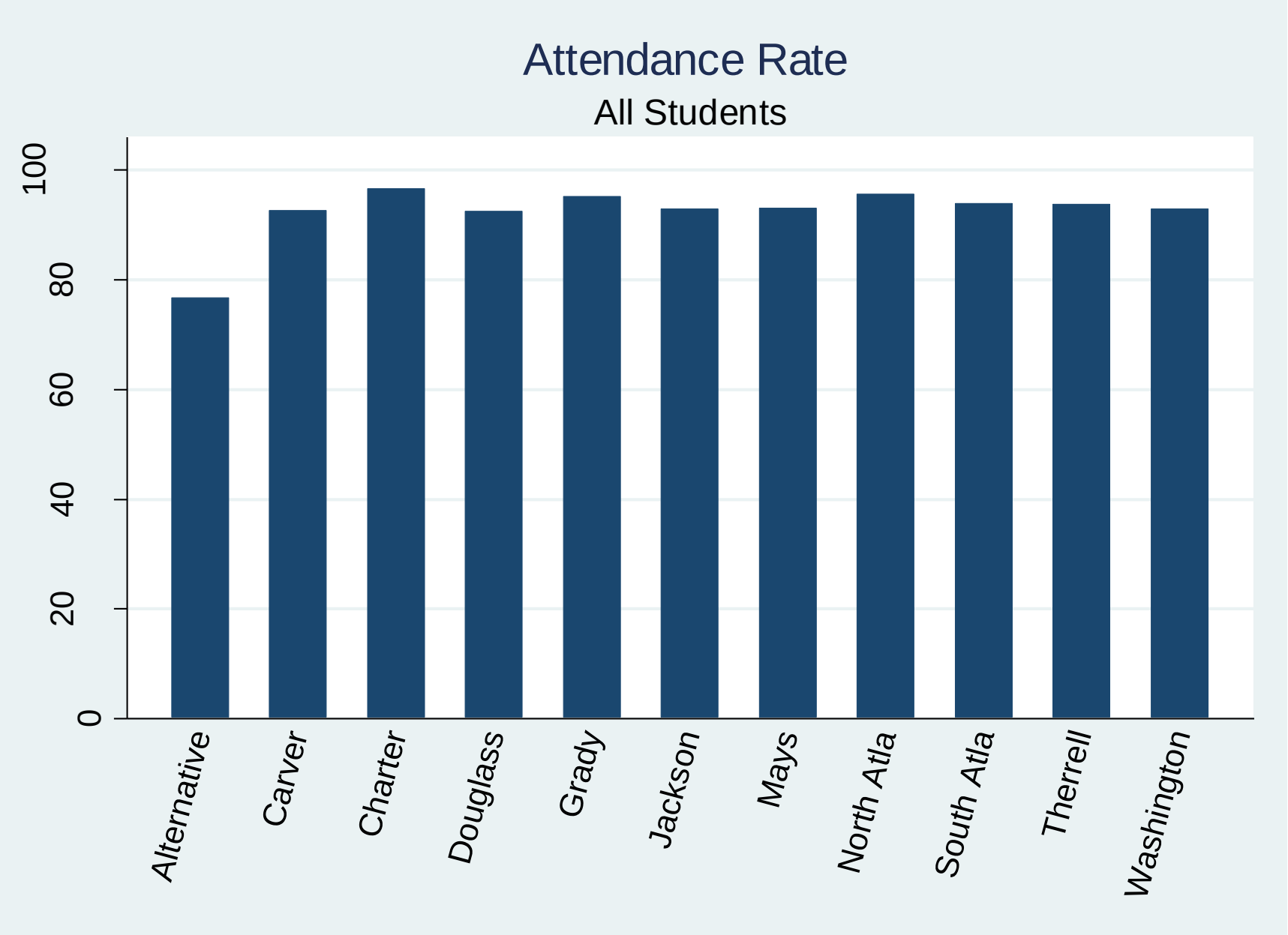
## C. Cluster Figures

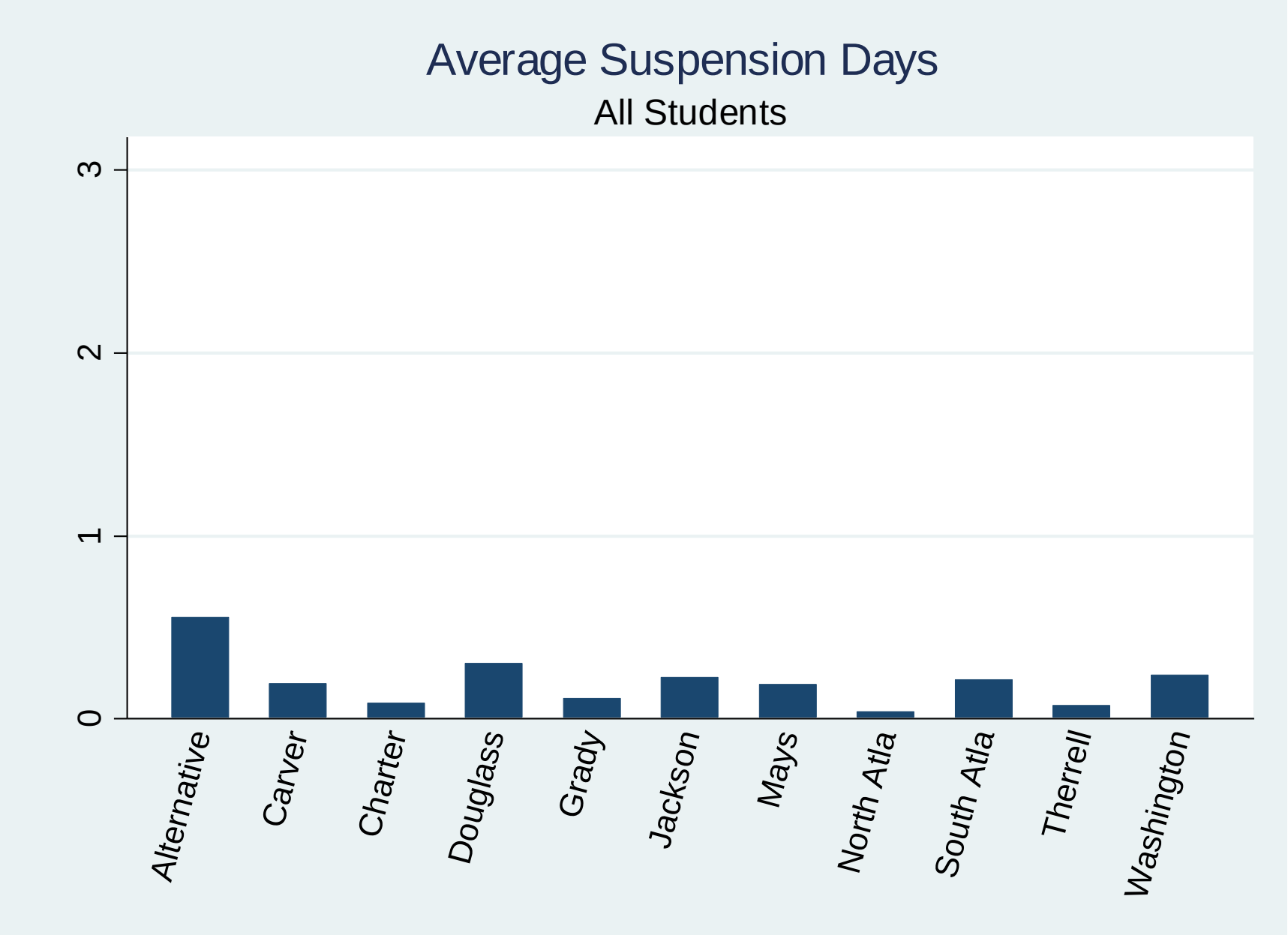


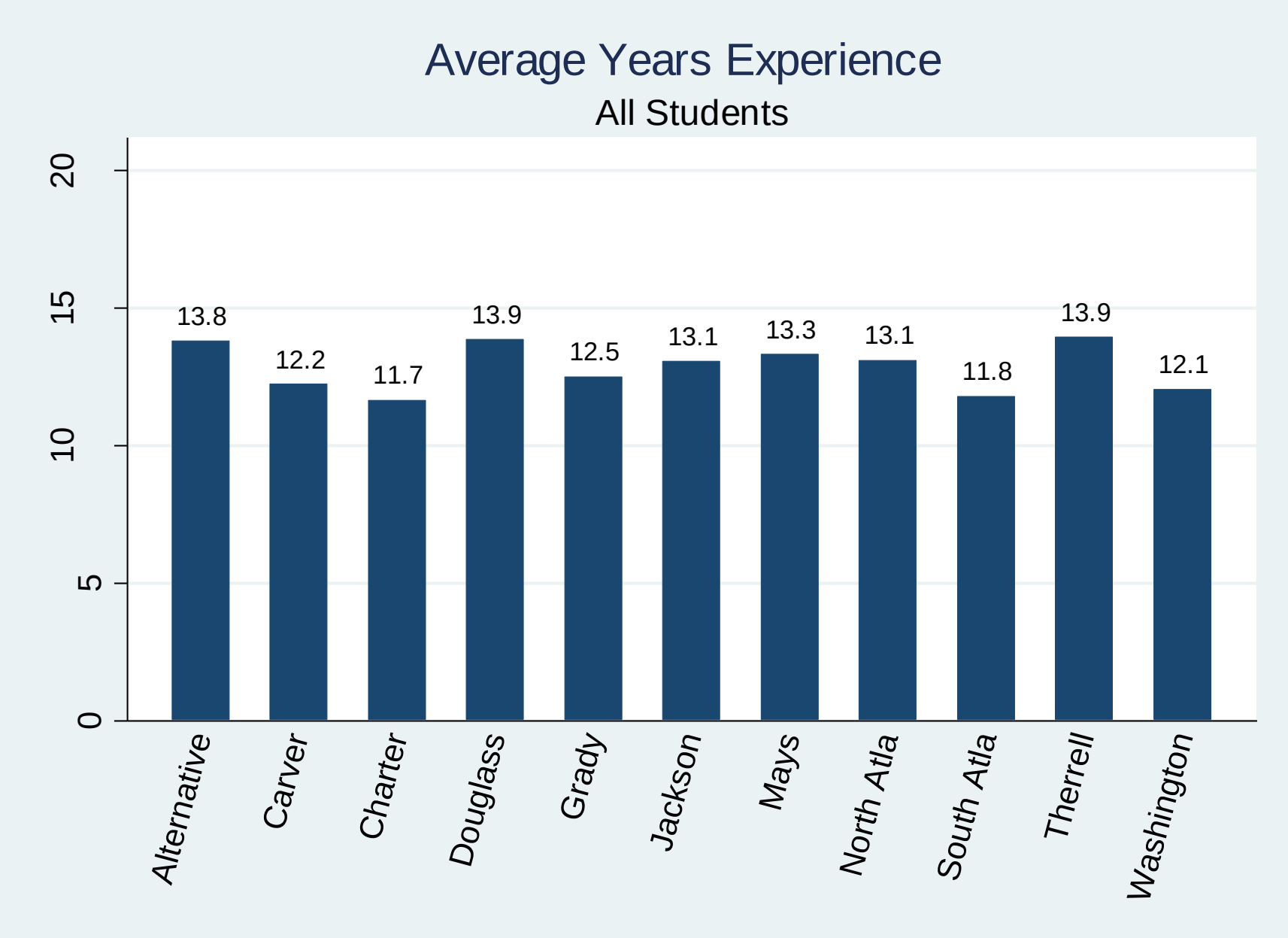

Percent by Male, Gifted, and Special Education
All Students
0
20
40
60
80
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington
Percent Male
Percent Gifted
Percent Special Education

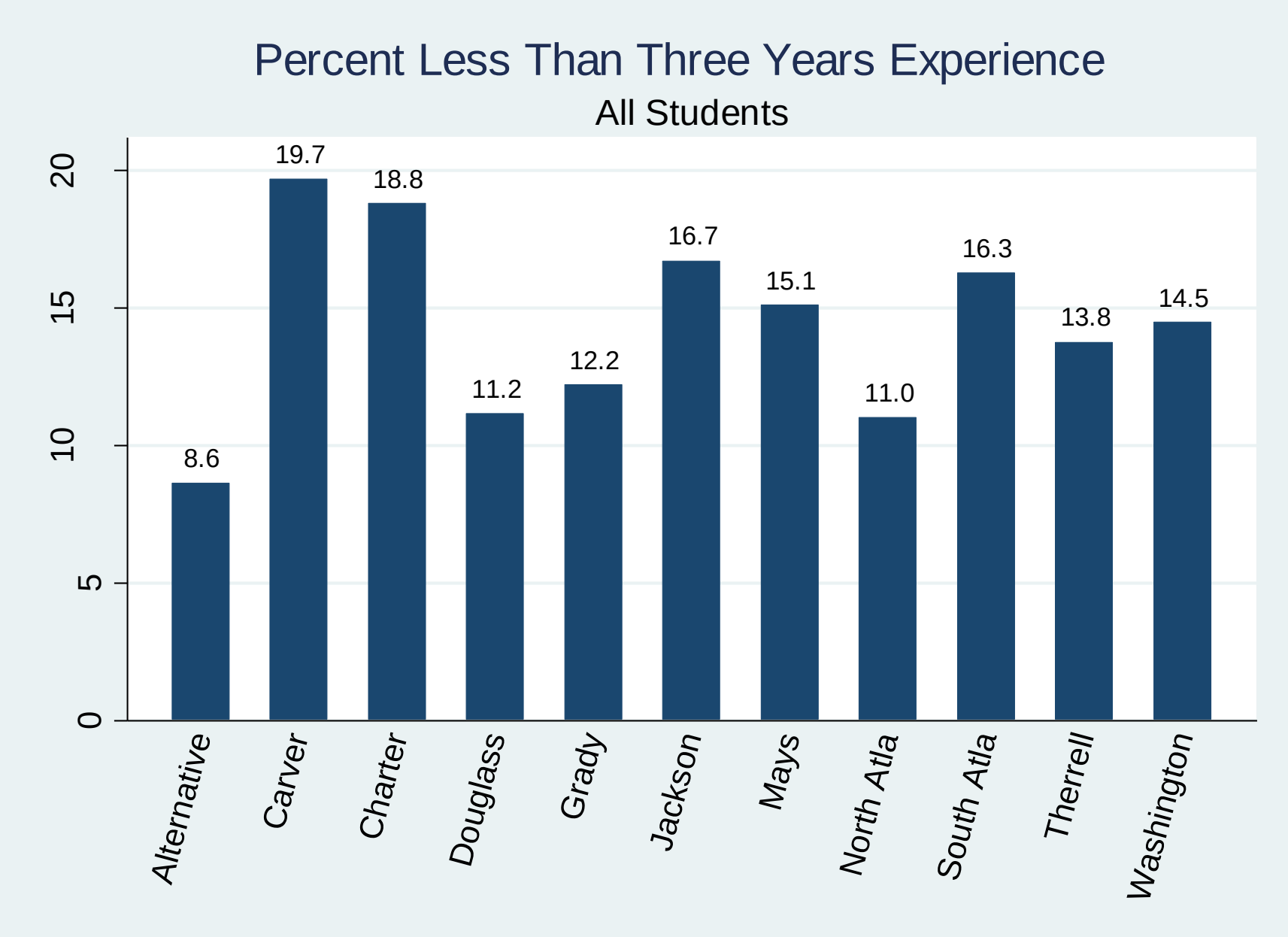

Percent by Economically Disadvantaged, Homeless, and English Learner
All Students
0
20
40
60
80
100
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington
Percent Economically Disadvantaged
Percent Homeless
Percent English Learner
Economically Disadvantaged defined as eligible for free or reduced price lunch.

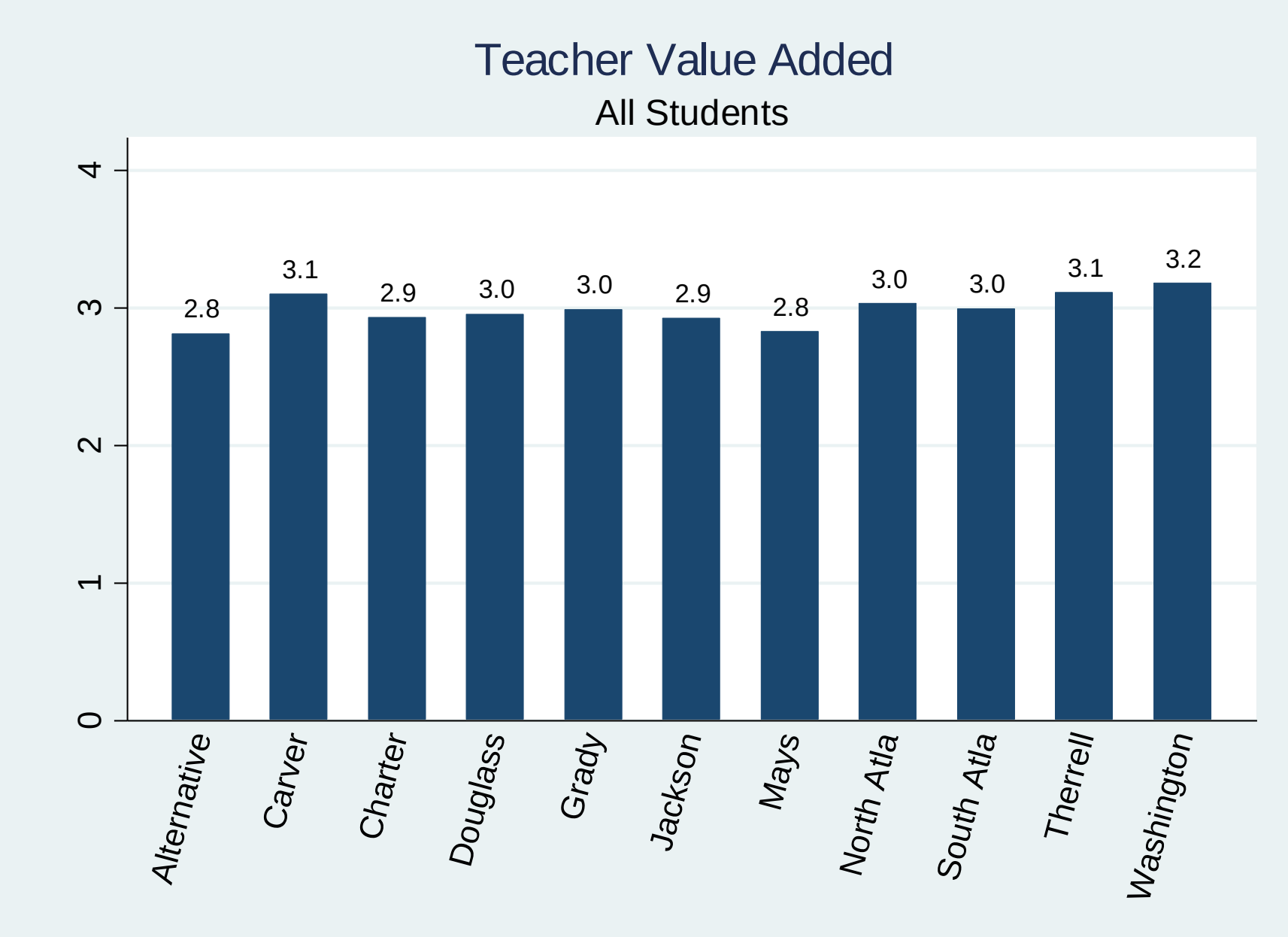

Percent by Academically Disadvantaged, Advanced Courses, and Remedial Courses
All Students
0
20
40
60
80
100
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington
Percent Academically Disadvantaged 2013
Percent Advanced Classes
Percent Remedial Classes
Academically Disadvantaged defined as a score of not proficient on any CRCT or EOCT exam in 2013.

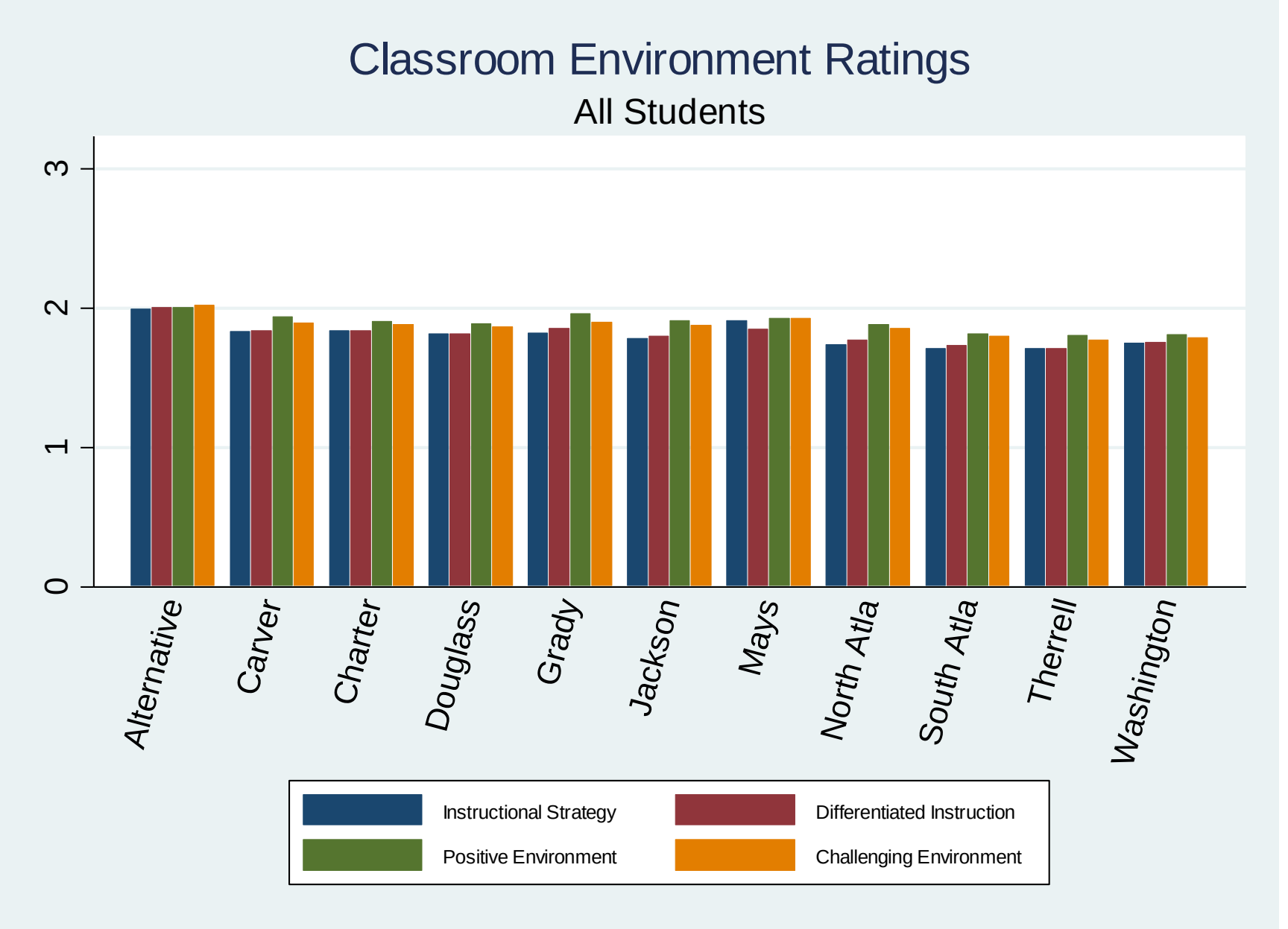

Attendance Rate
All Students
100
80
60
40
20
0
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington


Average Suspension Days
All Students
0
1
2
3
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington


Average Years Experience
All Students
0
5
10
15
20
13.8
12.2
11.7
13.9
12.5
13.1
13.3
13.1
11.8
13.9
12.1
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington


Percent Less Than Three Years Experience
All Students
0
5
10
15
20
8.6
19.7
18.8
11.2
12.2
16.7
15.1
11.0
16.3
13.8
14.5
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington


Teacher Value Added
All Students
0
1
2
3
4
2.8
3.1
2.9
3.0
3.0
2.9
2.8
3.0
3.0
3.1
3.2
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington


Classroom Environment Ratings
All Students
0
1
2
3
Alternative
Carver
Charter
Douglass
Grady
Jackson
Mays
North Atla
South Atla
Therrell
Washington
Instructional Strategy
Differentiated Instruction
Positive Environment
Challenging Environment