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Cream Skimming in Texas: A Comparison of the Characteristics of Students Entering High-Profile Charter Schools in the Same Zip Code

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Abstract

While charter schools have been touted as being far more effective than public school in improving student outcomes, few studies have examined how differences in the characteristics of students entering charter schools and public schools may create an “apples-oranges” comparison. This study uses student level data in Texas to compare the test scores, economically disadvantaged status, English Language Learner (ELL) status, and special needs status of students entering five high-profile charter organizations and public schools within the same zip code as the charter schools under study. Using six years of data, this study shows students entering the five charter organizations had substantially greater mathematics and reading scores than students from a set of comparison schools—traditional public schools located within the same zip code as the charter schools. Further, a lower percentage of the students entering charter schools were identified as ELL or special needs as students entering public schools in the same zip codes. Finally, the percentage of students entering charter schools identified as economically disadvantaged was roughly equal to the percentage of students entering public schools in the same zip code identified as economically disadvantaged.

Keywords: charter schools, student characteristics in charter schools, student background, characteristics in charter schools, charter school comparisons to other schools

In 1995, the Texas Legislature completed an extensive overhaul of the Texas Education Code. That effort included providing the Commissioner of Education the authority to grant open-enrollment charter schools. Charter schools were established to provide an alternative to traditional public schools and were granted greater autonomy in decision-making by being freed from some of the rules and regulations governing traditional public schools.

Creating charter schools has become a popular policy across the country although growth in charter schools differs by state. The U.S. Department of Education, an increasing number of policymakers, and a seemingly endless number of think tanks support the proliferation of charters, largely based on the belief that charter schools: spur innovation, improve achievement of students in charter schools as well as schools in communities in which charters are located, operate more efficiently, and close the achievement gap between not economically disadvantaged and economically disadvantaged students.

Yet, in most places around the country, charters have only been in existence for a relatively short period of time. Because of this short existence and a lack of access to data, there has been insufficient research on the characteristics of students entering charter schools, particularly with respect to characteristics other than participation in the federal free-/reduced-price lunch program (Garcia, McIlroy, & Barber, 2008). Complicating this issue is the small number of students that actually attend charter schools. Most charter schools are extremely

small relative to traditional public schools, thus analyses examining individual schools often suffer from small sample sizes.

This study seeks to add to the small but growing body of literature that focuses on the characteristics of students entering charter schools. This study does not directly examine the efficacy of charter schools relative to student achievement or any other outcome.

Fully understanding the characteristics of students entering charter schools, however, provides important insights into the contextual factors that affect student performance. Indeed, research on peer effects concludes that the characteristics of the students in classrooms and schools have a profound effect on student achievement (Burke & Sass, 2013; Lin, 2010).

Purpose

The purpose of this report is to examine various characteristics of students entering charter schools as compared to schools located within the same zip codes as the charter schools. A growing body of research has focused on comparing the characteristics of students in charter and public schools, although much of this research has focused exclusively on the patterns of racial/ethnic and socio-economic segregation in such schools (See, for example, Frankenberg, Siegel-Hawley, & Wang, 2011; Bifulco, & Ladd, 2007). A relatively small subset of these studies—which are reviewed below—has compared the characteristics of students entering charter schools and their peers not entering charter schools. To the best of my knowledge, there are currently no studies that have compared the characteristics of students entering charter schools and public schools that are located *within the same zip code*.

More specifically, the purpose of this report is to compare the following five characteristics of students entering charter schools and public schools within the same zip code as the charter schools: mathematics test scores, reading test scores, economically disadvantaged status, English Language Learner (ELL) status, and special needs status. Further, this study focuses on a subset of all charter schools—those enrolling fairly substantial number of students and that are considered to be high-performing.

I chose to focus on these schools for a number of reasons. First, the charter schools with greater numbers of students are arguably the most popular with parents and, because of the sheer number of students enrolled, have a greater impact on the local schooling system. Second, public discourse around charter schools often focuses on the success of a relatively small group of “high-performing” charter schools. Yet, academic reports of charters have tended to examine all charter schools in a region or state, thus aggregating information across all charter schools. This aggregation is problematic in that information for particular charter schools is obscured. Thus, I wanted to shed some light on the “high-performing” charters that have a disproportionately large influence on the public discourse around charters and that have an actual impact on student enrollments.

I chose to focus on a comparison of charter and public schools within the same zip code as a strategy to construct an “apples-to-apples” comparison of the characteristics of students entering the two types of schools. Often, the student characteristics of charter schools are compared to the characteristics of public school students from across a region or a state (see, for example, Texas Charter School Association, 2012; Texas Center for Educational Research, 2006; National Center for Policy Analysis, 2002). This creates an inaccurate comparison since charter schools are most often located in urban areas that serve higher percentages of poor, minority, and lower-performing students. A more accurate comparison would be to examine the student

characteristics of charter and public schools that serve the same neighborhoods. By restricting the analysis to charter and public schools within the same zip code, this study seeks to make such an “apples-to-apples” comparison.

The remainder of this report begins with some general information on charter schools in Texas followed by a review of the literature that compares the characteristics of students entering charter schools and public schools.. The next section provides a description of the data and methodology employed in this report followed by the findings. The findings section is separated into two sub-sections: students entering 5th grade and students entering 6th grade. The report is divided into these two sections primarily because most KIPP schools have different grade configurations than other schools. Specifically, most KIPP schools in Texas enroll students in the 5th- though 8th-grades. Because the purpose of the study is to examine the characteristics of students entering charter middle schools in the lowest grade offered, both grades must be included in the analysis. Finally, the conclusion and discussion follows the findings.

Texas Charter Schools

The number of charter schools in Texas has increased tremendously since the first charter schools appeared in 1997. As shown below in Figure 1, the number of individual charter schools increased from 16 in 1997 to 552 in 2013 according to data from the Academic Excellence Indicator System (AEIS) on the Texas Education Agency (TEA) website¹. Also based on AEIS data from TEA, Figure 2 shows the concomitant increase in the number of students enrolled in charter schools over the same time period. In 1997, fewer than 3,000 students were enrolled in charter schools. In 2013, almost 179,000 students were enrolled in charter schools.

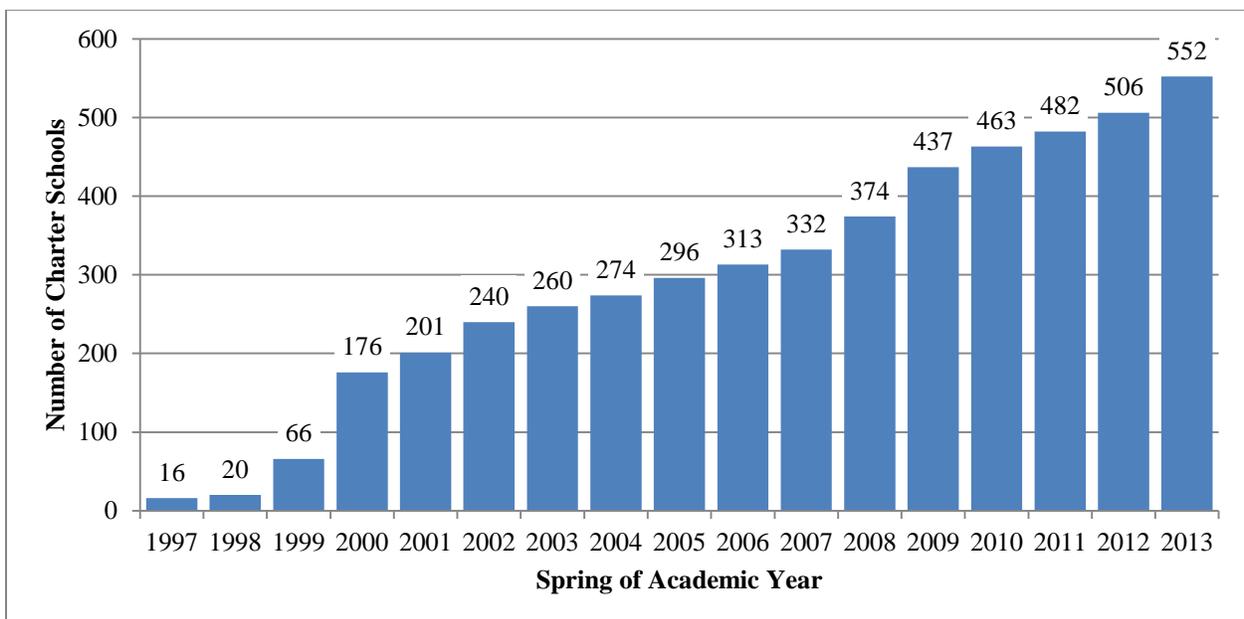


Figure 1. Number of Charter Schools in Texas: 1997 to 2013

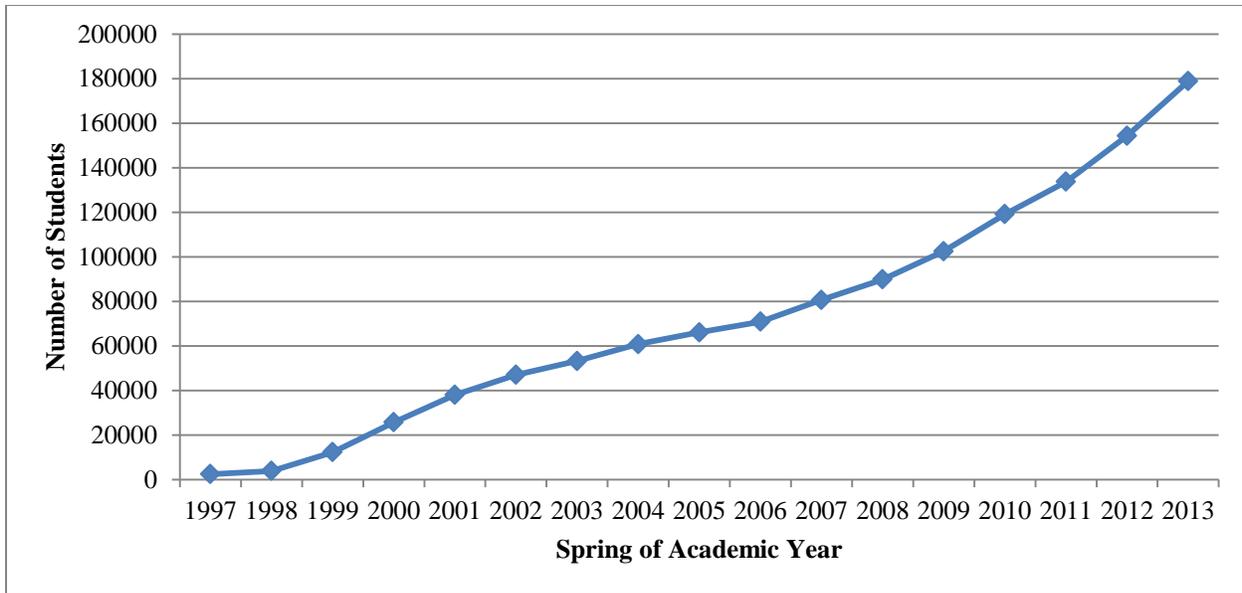


Figure 2. Number of Charter School Students in Texas: 1997 to 2013

Review of the Literature

There is a growing body of research that examines the characteristics of students entering into and enrolled in charter schools. However, much of the focus has been on the racial/ethnic characteristics of those students, and whether charter schools lead to greater student segregation. Since this paper does not examine student racial/ethnic characteristics, that issue is not addressed in this literature review.

Students Test Scores

There is not a large body of research examining the test scores of students choosing to enter charter schools and the scores of their peers choosing to not enter charter schools. . One reason for this dearth of research is that researchers need longitudinal student-level data with test scores included in the data set. There are, however, a few notable exceptions to this paucity of research.

For example, Woodworth, David, Guha, Wang, & Lopez-Torkos (2008) found that KIPP schools, as compared to other schools, did not attract higher performing students. Similarly, Lacireno-Paquet, Holyoke, Moser, and Henig (2002) found no evidence of differences in academic ability between students entering and not entering charter schools. Zimmer, Gill, Booker, Lavertu, and Witte (2009) reached the same conclusion in a seven-site study that included the entire states of Ohio and Texas while Booker, Zimmer, and Buddin (2005) reached the same conclusion using just Texas data.

Thus, the available studies examining differences in test scores between students entering charter schools and their peers not entering charter schools found no statistically significant differences in the test scores of students entering charter schools and not entering charter schools.

With respect to the two studies that examined this issue in Texas, both compared the test scores of students entering *all* charter schools to students entering public schools. Thus, all

charter schools—regardless of type, purpose, or quality—were included in the charter school category. As noted by Lacireno-Paquet, et al. (2002), this can be problematic because such an approach can mask variations across different types of charter schools. There is a vast array of charter schools in Texas and these schools have very different missions and goals. Further, some seek to enroll students that are low-performing or have previously dropped out of school while others focus on enrolling students that are higher-performing or are college-bound. Thus, when averaging the test scores of students entering all charter schools, the results for different types of charter schools is lost within the overall average results (Lacireno-Paquet, et al., 2002).

Economically Disadvantaged Status

Charter advocates, including those in Texas, often claim that charter schools enroll greater percentages of economically disadvantaged students than public schools (Texas Charter School Association, 2013; National Center for Policy Analysis, 2002). For example, the Texas Charter School Association (May 8, 2013) claimed, “Texas public charter schools, as a percentage, serve more . . . economically disadvantaged students . . . than traditional public schools.”

Research, however, has found mixed results in this area with some studies finding charter schools enrolling greater percentages of economically disadvantaged students and others finding the opposite result. The difference in the research results, in this area, can often be explained by the comparison group employed by a study. Specifically, as the geographic distance between charter schools and the comparison group of public schools increased, the greater the likelihood that the comparison concluded charter schools enrolled a greater percentage of economically disadvantaged students than public schools. Thus, when compared to schools in the same neighborhood, charter schools had similar percentages of economically disadvantaged students, or even lower percentages of economically disadvantaged students. For example, Miron, Urschel, and Saxton (2011) found that KIPP enrolled similar percentages of free- and reduced-price lunch students as host districts. Similarly, in a national study, Mishel, Rothstein, Carnoy, and Jacobsen (2005) found that charter schools enrolled similar percentages of economically disadvantaged students as traditional public schools.

English Language Learner (ELL) Status

Of the available research, most studies conclude that charter schools tend to enroll lower percentages of ELL students than comparison schools. For example, Miron, et al., (2011) found that KIPP schools enrolled substantially lower percentages of ELL students than host districts. Similarly, Woodworth, et al. (2008) found that KIPP schools in the Bay area enrolled fewer ELL students than comparison schools. Examining a wider array of charter schools, Miron, Urschel, Marthis, and Tornquist (2010) found that charter schools in general enrolled fewer ELL students than the home districts in which the charter schools were located.

Special Education/Special Needs Status

As with studies of ELL students, studies focusing on special education students generally find charter schools enrolling a lower percentage of special education students than public comparison schools. For example, Miron, et. al., (2011) determined that KIPP schools enrolled

substantially lower percentages of special education students than host districts while Woodworth, et al. (2008) discovered that KIPP schools in the Bay area also enrolled fewer special education students than public comparison schools. In a national study, Howe and Welner (2002) found that charter schools enrolled a lower percentage of special needs students than did public schools. Finally, in their study of a wide variety of different types of charter operators, Miron, et al. (2010) also found that charter schools in general enrolled fewer special education students than the home districts in which the charter schools were located.

Importantly, some studies have found that the types of special education students also differ between charter schools and traditional public schools. Specifically, Fiore, Harwell, Blackorby, and Finnigan (2000) uncovered that special education students enrolled in charter schools had less severe disabilities than special education students enrolled in public schools. Consequently, charter schools enrolled less costly special education students than traditional public schools.

Data

This study relied on three sources of data: student testing data, school information, and zip code data. The first source was student-level testing data from the Texas Education Agency (TEA). The data was purchased from TEA for the purpose of examining important education topics in Texas such as enrollment in charter schools. For each individual student, the data included the following elements: mathematics and reading scale score, grade level, economically disadvantaged status, valid score indicator (whether the score was accepted by TEA), test type (regular test, modified test, or alternate test), test language (English or Spanish) and exemption status (exempted for Limited English Proficiency status or special education status). The testing data included information on students taking the Texas Assessment of Knowledge and Skills (TAKS) from spring 2003 through summer 2011 in grades three through 12. Student information included the school and district in which the student was enrolled when s/he took the TAKS test, grade level, economically disadvantaged status, test score, score indicator, exemption status (e.g., special education exemption, Limited English Proficiency exemption, absent, etc.) and test type. Importantly, even if a student did not actually take the TAKS, such a student would be included in the data because an answer document was submitted for the student. Because of the Family Educational Rights and Privacy Act (FERPA), TEA made some information confidential by removing the information. However, the student was not removed from the data and the student was still associated with a particular school and district.

The second set of data was school-level information from the Academic Excellence Indicator System (AEIS). The data was downloaded for free from the TEA website. The school-level AEIS data included a wealth of information on schools in Texas, including charter status, district in which the school was located, the region of the state in which the school was located, the overall number of students, and the number and percentage of students with various characteristics (e.g., percentage of economically disadvantaged students, percentage of White students, percentage of Latino students, percentage of African American students, etc.), and participating in specific education programs (special education, bilingual education, English as a Second Language).

The third set of data was downloaded from the Common Core of Data provided by the National Center for Education Statistics. Those data included the zip code for schools in Texas. Some charter schools were not included in those data. The zip codes for such schools were

obtained by doing an Internet search and then finding the zip code from the contact information for each of the charter schools. Further, the zip codes for the charter schools were crosschecked with the zip codes of the actual schools as provided by the websites of the charter schools. In cases in which there was conflicting information, the zip code provided by the charter school was used.

Because the details of the data are crucial to fully understanding the results of this study, the following sections delve more deeply into the fine-grained details of different pieces of data that served as the foundation for this study.

Student Characteristics Included the Analyses

The characteristics examined in this section include:

- TAKS mathematics scores;
- TAKS reading scores;
- Economically disadvantaged status;
- Spanish-Language TAKS test;
- Exemption from TAKS for Limited English Proficiency (LEP) reasons; and
- Special Needs students as identified by identification of taking a non-standard TAKS examination.

TAKS Scores. Because scale scores on TAKS tend to increase over time, such a metric could not be averaged across all cohorts. If the scale scores were averaged across years, then schools with larger enrollments in later years as opposed to earlier years would have artificially greater average scale scores. In order to compare achievement in a defensible manner, the TAKS scale scores had to be standardized across years and administrations so schools with more students in later cohorts and fewer in earlier cohorts would not have artificially greater scores and schools with more students in earlier cohorts would not have artificially lower scores. To standardize the TAKS scores over time, the scores were converted to z-scores for each grade level and year. Further, z scores were calculated separately for students taking different versions of the test. Thus, a separate z-score was calculated for all students taking the standard TAKS, TAKS-modified, and TAKS-alternative versions of the test.

Economically Disadvantaged Status. In Texas, economically disadvantaged is determined by participation in the federal free-/reduced-price lunch program. In addition, a student can be identified as economically disadvantaged if she or he is eligible for other public assistance programs intended for families in poverty. In the data provided by TEA, each student had a binary indicator of participation in the free-/reduced-price lunch program.

English Language Learner Status. Characteristics four and five were collapsed into one measure that identified students as English-Language Learner students. Thus, English Language Learner (ELL) students were identified in two ways. First, students were identified by having taken the Spanish-language version of the TAKS. The Spanish version was available in grades three through six. Second, the test score code provided by the state also identified those students exempted from testing for Limited English Proficiency (LEP). While there was some overlap between the two groups, only 7% of the students taking the Spanish TAKS were also identified as being LEP exempt. Thus, a student was identified as ELL if the student (a) took the Spanish-

language TAKS in the previous year; or (b) was exempted from TAKS testing because of LEP reasons.

Special Needs Students. Special needs students were identified by the type of TAKS test taken by the student. Unfortunately, those data were only available in the academic years 2008 through 2010. In previous years, a substantial proportion of students identified as special needs were placed into a separate data file by the state. To comply with FERPA, the student identifier process was different than the one employed for non-special needs students. Thus, the two files could not be merged which prohibited the use of the data.

With respect to the different types of TAKS tests, the TAKS-modified (TAKS-M) and TAKS-alternate (TAKS-A) tests were developed for students that require some alternate test form based on either modifications, or an alternative assessment strategy to meet the needs of the student under either Section 504 of the Rehabilitation Act of 1973, or under an Individual Education Plan. Unfortunately, relying on test type does not directly assess the number of students in special education. Some special education students do not require any special test modifications while other students (such as those with a 504 plan) may require modifications, but may not be designated as special education. Thus, the students taking either a TAKS-M or TAKS-A test were not designated as special education, but rather as having special needs with respect to state standardized assessments. That is an important distinction because many 504 and special education students who do not require any testing modifications need only minimal changes in instruction and additional assistance while students requiring special testing are far more likely to require extra attention and assistance by educators.

TEA (TEA, 2011, p. 117.) described the TAKS-modified, test in the following manner: The Texas Assessment of Knowledge and Skills–Modified (TAKS–M) is an alternate assessment based on modified academic achievement standards designed for students who meet participation requirements and who are receiving special education services. TAKS–M has been designed to meet federal requirements mandated under the No Child Left Behind (NCLB) Act. According to federal regulations, all students, including those receiving special education services, will be assessed on grade-level curriculum. TAKS–M covers the same grade-level content as TAKS, but TAKS–M tests have been changed in format (e.g., larger font, fewer items per page) and test design (e.g., fewer answer choices, simpler vocabulary and sentence structure).

TEA (TEA, 2011) described the TAKS-alternate test in the following manner:

TAKS–Alternate (TAKS–Alt) is an alternate assessment based on alternate academic achievement standards and is designed for students with significant cognitive disabilities receiving special education services who meet the participation requirements for TAKS–Alt. This assessment is not a traditional paper or multiple-choice test. Instead, it involves teachers observing students as they complete state-developed assessment tasks that link to the grade-level TEKS. Teachers then evaluate student performance based on the dimensions of the TAKS–Alt rubric and submit results through an online instrument. This assessment can be administered using any language or other communication method routinely used with the student. (p. 141)

While other measures would certainly be important as well, such measures were not available in the data procured from the Texas Education Agency. The measures included in the analyses were selected for two reasons: First, because the data can be used to directly address claims of charter school proponents; and second, research suggests that each measure is associated in some manner with school-level test score levels as well as school-level growth.

Types of Comparisons

One difficulty in examining the characteristics of students entering charter schools is determining the appropriate comparison group of students from public schools. As noted above, state education agencies, charter school representatives, and media personnel compare charter schools and charter school students to all traditional public schools and public students in a state. While such a comparison provides some useful information, such comparisons are deeply flawed because charter schools are located in distinct geographic locations.

As such, enrollment in a charter school is typically limited to those students who live in close geographic proximity to the charter school.² So, for example, a student living in Austin cannot enroll in a charter school in Houston. Thus, most researchers typically do not compare charter school student characteristics to the characteristics of all other schools in the state. Rather, researchers tend to compare the characteristics of charter school students to the characteristics of students in the same metro area, district enrollment zone, selected geographic area such as a zip code, or to schools that sent at least one student to the charter school.

This study focuses only on those students enrolled in schools in the zip code in which the charter schools in question were located. Thus, comparisons were made between students entering a set of charter schools (e.g., KIPP) and students entering schools located in the same zip codes as the set of charter school. The student data were aggregated across all charter schools within a particular charter organization and across all public schools in the zip codes in which the set of charter schools were located.

Methods

After the characteristics of students were aggregated for a set of charter schools and the public comparison schools for that set of charter schools, independent sample t-tests were employed to compare the aforementioned characteristics.

Selection of Charter Schools

This study focuses on five high-profile charter school organizations that served students in grades four through eight. Most are charter organizations that included multiple schools serving students from early elementary grade levels through high school grade levels. In the remainder of this paper, charter organization is abbreviated as “CO” in an effort to increase the readability of the text.

To be considered high-profile, the CO had to be mentioned in state and national press regarding charter schools. Moreover, each CO had to enroll a substantial number and percentage of the students entering either the 5th grade or the 6th grade.

Table 1 lists, in descending order, the COs with the greatest number of incoming 6th grade students from schools other than from schools within their own CO for the years 2005 through 2011. The two largest COs—Harmony and Yes Preparatory—both accounted for 20% of all incoming 6th grade students. Overall, these 11 COs accounted for 83% of all incoming 6th grade students into charter schools in Texas. The five high-profile CMOs in this study accounted for more than 10,300 incoming 6th grade students—almost 65% of all incoming 6th grade students into charter schools over those years.

The number for KIPP was somewhat misleading because KIPP schools are generally configured to serve grades five through eight (although the grade span varied across individual schools). Very few KIPP schools served only grades six through eight. Complicating matters, the grade span of KIPP charter schools—as well as for some of the other COs—changed over time. Table 2 shows the number of students that entered the selected charter schools in the 5th grade and the 6th grade over the multiple cohorts under examination in this study. Again, incoming students were defined as those not previously enrolled in schools within that particular CO. YES Prep was the only CO that served a distinct grade span (grades 6 through 12). The other schools served—at least according to the state testing data-- students in grades five and six and, moreover, had students entering the schools in both grades five and six. The majority of students, however, entered in the 6th grade. That issue complicates the analyses and greater attention to those issues should be included in future analyses.

Because of the small numbers of students entering the 5th grade in some charters, only KIPP and Harmony, were included in the 5th grade analysis. Despite most students enter KIPP in the 5th rather than 6th grade, the charter was included in both analyses. Thus, the reader should interpret the 6th grade findings for KIPP in a different light than the 5th grade findings.

Finally, Table 3 provides some greater perspective on the scope and impact of high-profile charter organizations on the number and percentage of charter schools students. Specifically, Table 3 shows that 29% of the charter students in 2011 were enrolled in one of the five high-profile COs. Thus, those COs have a large influence on the overall population of charter school students in Texas.

Findings

This section is divided into two major sub-sections, each of which is then further subdivided by the different student characteristics examined in this study. The two major sub-sections are: students entering the 5th grade and students entering the 6th grade. The first sub-section was necessary because, unlike most middle schools, most KIPP middle schools include grades five through eight rather than six through eight. Thus, in order to examine KIPP charter schools in this study in a fair manner, I had to examine students entering charter schools in both the 5th and 6th grades.

The 5th grade analysis includes only KIPP and Harmony charter schools. These two COs were included in the 5th grade analysis for different reasons. With respect to KIPP charter schools, some of the middle schools start with the 5th grade while others starts with the 6th grade. Thus, it was necessary to include KIPP charter schools in both analyses. Harmony charter schools, however, typically offer report a grade span that encompasses kindergarten through high school. Thus, Harmony charter schools are included in both analyses as well, albeit for a different reason than for eh inclusion of KIPP charter schools in both analyses. Alternatively, IDEA, UPLIFT, and YES Preparatory charter schools all consistently served students in the 6th-through 8th-grades. Thus, students could not enter these charter schools in the 5th grade. Because of these unique characteristics, readers should interpret the findings in light of these different grade configurations that make comparisons across COs more challenging.

The analyses in the following sections focus on the characteristics of students entering a charter school in a particular grade that were not previously enrolled in that particular charter organization.

In other words, to be included in an analysis, a student had to *not* be enrolled in the specific charter school in the 4th or 5th grade, but be enrolled in the specific charter school in the 5th or 6th grade, respectively. The characteristics of such

The analyses of 4th grade students entering the 5th grade included seven cohorts of 4th grade students for the academic years 2003-04 through 2009-2010. The analysis of 5th grade students entering the 6th grade included six cohorts of 5th grade students for the academic years 2004-05 through 2009-10.

Students Entering 5th Grade

The analyses in this section focus on students entering COs in the 5th grade. Only KIPP and Harmony were included in the analyses because the other three COs had very few, if any, students entering in the 5th grade. Students enrolled in the CO in the 4th grade were *not* included in these analyses since the analyses focused on students entering the schools. For example, a student enrolled in a KIPP school in the 4th grade was not included in the analysis of students entering a KIPP school in the 5th grade.

Three separate analyses are presented in this section: TAKS mathematics and reading z-scores, percentage of economically disadvantaged students, and percentages of ELL and special needs students.

TAKS Mathematics and Reading Scores. Table 4 documents the differences in TAKS mathematics and reading z-scores for students entering the selected COs and students from the public comparison schools. Students entering both KIPP and Harmony had statistically significant greater TAKS mathematics and reading scores than students entering other schools in the same zip code.

With respect to mathematics, students entering KIPP had scores that were essentially equal to the average score for all 4th grade students in Texas, but the scores for students entering other schools in the same zip code were substantially below the state average (-0.302). Thus, students entering KIPP had TAKS mathematics z scores that were 0.288 standard deviations greater than for students entering the public comparison schools.

Students entering Harmony schools had TAKS mathematics z scores that were 0.432 standard deviations greater than the state average while students entering public comparison schools had scores roughly equal to the state average (0.004). Thus, students entering Harmony had TAKS mathematics z scores that were 0.428 standard deviations greater than students entering public comparison schools.

With respect to reading scores, students entering KIPP had z scores slightly lower than the average score for the state while students entering public comparison schools had scores substantially lower than the average score for all 4th grade students in Texas. Thus, students entering KIPP had 4th grade TAKS reading z scores that were 0.208 standard deviations greater than students entering public comparison schools.

Students entering Harmony schools had TAKS reading z scores that were almost 0.400 standard deviations greater than the state average while students entering public comparison schools had scores slightly below the state average. The difference in scores was substantial--0.407 standard deviations.

Thus, not only did students entering KIPP and Harmony have greater TAKS mathematics and reading z scores than students entering public comparison schools, but the differences were quite large—greater than 0.2 standard deviations for KIPP and greater than 0.4 standard deviations for Harmony. Such differences far exceed the impact education interventions might have on student scores.

Table 4

Comparison of the mathematics and reading z-scores of incoming 5th grade students for high-profile charter and public comparison schools

Charter Name	Charter Organization	Comparisons Schools	Difference: CO - CS	T-Test p-Value
TAKS Mathematics Z Scores				
KIPP	-0.014	-0.302	0.288	0.000
Harmony	0.432	0.004	0.428	0.000
TAKS Reading Z Scores				
KIPP	-0.046	-0.254	0.208	0.000
Harmony	0.391	-0.016	0.407	0.000

Economically Disadvantaged Students. Table 5 documents the differences in the percentage of students entering the charter schools and public comparison schools that were identified as economically disadvantaged in the 4th grade. Both KIPP and Harmony schools had lower percentages of economically disadvantaged students entering the 5th grade as compared to public comparison schools.

Table 5

Comparison of the percentage of incoming 5th grade students identified as economically disadvantaged for high-profile charter and public comparison schools

Charter Organization Name	Percentage of Economically Disadvantaged Students			
	Charter Organization	Comparisons Schools	Difference: CO - CS	T-Test p-Value
KIPP	84.5	90.0	-5.5	0.000
Harmony	55.7	69.9	-14.2	0.000

CO = charter organization

CS = comparison schools (traditional public schools)

While the vast majority of 4th grade students entering KIPP in the 5th grade were designated as economically disadvantaged (84.5%), an even greater percentage of students entering public comparison schools were identified as economically disadvantaged (90.0%). The difference between the two groups of schools (-5.5 percentage points) was statistically significant at the $p < .000$ level. For Harmony, the difference was even greater. Specifically, while only 55.7% of students entering Harmony schools were designated as economically disadvantaged, 69.9% of students entering public comparison schools were designated as economically disadvantaged. The difference of -14.2 percentage points was statistically significant at the $p < .000$ level.

ELL and Special Needs Students. This section documents the differences in the percentages of ELL and special needs students entering the charter schools and public comparison schools. With respect to the percentage of 4th grade students identified as ELL, Table 6 shows that a greater percentage entered KIPP schools than public comparison schools. Moreover, the difference was quite large (11.1 percentage points) and statistically significant at the $p < .000$ level. In contrast, the percentage of ELL students entering Harmony schools was substantially lower (-9.6 percentage points) than the percentage entering public comparison schools.

With respect to special needs students, both KIPP and Harmony schools had statistically significantly lower percentages of incoming 5th grade students who were identified as special needs in the 4th grade. For KIPP, 3.5% of entering students were special needs as compared to 8.5% for comparison schools. The difference of -5.0 percentage points was statistically significant at the $p < .000$ level. For Harmony schools, only 1.1% of entering students were identified as special needs while 7.5% of entering students were identified as special needs for public comparison schools. Again, the difference of -6.4 percentage points was statistically significant at the $p < .000$ level.

Table 6

Comparison of the percentage of incoming 5th grade students identified as ELL and special needs for high-profile charter and public comparison schools

Charter Name	Charter Organization	Comparisons Schools	Difference: CO - CS	T-Test p-Value
Percentage of ELL Students				
KIPP	12.3	1.2	11.1	0.000
Harmony	3.8	13.4	-9.6	0.000
Percentage of Special Needs Students				
KIPP	3.5	8.5	-5.0	0.000
Harmony	1.1	7.5	-6.4	0.000

CO = charter organization

CS = comparison schools (traditional public schools)

Summary. Thus, in all but one case (ELL students for KIPP), both KIPP and Harmony schools had entering 5th grade students that were clearly not disadvantaged relative to students entering public comparison schools. Indeed, students entering KIPP and Harmony schools were decidedly much more advantaged than students entering public comparison schools as measured by student test scores, economically disadvantaged status, ELL status, and special needs status.

Students Entering 6th Grade

This section examines the characteristics of students entering the 6th grade from the 5th grade. This section includes all five COs rather than just the two COs included in the previous section. All five COs were included in this analysis since four of them (KIPP, IDEA, UPLIFT, and YES Preparatory) had schools in which 6th grade was the first grade level offered in middle school and the fifth CO—Harmony charter schools—had students entering at all grade levels.

As noted previously, the analysis of KIPP schools is somewhat complicated in that some KIPP schools had a grade span that started with the 5th grade and ended with the 8th grade.

However, three KIPP schools had grade spans that started with the 6th grade. To make matters even more confusing, the grade spans for some KIPP schools changed from 5th to 8th grade to 6th to 8th grade or vice versa. Ultimately, most of the students entering KIPP in the 6th grade were not entering a KIPP school that started with the 6th grade. Thus, the results for KIPP must be interpreted from a different perspective than the other COs. Future studies should consider this issue more closely and individually examine each KIPP school to see if differences arise from the different grade span configurations.

Similarly, since Harmony schools enrolled students from kindergarten through high school, Harmony charter schools were included in both analyses. Because Harmony schools cover all grade levels, the reader must consider this when making conclusions about Harmony charter schools.

Since this analysis examined the characteristics of students entering the 6th grade, the characteristics in the following analyses were those associated with the student in the 5th grade—the year before entering the CO.

TAKS Mathematics and Reading Scores. Table 7 documents the differences in TAKS mathematics and reading z-scores for students entering the selected CMOs and students from the public comparison schools. As shown in the Table 7, all five of the COs had incoming 6th grade students with substantially greater 5th grade TAKS mathematics and reading scores than public comparison schools and all the differences were statistically significant at the $p < .000$ level. In terms of magnitude, all of the differences for both mathematics and reading were at least 0.200 standard deviations. The differences for Harmony and UPLIFT schools were particularly large—greater than 0.325 standard deviations in both mathematics and reading. The smallest differences were for KIPP which had a difference of 0.230 in mathematics and 0.200 in reading.

Table 7

Comparison of the mathematics and reading z-scores of incoming 6th grade students for high-profile charter and public comparison schools

Charter Name	Charter Organization	Comparisons Schools	Difference: CO - CS	T-Test p-Value
TAKS Mathematics Z Scores				
KIPP		-0.186	0.230	0.000
YES Prep		-0.190	0.278	0.000
IDEA		-0.017	0.219	0.000
Harmony		-0.028	0.348	0.000
UPLIFT		-0.189	0.466	0.000
TAKS Reading Z Scores				
KIPP		-0.240	0.200	0.000
YES Prep		-0.304	0.225	0.000
IDEA		-0.116	0.254	0.000
Harmony		-0.076	0.338	0.000
UPLIFT		-0.291	0.327	0.000

CO = charter organization

CS = comparison schools (traditional public schools)

Economically Disadvantaged Students. Table 8 delineates the differences in the percentage of students entering the charter schools and public comparison schools that were identified as economically disadvantaged in the 5th grade. Three of the five differences were statistically significant and negative, thus indicating the charter organization had a lower percentage of incoming 6th grade students that were designated as economically disadvantaged. The three organizations were Harmony, IDEA, and UPLIFT. The greatest difference was between UPLIFT and its public comparison schools. Specifically, the percentage of students designated as economically disadvantaged was 70.8% in UPLIFT schools-12.4 percentage points lower than for public comparison schools.

There was no statistically significant difference between KIPP schools and public comparison schools while YES Prep schools actually had a slightly greater percentage of incoming students designated as economically disadvantaged relative to public comparison schools. Specifically, the percentage of economically disadvantaged students entering YES Prep schools was 3.7 percentage points greater than for public comparison schools.

Table 8

Comparison of the percentage of incoming 6th grade students identified as economically disadvantaged for high-profile charter and public comparison schools

Charter Organization Name	Percentage of Economically Disadvantaged Students			
	Charter Organization	Comparisons Schools	Difference: CO - CS	T-Test p-Value
KIPP	85.1	86.8	-1.7	0.204
YES Prep	86.5	82.8	3.7	0.000
IDEA	79.6	85.7	-6.1	0.000
Harmony	62.9	69.2	-6.3	0.000
UPLIFT	70.8	83.2	-12.4	0.000

CO = charter organization

CS = comparison schools (traditional public schools)

ELL and Special Needs Students. This section documents the differences in the percentages of ELL and special needs students entering the charter schools and public comparison schools. As shown in Table 9, four of the charter organizations had a statistically significantly greater percentage of incoming students identified as ELL relative to public comparison schools. The four organizations were KIPP, YES Prep, IDEA, and Harmony. All of the differences were between 2.1 and 3.5 percentage points. There was no statistically significant difference in the percentage of ELL students entering UPLIFT and public comparison schools.

With respect to the percentage of special needs students, all five charter organizations had statistically significantly lower percentages of incoming 6th grade students that were identified as special needs students relative to public comparison schools. All of the differences were fairly substantial—greater than 2.3 percentage points. The greatest differences of 5.4 percentage points and 5.6 percentage points were for KIPP and Harmony, respectively.

Table 9

Comparison of the percentage of incoming 6th grade students identified as ELL and special needs for high-profile charter and public comparison schools

Charter Name	Charter Organization	Comparisons Schools	Difference: CO - CS	T-Test p-Value
Percentage of ELL Students				
KIPP	2.5	4.6	-2.1	0.000
YES Prep	2.2	4.4	-2.2	0.000
IDEA	5.3	8.8	-3.5	0.000
Harmony	2.4	5.9	-3.5	0.000
UPLIFT	3.2	3.7	-0.5	0.363
Percentage of Special Needs Students				
KIPP	4.2	9.6	-5.4	0.000
YES Prep	4.5	6.8	-2.3	0.000
IDEA	3.1	7.3	-4.2	0.000
Harmony	2.2	7.8	-5.6	0.000
UPLIFT	3.3	7.4	-4.1	0.000

CO = charter organization

CS = comparison schools (traditional public schools)

Summary. Similar to the findings for incoming 5th grade students, charter organizations did not enroll incoming 6th grade students that were more “disadvantaged” than students entering public schools located in the same zip code. In fact, the opposite was true—charter organizations actually enrolled students who were arguably more advantaged as measured by test scores, economically disadvantaged status, ELL status, and special needs status.

Conclusion and Discussion

This study examined the characteristics of students entering high-profile Texas charter as compared to the characteristics of students entering public schools located within the same zip code as the charter schools under study. This is one of the first studies to examine this issue at the zip code level and certainly the first in Texas focusing on high-profile charter schools.

Contrary to the profile often portrayed by some policymakers, charter advocates, and media, students entering the selected high-profile charter schools in this study are more advantaged than students entering public schools located in the same zip code as the charter schools under study. Indeed, the results of this study show that, relative to public comparison schools, the selected charter schools had:

- Entering students with greater prior TAKS scores in both mathematics and reading;
- Lower percentages of incoming students designated as ELL;
- Lower percentages of incoming students identified as special needs; and,
- Approximately equal percentages of economically disadvantaged students entering charter schools relative to public comparison schools.

In other words, rather than serving more disadvantaged students, the findings of this study suggest that the five high-profile/high-enrollment COs in this study actually served a more *advantaged* clientele relative to public comparison schools. Thus, the comparisons that have been made between these COs and traditional public schools—especially traditional public schools in the same neighborhoods as the CO schools—have been “apples-to-oranges” comparisons rather than “apples-to-apples” comparisons. The public and policymakers need to look past the percentages of economically disadvantaged students and disabuse themselves of the notion that high percentages of economically disadvantaged students equates to lower-performing students. This study shows that many economically disadvantaged students—particularly those entering the five COs in this study—actually perform at a level equal to or greater than the average Texas student. In fact, students entering the charter schools under study tended to have average or above average TAKS achievement and certainly greater achievement levels than public comparison schools.

These differences in the characteristics of students entering COs and public comparison schools are critical because a plethora of research has shown that peer effects—particularly those associated with achievement levels—has a profound effect on student achievement. Given the substantial impact on student performance of peer effects, one of the ingredients of the so-called “secret sauce” of “high-performing” charter schools may simply be the skimming of higher-performing students from feeder schools into the charter schools.

Ultimately, while far more detailed and sophisticated research needs to occur in this area, these preliminary results should raise serious questions about the claims made by charter advocates about the characteristics of students entering their schools and why their schools may appear to have greater levels of achievement. Further research would need to investigate the effects of attrition on the test score distribution as a potential additional “secret sauce” ingredient. These issues should be thoroughly investigated before Texas (or any other state) invests even further in the expansion of charter schools as a solution to improving student performance.

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¹ Data were retrieved from <http://ritter.tea.state.tx.us/perfreport/aeis/> and analyzed by the author.

² An exception to this rule is cyber schools that can enroll students regardless of geographic location. This study, however, does not examine cyber schools.