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Schools Without Diversity: Education Management Organizations, Charter Schools, and the Demographic Stratification of the American School System

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Executive Summary

Whether charter schools will increase segregation in schools and, ultimately, in society is an important and hotly contested question. Charter proponents point to the high enrollments of minority and economically disadvantaged pupils in charter schools, compare them with overall state enrollment percentages, and contend that charter schools are integrative. Opponents explain these enrollment levels by noting the high minority and poverty concentrations in the urban areas where charter schools are centered. They quote other research suggesting that the schools exacerbate existing segregation.

Gary Miron, Jessica Urschel, William Mathis, and Elana Tornquist examine this issue using a national data base of schools operated by Education Management Organizations (EMOs), 95% of which are charter schools. The study explores whether these EMO-operated charter schools integrate or segregate students by four key demographic characteristics: ethnic/minority classification, socio-economic status, disabling condition and English language facility.

The database was created from a variety of sources, including the National Center for Education Statistics (NCES) Common Core of Data and the For-Profit and Nonprofit Annual Profiles of Education Management Organizations published by the Commercialism in Education Research Unit (CERU). In total, the authors were able to gather data on 968 schools, which comprised 89% of schools operated by EMOs in 2006-2007. Longitudinal datasets were constructed that included two additional years—2000-2001 and 2003-2004—which allowed the authors to track segregation/integration trends over time. Demographic characteristics on each charter school were compared with those same characteristics from the sending public school district.

Descriptive comparisons were made using means and were tested by analyses of variance. To measure segregation, however, data aggregated to mean scores misleads by hiding important differences. Accordingly, the distribution of the scores required examination. Cut-scores were established representing various degrees of segregation along a five-point scale from highly segregative to highly integrative.

Five primary findings were reached:

- Charter schools operated by EMOs tend to be strongly racial segregative for both minority and majority students as compared with the composition of the sending district. Only one-fourth of the charter schools had a composition relatively similar to that of the sending district.
- For economically challenged students, EMO-operated charter schools more strongly segregate students than do their respective local districts. The student population is pushed out to the extremes. Most charter schools were divided into either very segregative high-income schools or very segregative low-income

schools. Between 70% and 73% of the schools were in the extreme categories of the scale, depending on the comparison.

- EMO-operated schools consistently enrolled a lower proportion of special education children than their home district. Past research has shown that charter schools have less capacity for special education children. Thus, parents tended to select away (or were counseled away) from charter schools. A small group of charter schools focused on special needs children and were, consequently, highly segregative in this regard.
- English Language Learners (ELL) were also consistently underrepresented in charter schools in every comparison. While one-third of the EMO schools had an ELL population similar to the sending district, the distribution was highly skewed, with well over half the EMO schools being segregated.
- When examined for the years 2001 to 2007, the composition of the charter schools trended closer to the public school district for each of the four demographic groups examined. However, this phenomenon was an artifact of balancing extremes. For both for-profit and nonprofit EMOs, the segregation patterns of 2000-2001 were virtually identical to those in 2006-2007. Consequently, a pattern of segregation attributable to EMO-operated schools is being maintained.

Looking specifically at racial segregation, both White flight and minority flight are evidenced in charter schools. Compounding the effects of the nation's highly segregated neighborhoods, policy makers must consider the economic, social and ethnic segregative effects of charter schools along with potential segregation that may be driven by other forms of school choice.

Given that educational equality, whether financial or programmatic, has not occurred in this nation, the perpetuation of educational policies that have the effect of further dividing society is troubling and calls for rectification.

Introduction

With enormous implications for society and education, school choice programs have the potential to affect segregation and social stratification—by race, income, English language learner status, or special needs status. On the one hand, it is claimed that publicly funded school choice creates new options for families that have limited options aside from their neighborhood public school. Those neighborhood schools are often segregated due to the residential segregation of neighborhoods in the United States. This opens an opportunity for school choice to mitigate existing school segregation. On the other hand, it is claimed that the actual effect of school choice is to exacerbate existing inequities, making schools even more segregated and socially stratified.

Prior to the advent of charter schools, publicly funded choice systems were relatively small and therefore incapable of noticeably affecting levels of segregation. However, amidst considerable political turmoil over the past two decades, almost 5,000 charter schools have emerged, serving around 1.5 million students, with a presence in all but 10 states. This rapidly growing form of publicly funded school choice has the potential to drastically alter the diversity of the nation's schools.

Although not initially considered part of the charter school movement, private for-profit and nonprofit education management organizations (EMOs) have come to play an increasingly larger role in the organization, management, growth and expansion of charter schools. According to the annual EMO *Profiles* reports, these organizations currently operate close to one-third of the nation's charter schools.[1]

Because more than half of EMO companies or organizations are for-profit entities, they might be expected to respond to market incentives to decrease costs or otherwise increase profitability. (In fact, comparable market forces might be strongly felt by nonprofit EMOs.) For instance, they might choose to serve less-costly-to-educate students, such as students at the lower elementary level, or they might seek out smaller proportions of students classified as low-income, special needs, and English Language Learners (ELL). Yet, as these interpretations are based on anecdotes, they are speculative. Aside from the annual *Profiles* reports of EMOs, very little systematic research has been done on how EMOs influence and impact the demographic composition of schools. This study of segregative effects—and the extensive database upon which it is built—is the most comprehensive study to explore how EMOs and their charter schools impact the distribution of various categories of students.

Research Questions

The primary purpose of this study is to examine how EMOs appear to affect the segregation or integration of schools by race, economic class, special education status, and language. This is accomplished through examining differences in enrollment patterns between schools operated by EMOs and schools run by

their neighboring local districts. The shifts in segregative/integrative patterns over time are also examined.

In addition, this study explores whether for-profit and nonprofit status, the number of schools operated by an EMO, the instructional levels of schools (elementary, middle, and high), and the number of years in operation are associated with these patterns of segregative/integrative balances.

Education Management Organizations

An EMO, as the term is used here, is a private organization or firm that directly or indirectly receives public funds to manage schools, whether district schools or charter schools. Education management organizations emerged in the early 1990s in the context of widespread interest in so-called market-based school reform proposals. Ninety-five percent of EMO-operated schools are charter schools and employ a wide variety of implicit or explicit admissions rules. The EMO-operated public schools included in this report use the same admissions rules as regular public schools.[2] That is, none are expressly restricted to a given subpopulation of students.

In this study, we include analyses that distinguish between for-profit and nonprofit EMOs. Schools operated by for-profit EMOs appeared first and grew quite rapidly in number between 1998 and 2006. Since then the number of for-profit EMO schools has been rising at a much slower rate than have the nonprofits. The result is a fairly even split. During the 2008-2009 school year, 103 nonprofit EMOs managed 609 public schools in 25 states[3] and 95 for-profit EMOs managed 733 public schools in 31 states.[4]

Some analyses presented in this report also classify EMOs by the number of schools they operate, since they may be large regional or national franchises or single-site operators. We define large-sized EMOs as those that operate 10 or more schools, while medium-sized EMOs operate between 4 and 9 schools, and small-sized EMOs operate between 1 and 3 schools.

Most research and policy attention until recently was given to the for-profit EMOs. However, increasing interest has been devoted to the fast-growing nonprofit organizations that manage charter schools. A subset of these nonprofit organizations is known as charter management organizations (CMOs). CMOs are distinguished by receiving substantial financial support from private foundations for the purpose of helping bring what they believe are successful models up to scale.[5]

Review of Relevant Literature

There has long been significant concern about how school choice might increase or accelerate the segregation of public schools.[6] Proponents of charter schools say they can reduce school segregation by giving students the opportunity to attend schools outside their segregated residential neighborhoods.[7] However, critics fear that charter schools may increase segregation by enrolling students disproportionately (at a given school) from particular racial/ethnic and socioeconomic groups.

Due to the concerns about charter schools accelerating the segregation of public schools, sixteen states have regulations in place that require or encourage charter schools to take positive action to ensure diversity.[8] States such as Connecticut require charter schools to recruit from all segments of the district. In South Carolina, the racial composition of charter schools is required not to differ by more than 20% from that of the local school district.[9] Unfortunately, studies in states with such regulations commonly reported that the regulations were being ignored or not enforced.[10]

A related concern is that charter schools may increase inequalities by providing uneven or inferior services to students who have special needs, who come from low-income families, or who are English Language Learners (ELL). This same concern has been voiced in connection with other school choice reforms. Yet, because of the rapid growth of EMO-operated (and other) charter schools, the issue of segregation has become increasingly important in the charter sector.

In the past decade, many studies have examined the impact charter schools appear to be having on segregation.[11] When reviewing this literature, it becomes clear that the results are often influenced by the research design and the comparison group employed. There have been four general approaches:

1. Studies that compare charter schools' aggregate data to state or national aggregate data;
2. Studies that compare aggregated charter school data to aggregated local district data;
3. Studies that are based on comparisons between individual schools and local districts; and
4. Studies that track individual students and compare the demographic characteristics of each student's previous school with the chosen charter school.

As explained below, the present study uses the third approach. But research using each of the four approaches is briefly discussed below.

Comparisons with State or National Data

These studies offer broad comparisons of enrollment between charter schools, which in most states are concentrated in urban areas, and national or state comparison groups. Not surprisingly, these studies tend to report that charter schools serve more minority and low-income students than the state or national average.

The most noteworthy reports of this type were prepared by RPP International, which conducted a four-year study of the federally funded Public Charter School Program.[12] The RPP study found that African American and Hispanic students were overrepresented in charter schools compared with traditional public schools. The study also found that charter schools in around 60% of the states enrolled a higher percentage of non-White students than all public schools in those states. Likewise, charter schools served a slightly higher percentage of students from low-income families than did pooled data for all public schools.

A similar study was undertaken by Rapp and Eckes in 2007.[13] They found that in two-thirds of the 32 states they examined, charter schools enrolled a higher percentage of minority students than the aggregate totals for public schools. The study concluded that although it is true that charter schools have the opportunity to be more racially integrated, they have not done so.

Because charter schools are primarily located in urban areas, the national or state comparison groups used by these studies do not provide a relevant comparison. Unfortunately, it is not uncommon for advocacy groups to misapply findings from studies in this category to suggest that charter schools may ameliorate school-level segregation—claims not supported at all by the studies' data or methods.

An example of an innovative study that examines the issue of segregation in charter schools with a national database was prepared by Carnoy, Jacobsen, Mishel, and Rothstein in 2005.[14] They used results from the NAEP study to compare a sample of students in charter schools with similar students in traditional public schools. Rather than aggregate or pool the data for comparison, they disaggregated the data for both charter schools and district schools by race/ethnicity, income, and degree of urbanicity. Their analyses, which helped to ensure that similar urban populations were being compared, revealed that charter schools enrolled a lower percentage of Black, Hispanic, and White students eligible for a free or reduced-priced lunch than did district schools.

Comparisons Between Aggregated District and Aggregated Charter School Data

Studies that compare overall charter enrollments in a given district with that district's overall non-charter enrollment typically find that charter schools serve similar proportions of minority and at-risk students as their local districts. The shortcoming of this approach is that it can miss important school-level patterns. Individual charter (and non-charter) school-to-district differences are concealed when the data are pooled or aggregated. (This phenomenon will be observed below when the arithmetic mean differences are compared to the much larger variations.)

One of the most prominent examples of this kind of error is the study of New York City charter schools by Hoxby, Murarka, and Kang in 2009.[15] The authors reported that compared to the city district, charter school students were more likely to be Black and from low-income families. However, a closer look revealed that when these charter schools were compared to the traditional public schools in the same borough or neighborhood, charter school students were less poor, less likely to be disabled, and more likely to speak English.[16] Further, the Hoxby *et al.* report was subject to methodological criticism for not being peer-reviewed and not providing sufficient data to justify the conclusions.[17]

Comparisons of Individual Schools and Their Respective Local District

These studies are based on school-level analyses that compare individual schools with their respective local district or neighborhood schools. This kind of

comparison makes it possible to uncover great variations among the schools—variations that are concealed in the previous categories. Studies in this category tend to reach less optimistic conclusions about the impact of charter schools on segregation, and most of the studies we reviewed are in this category.[18] Since the data and methods used in these studies allow for stronger conclusions, and since our study falls into this category, we highlight and describe key findings from seven major and representative studies in this group:

- Renzulli and Evans (2005)[19] found that charter schools were facilitating "White flight" since White families tended to choose schools with higher concentrations of White students. The authors concluded that racial competition within specific areas was "bolstering the 'return to school segregation'" (p. 398).
- Cobb and Glass (1999)[20] used geographic maps to compare the ethnic composition of Arizona's charter schools with those of their surrounding public schools. Nearly half of the charter schools exhibited substantial ethnic separation. The Arizona charter schools were typically 20 percentage points higher in White enrollment than comparable traditional public schools. Charter schools with a majority of ethnic-minority students tended to be either vocational schools that do not lead to college or "schools of last resort" for students expelled from their traditional public schools.
- In California, Powers (2008)[21] found that charter schools were not ameliorating racial segregation in public education and may well be exacerbating existing patterns of school segregation.
- In Michigan, Miron and Nelson (2002)[22] found that charter schools differed substantially from local districts in terms of ethnic background, family income, and proportion of children with disabilities.
- Fusarelli (2002)[23] found that Texas charter schools disproportionately served minorities because a large portion of them were created explicitly to meet the needs of minority and at-risk children. Accordingly, Texas charter schools mostly serve minorities in segregated contexts and do not serve Whites and minorities together at the same rate as the non-charter public schools.
- In Washington, D.C., Lacireno-Paquet, Holyoke, Moser, and Henig (2002)[24] found little evidence that market-oriented charters focused on an elite clientele, although they did find that these schools were less likely than public and non-market charters to serve some high-need populations. The authors found that rather than cream-skimming the student population, market-oriented charter schools may be "cropping" off services to students whose language or special education needs make them more costly to educate.
- In Minnesota, the Institute on Race and Poverty (2008)[25] found that charter schools have intensified racial and economic segregation. This study found that charters segregated students of color more deeply than the already highly segregated public schools. In some predomi-

nantly White urban and suburban neighborhoods, charter schools served as outlets for "White flight" from public schools.

Comparisons of the Characteristics of Individual Students with those of Charter Schools and Sending Schools

Studies in this category examine individual students' characteristics in relation to the demographics of the schools they are leaving and those they are entering. Studies of this sort are conceptually the most powerful, but are more complicated and are often not feasible since they require student-level datasets.

These reports generally find that students tend to leave more diverse public schools and enroll in less diverse charter schools.

- In North Carolina, Bifulco & Ladd (2006)[26] found that charter schools increased the racial segregation of both Black and White students and further widened the achievement gap between them. Moreover, the negative effects of charter schools on the achievement of Black students was driven by students who transferred to charter schools that were more racially isolated than the schools they left.
- A study of charter schools in Texas and California conducted by Booker, Zimmer & Buddin (2005)[27] examined the sorting patterns of students in terms of ethnic background and standardized test scores. In both states, the authors found that Black students were more likely to move to charter schools with higher concentrations of Black students than the traditional public schools they were leaving.
- In their study of charter schools in eight states, Zimmer, Gill, Booker, Lavertu, Sass & Witte (2009)28 found that transfers to charter schools did not create dramatic shifts in the sorting of students by ethnicity, although transfers to charter schools tend to marginally reduce racial integration in Philadelphia and in Texas while marginally increasing racial integration in Chicago. The study also concluded that Black students are more likely to self-segregate by moving to schools with higher concentrations of African American students.
- In Michigan, Ni (2007)[29] used a student-level dataset to compare charter schools with the public schools from which they drew their students. Charter schools tended to be more racially segregated when they drew students from their local district. Charter schools drawing students from outside their host district showed some positive evidence of racial integration.
- One of the most sophisticated studies on this topic was undertaken in Arizona by David Garcia (2008).[30] Garcia used longitudinal student data to compare charter schools with the schools the students left. Charter elementary school choosers entered schools that were more racially segregated than the district schools they exited. When they entered high schools, however, choosers entered charter schools that were as racially segregated or more integrated than the district schools

they exited. The author concluded that racial segregation patterns were the result of self-segregation by White, Black and Native American students.

Thus far, only a few studies have considered the subgroup of charter schools operated by EMOs. However, Miron & Nelson (2002)[31] found a tendency for the EMO-operated charter schools in Michigan to target less-costly-to-educate students. Lacireno-Paquet (2004)[32] found that small EMOs served significantly lower percentages of minority students. Her results suggest that not all charter schools are the same and that policy design and organizational form matter in determining who charter schools will serve.

Segregation by Special Education and ELL Status

Only a small number of researchers have considered whether charter schools and local district schools serve similar populations of students with disabilities or students classified as English Language Learners (ELL). The RPP International study from 2000[33] indicated that charter schools enrolled about the same percentage of students who were ELL as did traditional public schools across the country. Nationwide, a smaller percentage of students enrolled in charter schools have disabilities than is the case in traditional public schools.[34] (Note that special needs students are presumably distributed fairly evenly across urban, rural, and suburban locations, so charter school location plays a lesser role in undermining such aggregate analyses.) Supporting this conclusion, Howe & Welner[35] noted that charter schools across the nation enrolled a lower percentage of special needs students than did public schools. In 15 states and Washington, D.C., the percentage of special education students enrolled in charter schools was less than the percentage enrolled in the public schools. Seven states with relatively limited charter school programs enrolled a larger percentage of special education students than did the public schools.[36] In addition to enrolling fewer students with disabilities, the disabled students that charter schools do enroll have tended to have less severe and less costly disabilities than those in public schools.[37]

In looking for reasons for this disparity, the U.S. Department of Education funded an investigation in 32 charter schools in 15 states.[38] Interviews with parents, teachers, and school administrators revealed that parents of children with disabilities were attracted to charter schools because of dissatisfaction with their previous school or a belief that a smaller and warmer learning environment might benefit their child. Some parents preferred a charter school because they believed it offered a "fresh start" where the child need not be formally labeled as different—a label they believed was more likely in a conventional public school. Moreover, studies have found that some charter school administrators "counsel out" families of prospective students whose needs exceed the capacity of the school.[39] Administrators at one-fourth of the charter schools visited in the Department of Education study reported having advised parents of disabled children that the school was not "a good fit" for their child.[40] No follow-up study has been conducted, and it is unclear if the same problems remain a decade later.

Over the past decade, the body of research on segregative effects has become more rigorous and the conclusions drawn are clearer and more consistent: charter schools tend to accelerate the process of re-segregating U.S. schools. This study takes a national view and focuses specifically on the charter schools that are managed by EMOs, attempting to delve deeper into patterns within the larger charter school sector.

Methods

In this section, we address issues related to methods including data sources, the creation of the national EMO dataset, outcome measures, analysis, and reporting.

Data Sources

The dataset used in this study was created from a variety of sources. Each year for more than a decade, the Commercialism in Education Research Unit at Arizona State University (now working along with the Education and the Public Interest Center at the University of Colorado at Boulder) has published a "Profiles" report detailing the management of charter schools by for-profit EMOs. More recently, a second report has been included, focusing on nonprofit EMOs. The comprehensive datasets used for these annual reports on nonprofit and for-profit EMOs were collected and assembled by researchers at Western Michigan University and provide a primary source of data for this current study.[41] Data from state education agencies and key informants within each state were used to annually update information on the EMOs and EMO-operated schools for the annual EMO *Profiles* reports. The EMO's for-profit or nonprofit status was determined by directly asking the EMOs, by reviewing state government registries of businesses organized as for-profit entities, or both. We used Guidestar,[42] which has a registry of nonprofit reports and tax forms, to confirm nonprofit entities.

Because our dataset does not include student demographic characteristics for schools operated by EMOs, we used the national Common Core of Data (CCD) as the primary source.[43] Enrollment, race/ethnicity, and free and reduced-priced lunch (FRL) status were gathered from school-level datasets. FRL is the most commonly used proxy for school poverty levels and is the metric used for that purpose in this study. District-level datasets were used for obtaining special education and ELL information. Each EMO was compared with the district-level dataset to determine variations. While comparisons with the local district are generally not as strong as matched school comparisons, many indicators in the national dataset were only available at the district level. We recognize that diversity within districts can be large, particularly for larger districts, and this is a limitation in the study.

The most recent year for which we could obtain CCD data was 2006-07. CCD data from 2000-01 and 2003-04 were also used to examine longitudinal trends.

Creation of a National EMO Dataset

Creating the national dataset for each EMO-operated school and each school's respective host district was a complex process. We started with the original databases created for the two 2008-2009 *Profiles* reports (for for-profit and nonprofit EMOs). For each school in our nonprofit and for-profit databases (N=1,343), we searched for the school's name on the National Center for Education Statistics (NCES) website. Of this number, NCES listed 1,079 of these as operating in 2006-2007.[44]

From the CCD, we extracted school characteristics such as enrollment, student background demographics, and general school characteristics for the 2006-2007, 2003-2004, and 2000-2001 school years.

School-level data regarding ELL and special education students showed more incomplete and less detailed data. Only district-level data included variables related to ELL and special education, which meant that we had included only states where charter schools are designated as their own district (or LEA). Special education students were defined as those having Individual Education Plans (IEPs). Comparisons were made with EMO and host-district numbers and proportions of ELL and FRL students. This procedure was used for 2006-2007, 2003-2004, and 2000-2001.[45]

Target and Achieved Samples

Table 1 provides data that describe our targeted sample of schools (all EMO-operated schools that were in operation in the U.S. during the 2006-07 school year). In total, we were able to gather data on 968 schools, which comprised 89.7% of the target population of schools. In order to be included, both the EMO-operated school and its respective district had to have available data on at least one of the four demographic measures considered in this study. In terms of specific variables, such as special education and ELL, only about half of the charter schools had viable data (described below).

Table 1. Target and Actual Sample of EMO-Operated Schools, 2006-07

	Total number of schools in operation, 2006-07	Number with NCES ID numbers	Number with NCES ID numbers and data
For-profit	627	570	550
Nonprofit	452	435	418
Total EMO	1,079	1,005	968

Description of schools included in the study. With 95% of EMO-operated schools being charter schools, we are primarily studying a subset of charter schools managed by private entities. There were only 52 district schools (5.4% of the overall EMO population of schools) that were managed by EMOs and had available data. The district schools operated by EMOs usually did not have dis-

tinct school-level data on special education or ELL and were therefore removed from those specific analyses.

There were 189 EMOs operating 968 schools, enrolling 370,209 students in 2006-07. While there were more nonprofit corporations (99 nonprofit and 90 for-profit EMOs), the for-profit companies operated more schools and enrolled nearly twice as many students. The for-profit EMOs operated 57% of the schools we examined and enrolled 67% of the students.

Table 2. EMOs by Profit Status and by the Size of the EMOs

	For-Profit EMOs		Nonprofit EMOs		Total EMOs	
	Number	Percent	Number	Percent	Number	Percent
Large-Sized EMOs	16	17.8%	16	16.2%	32	16.9%
Medium-Sized EMOs	20	22.2%	39	39.4%	59	31.2%
Small-Sized EMOs	54	60.0%	44	44.4%	98	51.9%
Total	90	100%	99	100%	189	100%

Virtual schools made up 4.5% of the total number of schools. Of the 43 virtual schools for which we had data, 40 are managed by for-profit EMOs. Virtual schools tended to enroll more students than the brick-and-mortar schools.

Figure 1 illustrates the breakout of the schools included in the study according to instructional level. Elementary schools are the most common. "Other" includes schools that cover more than one school level or schools that are ungraded.

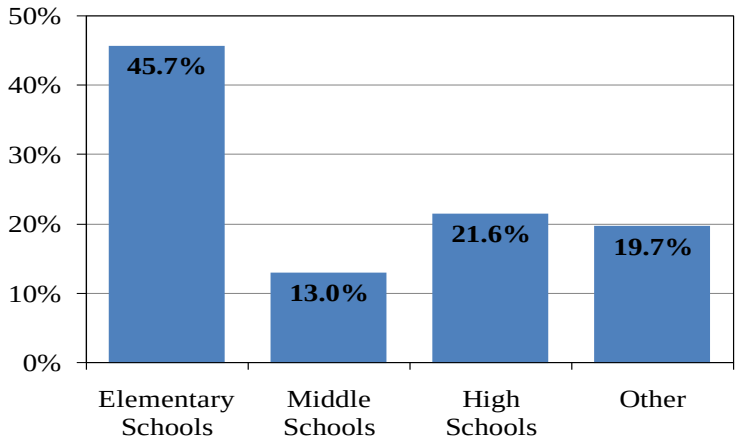


Figure 1. Distribution of Schools Included in the Study, by Instructional Level

Outcome Measures

When examining equity or segregation, a conventional method is the use of indices illustrating the extent to which students are exposed to or isolated from other groups. A study by Frankenberg, Lee, and Orfield (2003)[46] was grounded in such an exposure index that used cut scores. The authors created categories of

schools labeled "integrated," "segregated," or "extremely segregated." Ladd, Fiske and Ruijs (2009)[47] used a "segregation index," a gap-based measure similar to a dissimilarity index. Booker, Zimmer, and Budden (2005)[48] used a Herfindahl index, which measured the enrollment concentration of particular racial/ethnic groups. The range of these indices are typically 0 to 1, with scores close to 0 indicating relative balance and scores closer to 1 referring to highly segregated schools.

While these indices provide a measure with which to compare schools, they are not always presented relative to the local district. Thus, there is no normative base and the nature and scope of differences cannot be determined. In contrast, this study focuses on the comparative balance of subgroups within charter schools and local districts. This allows us to determine whether the EMO-operated schools are attracting more of one particular group from the local schools, which may result in further segregation.

Differential Scores. We calculated a "differential score" for each of the four subgroups of students (minority, low-income, special education, and ELL). This score is an easily interpreted percentage-point difference between an EMO-operated school indicator and the local district indicator. Theoretically, the differential scores can range from -100% to +100%.

A positive differential score means that the charter school has a higher percentage of students in that category than the local district. A negative score means that the EMO-operated school has a lower percentage. For example, if an EMO-operated school is comprised of 50% minority students and the local district is comprised of 60% minority students, then the minority differential would be -10.

Weighting. Because of the small size of some of the charter schools, it was easy for a particular group to be highly over- or under-represented, particularly in the comparisons of special education and ELL students. To prevent this skewing of school-level results, we weighted schools' results by enrollment.[49]

Analysis

Our examination of the key outcome differences (minority, FRL, IEP and ELL) involved descriptive and cut-score distributional analysis. Each outcome measure was analyzed in relation to school characteristics, EMO type (for-profit or nonprofit), size, and instructional level of the school. One way analysis of variance (ANOVA) was employed to explore differences across groups of schools. Appendix B describes the results from these tests.

Limitations

There are three general limitations.

Completeness of data. The study includes 90% of the EMO-operated schools, which we consider a satisfactory response rate. Nevertheless, the level of completeness of the data on special education and ELL was less than desirable. This was particularly problematic in states where EMOs are not considered Local

Education Authorities (LEAs) and thus did not have the legal responsibility for providing special education services.[50]

Selection of comparison groups. For this study, we use each EMO school's local school district as a comparison group. In most instances, the local district provides a fair, sensible comparison group. We recognize, nonetheless, that large differences can exist within districts, especially large urban districts. In some cases, the district profile may not be similar to the immediate community from which a school draws its students. Moreover, our approach does not allow us to determine whether, for instance, the minority differential for a charter school in such a district is greater or lesser than the minority differential of other individual (non-charter) schools in the district. While matched sets of EMO and public neighborhood-based schools would be desirable, that approach was precluded by the limitations of the national data available from NCES.

Evolving and changing group of schools. Although we examine data for a large proportion of the EMO-operated schools existing in 2006-07, it is important to note that the universe of schools operated by EMOs is changing. In recent years, growth in for-profit EMOs has slowed while nonprofit EMOs have accelerated. One-hundred and fifty eight nonprofit schools have been founded and 106 for-profit schools are known to have opened in the two years subsequent to the most recent year for which CCD national data were reported (i.e., 2006-2007). Our examination of longitudinal trends casts light on this question but inferences from past years should be considered cautiously.

Findings

Differences in Minority Enrollment

Two-thirds of the student populations of EMO-operated schools are non-White. This includes Latino, Native American, African American, and Asian American. In this study we also use the term "minority" to refer to these students. This reflects the location of most EMOs in concentrated high-minority urban areas.

The average minority differential score shows that, on average, the schools operated by EMOs have 1.47 percentage points more minority students than their local districts (see detailed findings in Appendix B). The recently increasing numbers of nonprofit EMOs enroll significantly higher proportions of minority students compared with the for-profit EMOs.

At first glance, the average differences might not necessarily appear meaningful for policy-making purposes. However, mean scores for groups composed of extreme scores may look very similar to groups of schools with smaller variation.

To illumine this concern, compare Figure 2 with Figure 3 (also see the descriptive data and statistical tests in Appendix B). Figure 2 would suggest marginal difference, while the histogram in Figure 3 shows extremely large variations, with some schools enrolling much higher concentrations of minority students than local districts, while others enroll much higher proportions of majority children.

There are large proportions of schools that are far above and far below the mean.

In Figure 3, schools are sorted into five categories:

- *Very Segregative White*: Schools that have a differential score greater than -10 percentage points.
- *Segregative White*: Schools that have a differential score between -5 and -10 percentage points.
- *Not Segregative*: Schools that had a differential score that was between -5 and +5 percentage points.
- *Segregative Minority*: Schools that have a differential score between +5 and +10 percentage points.
- *Very Segregative Minority*: Schools that have a differential score greater than +10 percentage points.

One would expect most EMO-operated schools to have a similar composition of minority students as the local district therefore the center column representing "Not Segregative" would be the largest category. The actual distribution, however, shows large bers of schools with extreme ferences in racial composition. While differences are relatively smaller for nonprofit EMOs, both groups show strong segregative fects. Interestingly, the evidence

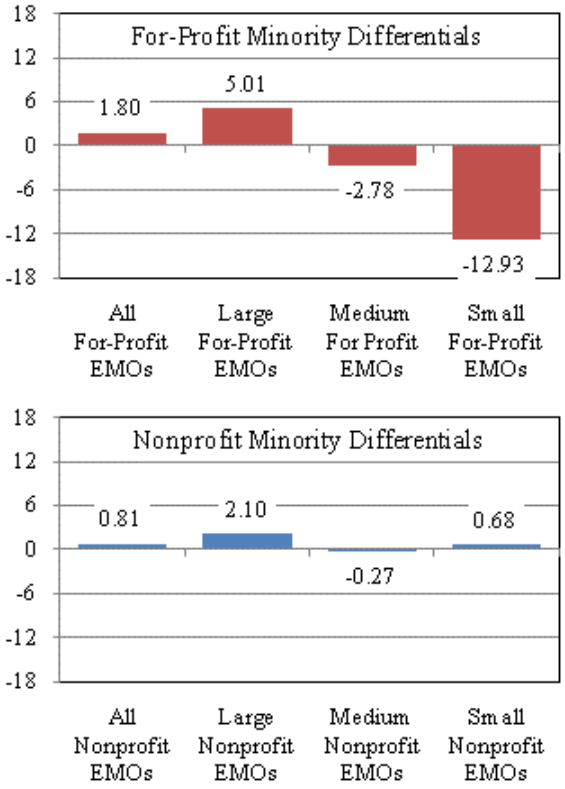


Figure 2. Minority Differentials for Both For-Profit and Nonprofit EMOs

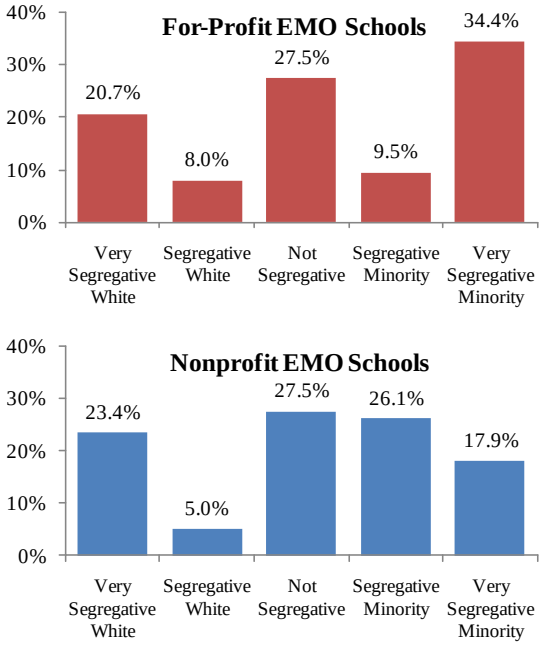


Figure 3. Distribution of EMO-Operated Schools according to Segregative Pattern

shows that "Minority-flight" schools are more prevalent than "White-flight" schools within the for-profit sector.

These patterns can be illustrated by specific companies. Two large-size for-profit EMOs that stood out because they had more than 97% African American students enrolled in their schools and because they had large minority differentials were Charter Schools Administrative Services and Victory Schools Inc. (See Appendix A for data broken out for specific EMOs.) In addition, the virtual schools, particularly those run by K12 Inc., served relatively few minority students and had some of the most negative minority differential scores.

Among the nonprofit EMOs, Green Dot Public Schools and KIPP were exceptional in the proportion of minority students they serve, with high minority differentials. Their differential scores, however, were not as positive and large as other nonprofit EMOs, such as ICEF Public Schools or Lighthouse Academies. Among the large nonprofit EMOs, Constellation Schools, which operates schools around Cleveland, Ohio, had one of the most negative minority differential scores, meaning its schools enrolled relatively small percentages of minority students relative to their local districts.

Composition by Students' Family Income

The federal free or reduced-priced lunch (FRL) program is the proxy for students from low-income families. While we had data on race/ethnicity for 968 schools, we were able to obtain FRL data on only 852 EMO-operated schools.

The proportion of low-income students enrolled in the EMO-operated schools is similar to what is typically seen across a diverse array of urban and suburban school districts. Schools with higher concentrations of low-income students, on average, perform less well on standardized tests and their students are more likely to require remedial support. These features might suggest that urban areas would not be attractive to EMOs—particularly for-profit EMOs. Nevertheless, urban areas clearly provide a viable market for new charter schools.

In order to determine whether the EMO-operated schools were enrolling a similar proportion of low-income students, we calculated a differential score (FRL Differential) in the same manner as described in the previous section. Figure 4 illustrates the mean

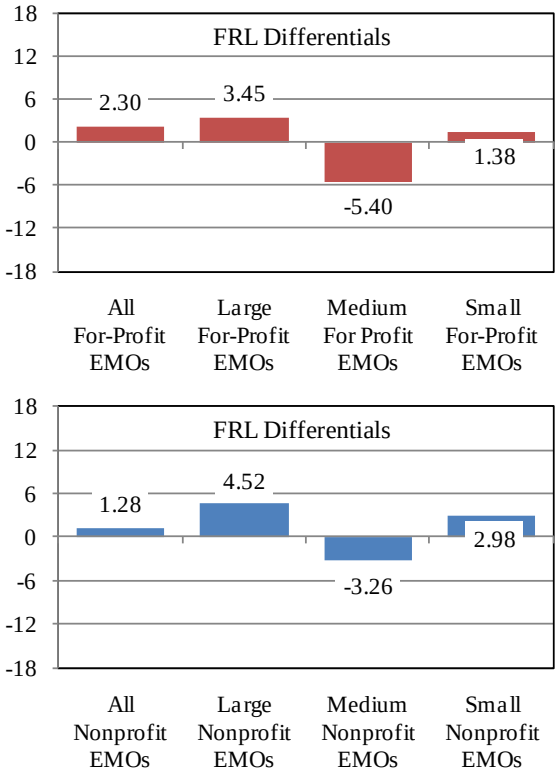


Figure 4. FRL Differentials for Both For-Profit and Nonprofit EMOs

percentage differences for the comparisons. The average FRL Differential score was +1.95, which means that schools operated by EMOs had 1.95 percentage points more low-income students than did their surrounding districts. The major finding, however, was in the extremely large variations among the schools. Some enrolled much higher concentrations of low-income students than local districts, while others enrolled relatively few low-income students. Figure 5 illustrates the disparities. The two histograms in Figure 5 actually display an inverted distribution, with large numbers of schools classified as Very Segregative High Income or Very Segregative Low Income.

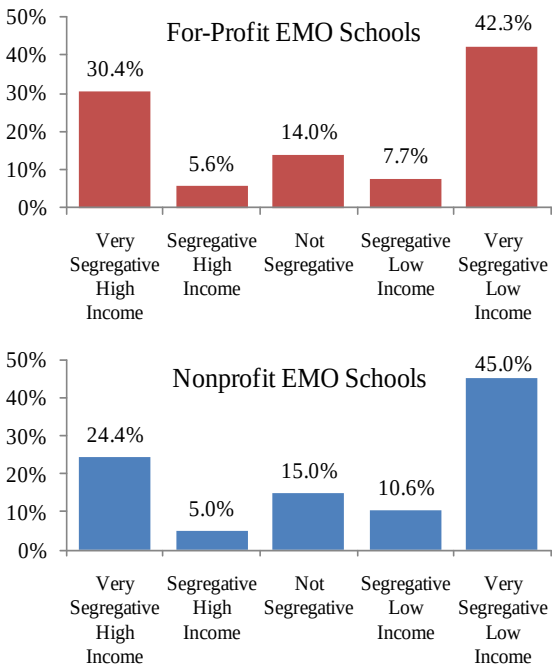


Figure 5. Distribution of EMO-Operated Schools according to Poverty-level Segregative Pattern

This pattern holds true both for for-profit and nonprofit EMO schools. A much larger proportion of the EMO schools had larger low-income populations than their local districts. However, the schools in the for-profit category had more schools classified as segregative high income than did the nonprofit EMO-operated schools.

Large-sized for-profit EMOs that were exceptional in serving low-income students include Victory Schools Inc., and Mosaica Education Inc. Both of these companies had schools that—on average—also had large positive FRL differentials. The EMOs operating virtual schools, such as K12 Inc. and Connections Academy, served relatively low proportions of FRL students, and they also had some of the largest and most negative FRL differential scores.

Among the large-sized nonprofit EMOs, the Academy for Urban School Leadership and the Alliance for College-Ready Public Schools were exceptional in the proportion of low-income students they served (96% and 91%, respectively). Both these nonprofit EMOs were ranked near the top in terms of their large positive FRL differential scores. In summary, these two nonprofit EMOs not only served large proportions of low-income students, they also served a substantially higher proportion of low-income students relative to the local districts in which their schools were located. Among the large nonprofit EMOs, Concept Schools and Achievement First stood out with large and negative FRL differentials. (See Appendix A for more data broken out for specific EMOs.)

Composition by Special Education Status

Special education has long been a controversial issue for charter schools. By design, charter schools are more autonomous and less regulated. That conflicts with this most heavily regulated area in education. Further, federal and state sources typically do not cover all required special education costs. Districts are more capable than charter schools of cost effectively serving students with special needs, given their economies of scale, deeper staffing and administrative support systems. Moreover, charter schools, especially those operated by for-profit EMOs, are inherently cost-conscious and have incentives to reduce the costs of instruction. This suggests that charter schools would be less likely to enroll proportions of students with disabilities similar to those of district schools. However, the relatively high proportion of students with IEPs in EMO schools (9.8%) shows an improvement from earlier years. For example, our examination of CCD data from 2000-2001 found that the proportion of students with an IEP in schools operated by for-profit EMOs was 6.5%, while the corresponding figure for schools operated by nonprofit EMOs was 7.9%. In traditional public schools the proportion of students with IEPs is 13.6% nationally, although this figure is often higher in urban areas. Still, the gap between the EMO-operated charter schools and the local districts is large in terms of the proportions of students classified as special education.

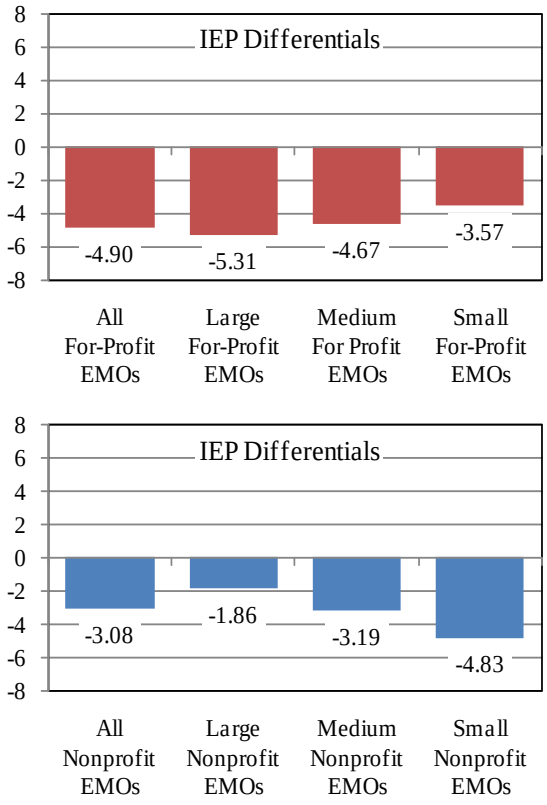


Figure 6. IEP Differentials for Both For-Profit and Nonprofit EMOs

We were able to obtain data on special education services from 598 EMO-operated schools, close to 62% of the schools in this study.

The number of students with IEPs is a relatively crude indicator that masks large differences in the types and severities of disabilities. For example, students with disabilities who are enrolled in charter schools tend to have disabilities that are less severe in nature and less costly to remediate, while district schools tend to have a higher concentration of students with moderate or severe disabilities.[51]

There are, however, a small number of highly segregated charter schools that cater to a specific group of students with severe disabilities. Although these schools are typically not large, they tend to have between 60% and 100% students

with disabilities. In this study, 19 schools, almost exclusively in the nonprofit sector, reported having more than 60% students with disabilities.

Note that the average Special Education Differential scores were larger and the direction was consistently negative across all comparisons (Figure 6), meaning that EMOs consistently under-enrolled special education students.

The mean differences mask even greater and, in this case, skewed variations. There are a large proportion of schools with very few students with disabilities. Figure 7 provides an illustration of the break-out of schools depending on the extent to which they could be classified as segregated or integrated.

The 5 categories created to sort the schools are based on the following designated cut scores:

- *Very Segregative Special Education Exclusive*: Schools with a differential score greater than -6 percentage points.
- *Segregative Special Education Exclusive*: Schools between -6 and -3 percentage points.
- *Not Segregative*: Schools between -3 and +3 percentage points.
- *Segregative Special Education Concentration*: School between +3 and +6 percentage points.
- *Very Segregative Special Education Concentration*: Schools with +6 percentage points or more.

As can be seen in Figure 7, aside from a handful of schools with a mission of serving special education students, the dominant pattern of schools operated by EMOs is that they tend to serve substantially fewer students with disabilities.

Among the for-profit EMOs, Victory Schools Inc. stood out, with 15% of the students enrolled in its schools classified as having a disability. This still resulted in a negative 4.5 IEP differential, but this was relatively small compared with other EMOs. Two EMOs that were relatively exclusionary towards students with special needs were Imagine Schools and K12 Inc., both of which enrolled students with disabilities who comprised only around 6% of their total enrollment. These two companies also had very large and negative IEP differential scores.

A nonprofit EMO that stood

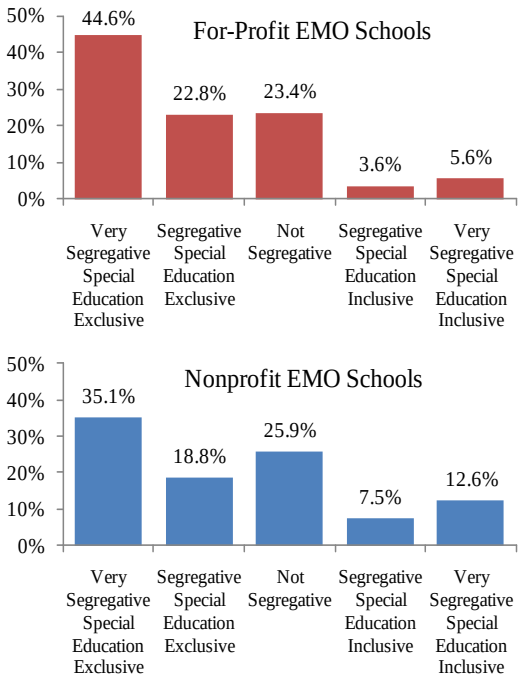


Figure 7. Distribution of EMO-Operate Schools According to Whether They are Segregative High Concentration or Low Concentration Special Education

out among all EMOs was Summit Academy Management, which largely served only students with disabilities (96% had IEPs). On the other extreme, Uncommon Schools did not report any students with disabilities, Achievement First reported having less than 1%, and Cosmos Foundation Inc. reported having only 3%. (See Appendix A for more data broken out for specific EMOs.)

Composition by English Language Learner Status

English Language Learners (ELL) have received relatively little attention in education policy research. This group comprised 11% of all public school students in 2004.[52] In schools operated by EMOs, we found that just 4.4% of the students were classified as ELL. We were able to obtain data on ELL services from 540 EMO-operated schools, less than half the schools in this study. As with the special education analysis, the schools were weighted by student population to correct for bias.

Note that the ELL differentials are consistently negative for both types and all sizes of EMOs (see Figure 8 and Appendix B). On average, the schools operated by EMOs have 3.8% fewer ELL students than local districts. Nonprofit EMOs had significantly more negative differentials than did the schools operated by for-profit EMOs.

For ELL students, the cut-score distribution shows an exclusive segrega-

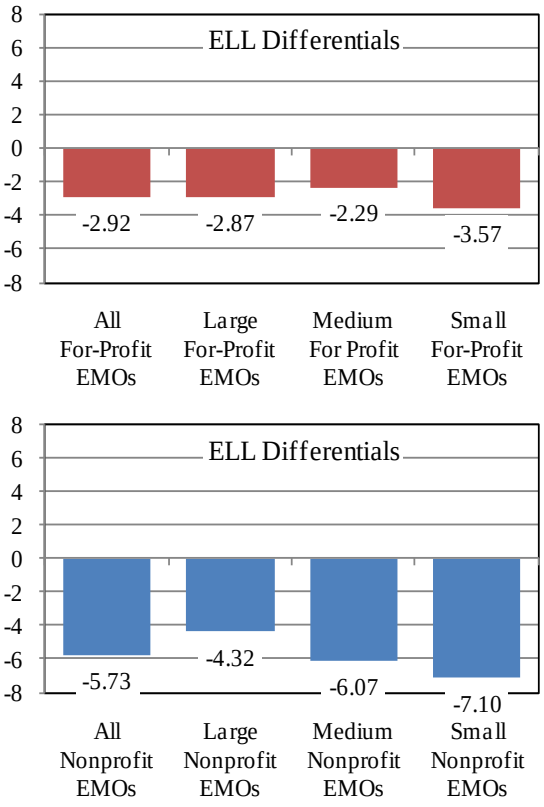


Figure 8. ELL Differentials for Both For-Profit and Nonprofit EMOs

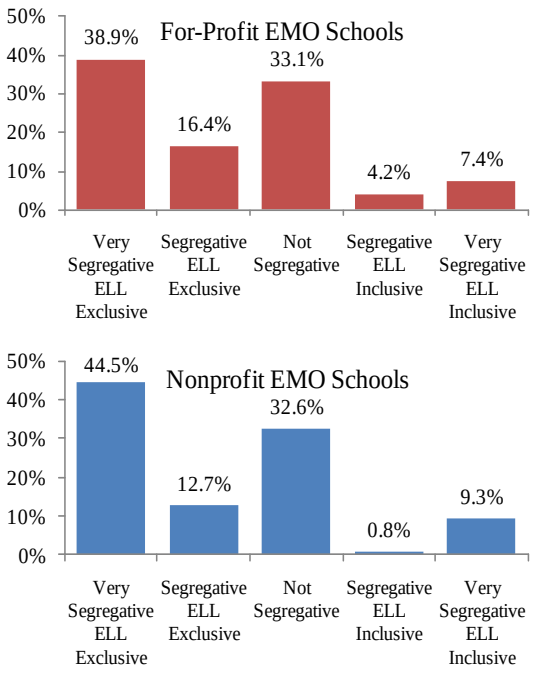


Figure 9. Distribution of EMO-Operated Schools According to Whether They are Segregative High Concentration ELL or Low Concentration ELL

tive effect of EMOs toward ELL students (Figure 9). The five categories used the same cut score differences as the special education analysis.

A small number of schools serve large numbers of ELL students while most schools serve few or no ELL students. Yet, around a third of the schools in both the nonprofit and for-profit categories were labeled as not segregative. Nevertheless, most of the schools that reported data had large negative differentials relative to the local districts.

For-profit EMOs, on the whole, had relatively few ELL students and all but a few of the EMOs had negative ELL differential scores. One exception to this was a medium-sized EMO, Global Educational Excellence. Close to 70% of the students enrolled in schools managed by this EMO were classified as ELL.

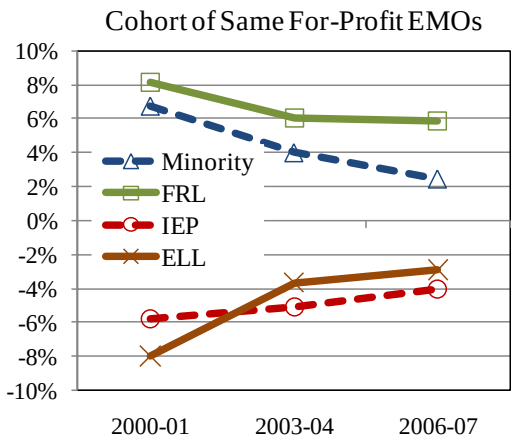
Among the for-profit EMOs, the Leona Group, with a large concentration of its schools in Arizona, reported having just over 10% of its students classified as English language learners; this however, was only 1 percentage point above the local districts. Four large for-profit EMOs (CS Partners LLC, K12 Inc., Mosaica Education Inc., and Non-Public Educational Services Inc.) reported between 0 and 1% of their students classified as English Language Learners. Large for-profit companies with the most negative ELL differentials included CS Partners, Academica, and Edison Learning.

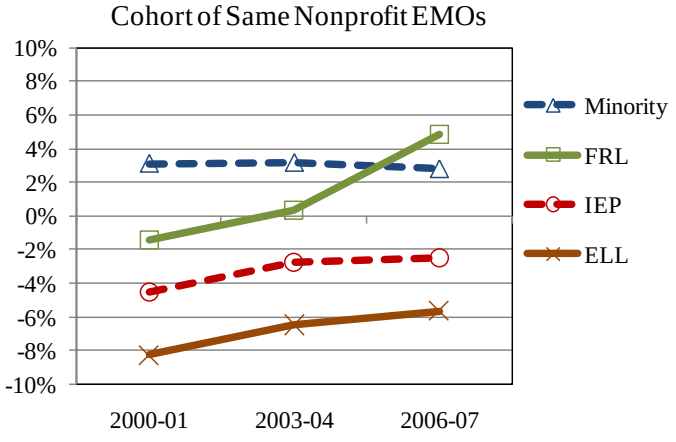
One large-sized, nonprofit EMO, PPEP and Affiliates, reported that 22% of its students were classified as English language learners. Several nonprofit EMOs reported no or fewer than 1% ELL students. (See Appendix A for more data broken out for specific EMOs.)

Longitudinal Findings

In order to shed light on the enrollment patterns in schools operated by EMOs, we conducted a longitudinal analysis of the data. Three data points were used, spanning 7 years (2000-2001, 2003-2004, and 2006-2007). Our analysis considered changes in mean differential scores as well as changes in the distribution of schools across the designated cut-score categories. These illustrate the extent to which schools differ or are similar to local districts.

With regard to longitudinal trends in the mean differential scores, Figure 10 contains the results for the for-profit EMOs and Figure 11 has the results for the nonprofit EMOs. Two line graphs are included in each figure to show trends in the differential scores. The upper graphs illustrate the findings for the subset of schools that were operating over the 7-year time-frame and had data available at all three points in time. This smaller subset of schools includes 229 for-profit EMOs and only 131 schools operated by nonprofit EMOs. The lower graphs contain the findings for all EMO-operated schools that were in operation at any point during the time period. The upper graphs, with only the cohort of same schools, illustrate trends occurring within schools operating over the entire time frame. The lower graphs illustrate how enrollment patterns are affected by the addition (and occasional subtraction) of new schools over time.





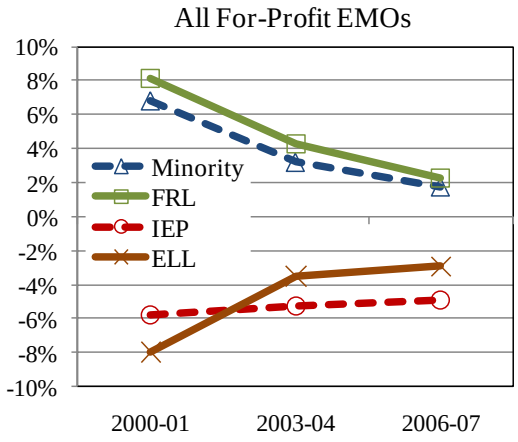


Figure 10. Longitudinal Trends in Differential Scores among For-Profit EMOs

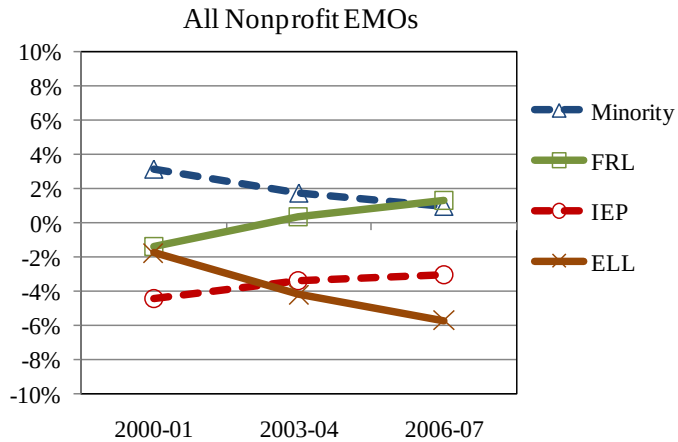


Figure 11. Longitudinal Trends in Differential Scores among Non-profit EMOs

Among the for-profit EMOs, the key findings are:

- In the earlier years, the for-profit EMOs were more likely to serve more minority and low-income students relative to the local districts. Over time, the trend has been for these differentials to decrease and approach zero. This does *not* mean that the schools that are extremely segregative have changed. Rather, over time the extreme categories at both ends maintained large proportions. As can be seen in Figure 12, while the means may have moved, the EMO schools remain segregated.
- Initially, the schools operated by for-profit EMOs served a noticeably small proportion of students with special needs and students classified as ELL. Over time, these differentials have grown less negative, which means that while for-profit EMOs still serve a lower proportion of

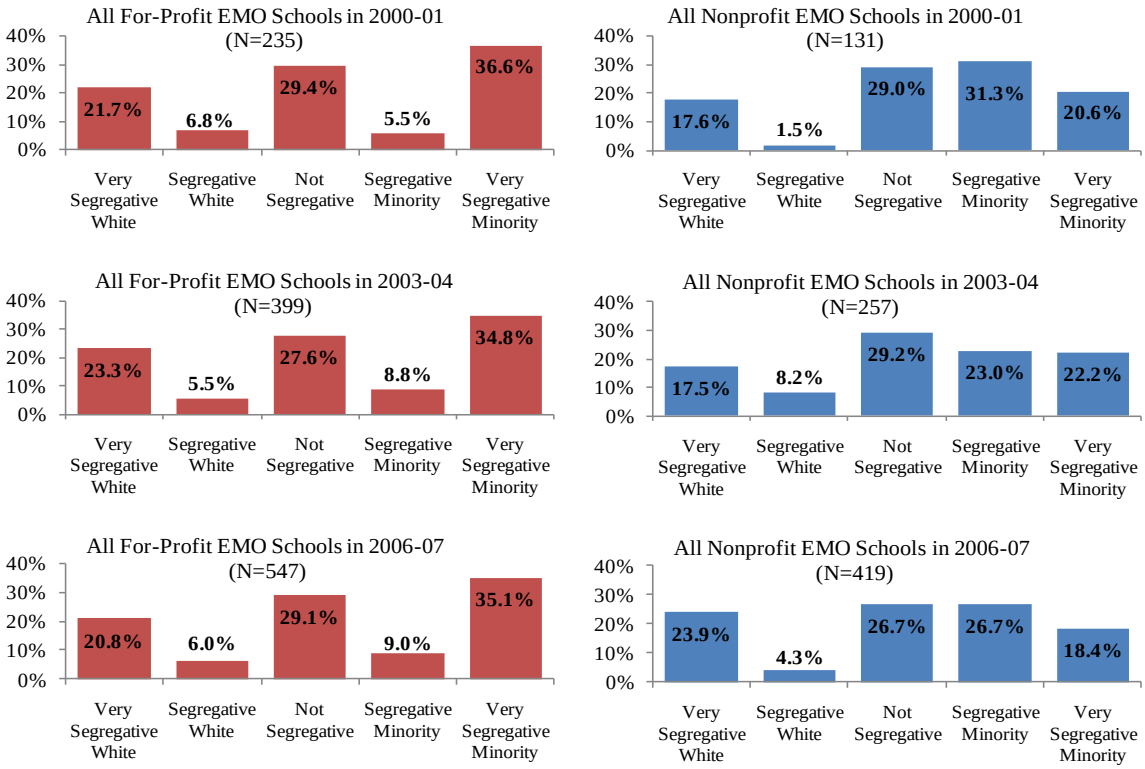


Figure 12. Longitudinal Trends in Distribution of Schools across Five Categories Ranging from Segregative White to Segregative Minority

special education and ELL students relative to local districts, this gap on the mean scores has been closing.

The trends for the nonprofit EMO schools are different. It was possible to track 131 schools over the 7-year period; only around 70 schools had data available on IEPs and ELL students over the period of time studied, so these cohorts are even smaller.

- Nonprofit EMO schools serve a slightly higher proportion of minority students than do local districts. The proportion of minority students in the nonprofit EMO schools is gradually becoming more similar to that of their local districts.
- Initially nonprofit EMO schools had a lower proportion of low-income students. Over time, this has shifted, and these schools now have a slightly higher proportion of low-income students than the local districts.
- In terms of students with special needs and students classified as ELL, the nonprofit EMO schools continue to serve lower proportions of these students than do the local districts. The proportion of students with an IEP has been increasing gradually. The trends regarding pro-

portion of ELL students, however, differ depending on whether one is looking at a consistent cohort or whether one is taking into account newly opened schools.

Yet, tracking mean differentials is not the complete answer. As seen in the earlier comparisons, arithmetic means hide large differences among the schools. Although the mean differentials suggest that segregative gaps are closing, Figure 12 shows that most schools continue to be either very segregative White or very segregative minority. Therefore the mean differential scores simply reflect the balance of extremely positive and extremely negative differential scores. Over these years, as the number of schools in each category swelled—more than tripling in size in the case of the nonprofits—the basic segregative distribution pattern remained relatively stable. This same pattern is found when examining FRL, IEP, and ELL sub-populations (see Appendix C). One might expect that over time the composition of the EMO-operated schools might become more similar to the local districts. Our findings, however, indicate that large differences remain and that they neither decrease or increase over time.

There are undoubtedly many explanations for the creation and maintenance of schools that segregate students by wealth, minority, special education and ELL. While a national study using matched schools or matched students would advance our knowledge in this area, the current body of research indicates that the emergence of charter schools and their supporting EMOs is a policy whose effect is to increase or maintain the segregation of our schools.

EMO Type and Characteristics

The main focus of this research was to explore whether and to what degree EMOs operating charter schools segregated students in a systemic way. Yet there are a large number of worthy secondary observations. This section presents a brief discussion of patterns that lie behind or within the broad patterns for EMO-operated charters, looking at differences among charters operated by for-profit versus nonprofit EMOs, by EMOs of different sizes, and with different grade-level configurations. We also consider the age and size of the schools themselves and at whether an urban location makes a difference.

For-Profit/Nonprofit Status. The most dramatic difference is that small, for-profit EMOs enrolled almost 13% fewer minority students than their local district. Nonprofits, as a rule, were much closer to the home district's minority mix, although they tended toward segregating minorities as well. As regards income, both for-profit and nonprofit EMOs produced "U"-shaped distributions indicating high segregative effects for poor as well as more affluent students. While both groups have moved their mean score toward that of their district, hidden behind those means are large segregative proportions remaining relatively unchanged over the past 7 years. Differences between for-profit and nonprofit EMOs in terms of special education and ELL were small.

Size of the EMO. We defined large-sized EMOs as those that operate 10 or more schools, while medium-sized EMOs operate between 4 and 9 schools, and

small-sized EMOs operate between 1 and 3 schools. EMOs classified as large or medium-sized enrolled more minority students than did small-sized EMOs. Large EMOs tended to be segregative minority, while the small EMOs were more likely to be segregative White. Large-sized EMOs had 7 percentage points more low-income students than did medium- or small-sized EMOs. In terms of differentials, however, the medium-sized EMOs were significantly more likely to be segregative high income, while the large-sized and small-sized EMOs were more likely to be segregative low income. No significant differences in the proportion of special education or ELL students were found across the three EMO size categories.

Instructional level of schools. The levels of instruction considered in the study were elementary, middle, and high school. EMOs were concentrated in elementary schools. A fourth category was also included, "other," which included schools that were ungraded or which included more than one level. Interestingly, the "other" category significantly favored White enrollments. Middle schools were the most likely to enroll large proportions of minority students. This was largely explained by the KIPP nonprofit EMO, which targets urban middle schools. In terms of low-income differentials, schools in the "other" category were segregative high income, while elementary schools were more likely to be segregative low income. Appendix B provides descriptive data from these analyses as well as results from our statistical analyses based on profit status, size of EMO, and instructional level.

Other predictive variables. In addition to the categories of schools described above, we also examined the relationship between other variables that might explain differences in the schools, including the age of the school, the degree of urbanicity, and school type (charter schools (brick and mortar), district schools or virtual schools).

Key findings (see Appendix B):

- In terms of the age of the schools, more recently opened schools tended to have slightly more children with special needs, but otherwise we found no significant relationships associated with the age of the school.
- Schools classified as more urban had larger proportions of minority students and students classified as low-income, although there were no large gaps in the differential scores across groups of schools classified by their level of urbanicity or population density.
- Virtual schools were the most segregative. They had one-third the proportion of minority students that brick and mortar schools had and half the proportion of low-income students. Likewise, the virtual schools had fewer students classified as special education or ELL. The differential scores for virtual schools were all negative and were noticeably more negative than the brick and mortar schools. (Of course, the level and type of interaction among students in a virtual school would, in any case, differ from the interactions that may take place in a brick and mortar school.)

- In terms of the enrollment size of schools, we found that schools with higher enrollments tended to have a smaller proportion of low-income students and children with special needs.
- The 58 district schools operated by EMOs had 15% more minority students and 17% more low-income students than did EMO charter schools. This can be explained by the fact that EMO district schools were all concentrated in urban areas and, as in Philadelphia, were schools targeted for turnaround-like interventions. The EMO district schools also had more positive minority and FRL differentials than did the EMO charter schools. [53]

Conclusions

Summary

This national study contributes to a growing body of research on the integrative or segregative effects of charter schools. The previous research on this issue has variously been used to claim either that charter schools are integrative or that they are segregative. The confusion over these contradictory claims has been driven primarily by two research design factors:

- Comparison groups are often inadequate or inappropriate; and
- Excessive aggregation of data obscures large school level differences.

As our findings reveal, when data are aggregated across a number of schools, the extremes balance each other out and dramatically understate real school-by-school differences. To avoid this problem, where data were available, we examined the composition of each EMO-operated charter school in the nation. We compared the charter school's demographics with those of the public district in which the charter school resided. When we look at the data using this more fine-grained lens, we found substantial differences. Disproportionate numbers of charter schools served almost wholly minority students while others catered overwhelmingly to White students.

This pattern of segregation by race was largely replicated when we examined student demographic composition by wealth, special education, and English Language Learner (ELL) status. The segregative trends were most pervasive for special education and ELL. For example, the typical pattern was for some EMO-operated charter schools to serve a high proportion of students qualifying for free- or reduced-priced lunch, while other schools had only a few low-income students. A few dozen of the charter schools considered in this study catered largely to students who have special education needs, while at most others the number of students with special education needs is surprisingly low.

White flight and minority flight. Some think that charter schools serve as a means for White families to leave schools with high concentrations of minorities. Our findings provide some support this interpretation.[54] At the same time, our

findings suggest that it is even more common for minority families to leave district schools to enroll in charter schools that have higher concentrations of minority students. Indeed, it is more common for charter schools to enroll higher concentrations of minority students than it is for charter schools to enroll disproportionate concentrations of White students. In a nutshell, the data paint a pattern of schools gravitating to the extremes—regarding race/ethnicity, poverty status, special needs status, or ELL status—rather than clustering around district averages.

Critical Issues

The net impact on sending schools. With the creation of highly segregated learning environments, EMO-operated schools are likely to leave the sending districts more stratified, fragmented and segregated. This particular question was not addressed in our study. It is much more complicated, as the increasing levels of segregation of traditional public schools may be due to various other factors, including other forms of school choice (non-EMO charters, private schools, open enrollment among public schools, and even magnet schools). Also, if some EMO-operated schools drew only White students and this were to be offset by a number of other EMO-operated schools that served only minority students, then there may not be a net change in the enrollment balance.

A return to separate and unequal? Not only are the EMO-operated public schools creating sharper separations between students based on demographic background, they may also be providing unequal educational opportunities. For example, in Miron *et al*. (2005) it was found that Delaware charter schools were highly segregated by race, class, and special education status. Delaware charters targeting minority and low-income students were less successful at garnering financial support and had performance levels that were much lower than those of the charter schools serving largely White and higher-income students.[55] Bifulco and Ladd (2006)[56] drew similar findings from North Carolina, where they found that charter schools have had a segregative impact and that charters serving Black students showed declining performance levels and an increase in the achievement gap.

Neither adequacy nor equality of educational resources and opportunities has been achieved in the U.S., particularly for economically challenged children and for children of color.[57] Any policy associated with further segregation of schools raises the question of whether we are erecting a new structure of inequality. This issue is a fundamental one for a democratic society and deserves attention when evaluating the impact of charter school reforms.[58]

The old charter school ideal and the new charter school ideal. Charter schools, which comprise 95% of the EMO-operated schools, are a relatively new form of schooling, having been born only in the 1990s. State authorizing statutes articulated the goals for charter schools. Common among them were the creation of schools that would be innovative, highly accountable for specified results, and open to all students. Charter schools were to create options by providing a diversity of learning environments from which parents could choose. By their very design, these schools were expected to be unique and to offer fresh, new approaches.

As it turns out, the curriculum and instruction in charter schools are very similar to those found in traditional public schools,[59] and test scores show no particular advantage for charter schools.[60]

This national study supports the conclusion that EMO-operated schools have facilitated the creation of segregated learning environments where students are more isolated by race, class, ability, and language than the public school district from which they were drawn. In a highly splintered and divided nation and world, policies that increase segregation should be remedied, not encouraged.

Endnotes

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[42] http://www2.guidestar.org/

[43] For more information about the Common Core of Data see http://nces.ed.gov/ccd/

[44] For a number of schools that were open in the 2006-2007 school year, NCES IDs could not be found. Although several attempts were made to locate these ID numbers using possible variations on the schools' names and locations, NCES-assigned school IDs could not be located for 30 for-profit EMO-operated schools and 17 nonprofit EMO-operated schools in operation in 2006.

[45] If an EMO-operated school had data available on any variable (i.e. FRL, Minority, ELL, or IEP) but the host district did not (or vice versa), the differential could not be calculated for that school. Differentials for schools in which the variables for the host district and the school were identical were also removed. This could occur for one of two reasons. First, if the EMO-operated school is a district school, it would not have its own unique district-level data. Second, in states such as Florida, Illinois, Nevada, and Oregon, charter schools are not organized as Local Education Authorities (LEAs) and therefore do not have their own unique district IDs. In both instances, this means that the data extracted for district-level variables (i.e., percent ELL and percent IEP) would be identical for both the school and its host district.

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[50] These states are as follows: Alaska, Colorado, Connecticut, Florida, Hawaii, Kansas, Maryland, Mississippi, Nevada, New Mexico, New York, Oklahoma, Oregon, South Carolina, Tennessee, Virginia, and Wyoming. The status of charter schools as part of an LEA or as their own LEA depends on the authorizer in Arizona, Georgia, Idaho, Illinois, Massachusetts, Texas and Wisconsin.

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Appendix A Findings by EMO

For-Profit EMOs	N Schools	N Students	% AM	%Asian	%Hisp	%Black	%White	% Minority	Minority Diff.	% FRL	FRL Diff.	% IEP	IEP Diff.	% ELL	ELL Diff.
Large For-Profit EMOs	**394**	**186,726**	**1.91**	**20.78**	**41.06**	**33.44**	**64.29**	**64.17**	**5.01**	**54.94**	**3.45**	**9.32**	**-5.31**	**3.94**	**-2.87**
Academica	33	12,518	1.75	64.84	6.61	25.40	73.39	73.42	1.98	38.63	-11.64	8.98	-2.38	0.79	-7.85
Charter School Administrative Services	16	6,809	2.48	1.17	22.47	70.47	26.51	97.54	23.97	64.17	13.80	6.04	-6.11	0.84	-4.78
Charter Schools USA	16	11,849	0.57	9.27	87.53	2.19	97.74	48.79	-14.04	20.57	-27.24				
Connections Academy	11	6,663	2.37	32.43	13.68	47.35	48.78	16.02	-7.67	41.81	2.84	11.81	-1.19	0.02	-9.85
CS Partners, LLC	10	3,342	1.32	5.39	8.07	77.83	16.01	26.52	8.57	31.83	4.81	11.45	-1.60	0.92	-0.85
Edison Learning	54	37,678	2.10	26.10	59.65	11.31	88.06	88.07	15.91	76.06	15.83	12.27	-2.66	3.13	-6.77
Helicon Associates	11	3,184	1.73	3.58	29.02	63.57	35.08	35.11	0.92	41.01	10.29	12.15	-1.77	5.36	2.72
Imagine Schools, Inc.	32	13,223	2.96	21.96	34.86	36.07	61.25	61.25	5.45	45.74	-0.90	6.32	-7.09	6.60	-2.55
Insight Schools	1	604	1.66	2.98	2.15	80.63	9.11	9.11	-18.88						
K12 Inc.	12	13,882	1.94	5.84	6.66	82.60	15.31	15.31	-25.04	20.98	-6.85	5.44	-9.62	0.11	-2.13
Leona Group, LLC, The	56	16,616	1.06	38.08	40.68	18.02	80.88	80.88	13.92	66.53	13.62	8.72	-5.08	10.15	0.98
Mosaica Education, Inc.	24	7,710	1.01	18.43	43.35	32.70	63.83	63.83	5.64	76.95	16.72	8.90	-6.18	0.25	-6.06
National Heritage Academies	53	31,791	2.76	5.51	44.45	43.05	53.01	53.01	3.55	50.19	2.07	9.36	-6.15	2.44	-3.44
Non-Public Educational Services, Inc.	9	1,666	1.14	29.29	32.89	35.65	63.69	63.76	3.91	52.38	-1.35	9.13	-2.89	0.00	-5.23
Victory Schools, Inc.	15	8,551	1.40	12.52	83.67	1.67	97.68	97.68	16.69	83.86	21.28	15.03	-4.48	3.00	-5.27
White Hat Management	41	10,640	0.59	10.28	56.83	28.46	68.36	68.36	9.09	58.10	-8.70	12.03	-4.43	9.49	1.63
Medium For-Profit EMOs	**84**	**26,798**	**2.31**	**14.23**	**42.27**	**38.67**	**59.64**	**59.63**	**-2.78**	**52.50**	**-5.40**	**10.07**	**-4.67**	**6.02**	**-2.29**
ACH of America, LLC	4	1,245	4.74	24.10	9.88	57.99	39.12	39.12	-19.93	25.05	-21.31				
Advance Educational Services	3	540	2.59	0.93	0.56	94.07	4.26	4.26	-0.64	15.10	-22.03	8.88	-3.94	0.00	-2.09
Benjamin Franklin Charter School	4	1,872	3.79	7.91	3.31	83.81	16.19	16.18	-16.63			3.69	-6.95	0.00	-4.63
Charter School Associates, Inc.	3	1,221	1.80	68.14	11.06	14.99	81.41	81.41	-6.11	21.10	-36.97				
Choice Schools Associates, LLC	7	1,783	2.49	7.18	29.46	59.99	45.88	45.80	8.38	47.79	1.21	12.11	-3.33	0.00	-3.00
Edtec Central, LLC	2	239	0.84	2.09	66.95	29.71	70.29	70.36	35.68	34.44	-25.32	41.60	25.71	0.00	-9.57
Educational Services of America, Inc.	4	389	0.65	28.66	5.39	60.78	41.39	41.30	5.82			21.98	10.29	0.00	-6.14
eSchool Consultants	4	1,913	0.73	1.99	26.08	64.82	29.12	29.15	-15.86			18.61	1.12	0.00	-3.76
Evans Solution Management Company	3	398	0.25	1.01	95.23	3.52	96.48	96.52	-2.17	72.75	5.89	23.54	9.75	0.00	-9.57
Global Educational Excellence	5	1,524	13.98	0.33	21.33	64.37	35.63	35.62	0.11	89.90	35.70	4.87	-6.69	69.68	47.59
Humanities and Sciences Academy of the Ur	3	484	1.24	22.31	7.02	48.14	51.86	52.07	-38.84					0.00	-15.04
Ideabanc, Inc.	4	672	2.68	42.71	10.71	41.82	58.18	58.22	-15.57	50.24	0.52	8.63	-3.87		
Institute of Charter School Management and	6	1,149	0.00	2.44	92.43	1.91	94.87	94.86	32.16	61.53	-6.25	4.89	-14.62	0.00	-3.64
Midwest Management Group Inc.	5	1,848	0.43	0.22	94.91	3.84	95.78	95.76	6.74	60.84	-8.11	7.19	-8.43	0.00	-7.93
OmniVest Properties Management, LLC	4	1,978	1.26	4.20	51.92	42.57	57.43	57.40	-28.30	78.52	14.65	17.46	2.13		
Pinnacle Education, Inc.	6	892	0.78	43.39	6.17	42.71	57.29	57.23	-6.56	20.24	-33.28	0.68	-9.14	0.00	-13.80
Rader Group	4	717	1.12	4.74	37.38	54.25	43.24	43.23	12.02	53.84	16.17				
Romine Group, LLC, The	5	2,594	2.97	1.43	57.29	34.50	61.84	61.87	1.83	44.19	-2.99	9.64	-4.60	2.35	-3.23
SABIS Educational Systems	5	3,771	0.82	29.80	51.20	16.71	79.16	79.14	-3.64	56.88	-18.00	8.13	-8.11	2.20	-11.11
Varner and Associates International LLC	3	1,569	0.45	3.76	90.63	4.72	95.28	95.27	23.27	69.93	7.51	6.51	-6.11	1.27	-0.86
Small For-Profit EMOs	**72**	**32,250**	**0.01**	**0.08**	**0.38**	**0.52**	**0.48**	**47.58**	**-12.93**	**51.53**	**1.38**	**11.32**	**-3.57**	**5.68**	**-3.57**
777 Educational Management Company	2	306	0.00	0.00	99.02	0.33	99.67	99.67	2.35	67.51	-9.46	6.54	-9.35	0.00	-9.57
Academic Leadership Services, L.P.	1	337	0.30	0.00	49.26	50.45	49.55	49.55	-13.31			1.48	-21.30		
Accelerated Learning Center, Inc.	1	276	1.81	11.23	0.72	85.14	14.86	14.86	-14.45			13.41	1.80	0.00	-7.78
Allen-Cochran Enterprises	1	304	5.92	12.17	9.54	69.74	30.26	30.26	-6.05			8.55	-2.25	0.00	-3.01
Allsport Enterprises, Inc	1	101	6.93	29.70	12.87	48.51	51.49	51.49	-16.47			12.87	-0.08	0.00	-12.05
AlphaStaff	2	305	0.00	8.20	47.87	40.33	56.07	56.03	11.26	48.78	11.81	18.47	0.48	9.11	3.31
Altair Learning Management	1	6,524	0.38	1.55	10.73	82.45	13.14	13.14	-55.98			20.36	4.17	0.00	-9.13
American Basic Schools, LLC	1	661	1.21	44.93	12.10	38.12	61.88	61.88	15.47	77.16	31.46	5.75	-4.07	7.72	-2.04
American Institutional Management Service	1	501	1.00	2.20	18.76	77.45	22.36	22.36	-50.41			8.78	3.17	11.58	11.58
Bardwell Group	2	624	0.16	0.00	99.68	0.00	99.84	99.84	23.14	21.24	-12.15	4.25	-10.20		
Black Star Educational Management	1	243	0.00	0.00	100.00	0.00	100.00	100.00	5.97	23.46	-17.04	7.82	-4.89	0.00	-3.20
Bright Beginnings School, Inc.	1	450	14.89	9.56	3.56	72.00	28.00	28.00	-15.07			8.00	-4.14	0.00	-7.65
Bright Horizons Family Solutions LLC	1	470	4.89	21.49	20.21	42.55	47.87	47.87	-6.79	33.62	-7.67				
Champion Schools, Inc.	1	199	1.51	35.68	15.58	39.20	60.80	60.80	-34.08	32.16	-46.41	8.54	-3.64	0.00	-28.93
Charter for Excellence	1	334	0.00	5.73	92.99	1.28	98.72	98.72	0.81			24.44	-1.11	1.04	-3.35
Charter School Management Inc.	1	2,025	1.20	15.87	7.78	74.25	25.75	25.75	-20.66	29.94	-15.75	8.68	-1.14	0.30	-9.46
Community Education Partners	2	596	0.17	2.18	63.26	33.22	65.94	65.95	9.06	63.67	19.51				
Compass High School, Inc.	1	312	0.96	30.13	10.26	58.01	41.99	41.99	-25.97			15.71	2.75	0.00	-12.05
Connections Between Cultures, Inc.	1	177	0.56	11.30	9.04	77.97	22.03	22.03	-24.83	40.68	-13.28	5.08	-9.77	0.00	-2.99
Cornerstone Charter School, Inc.	1	203	0.49	45.81	14.29	32.51	67.49	67.49	11.35			0.49	-10.24	0.00	-6.86
Country Gardens Educational Services, LLC	1	426	1.64	39.20	16.43	40.85	59.15	59.15	-27.48			7.75	-5.50	3.05	-17.69
East Valley Academy	1	22	0.00	13.64	4.55	59.09	40.91	40.91	14.88					0.00	-2.39
Eastpointe High School, Inc.	1	214	3.27	26.17	19.16	48.60	51.40	51.40	-16.56			14.95	2.00	0.00	-12.05
EdFutures, Inc.	2	579	0.00	2.07	94.99	1.38	97.06	97.07	25.12	64.02	1.76				

For-Profit EMOs	N Schools	N Students	% AM	%Asian	%Hisp	%Black	%White	% Minority	Minority Diff.	% FRL	FRL Diff.	% IEP	IEP Diff.	% ELL	ELL Diff.
Education Associates	1	711	3.94	8.86	3.80	82.28	17.02	17.02	-34.54	12.94	-36.33	12.10	-5.25	0.00	-10.79
Education Management and Networks	2	433	10.16	0.69	6.93	82.22	17.78	17.78	-46.35	97.69	21.51	1.85	-9.60	94.00	76.03
Educational Impact, Inc.	1	88	1.14	34.09	4.55	60.23	39.77	39.77	-28.19			7.95	-5.00	0.00	-12.05
Educators Management Group	1	120	0.00	3.33	8.33	83.33	11.67	11.67	-12.55	14.17	-15.54				
Eduprize Schools, LLC	1	1,133	4.50	8.56	3.35	82.97	17.03	17.03	-9.00	2.82	-13.50	6.27	-5.54	0.00	-2.39
GAR, LLC	1	118	1.69	22.88	3.39	60.17	39.83	39.83	16.21					0.85	-5.17
Hamadeh Educational Services, Inc.	3	1,894	1.27	1.27	5.97	91.50	8.50	8.50	-22.61	87.23	37.25	4.54	-7.96	47.78	42.08
Heritage Academy, Inc.	1	407	1.72	11.55	1.97	84.03	15.97	15.97	-30.43			0.25	-9.57	0.00	-9.76
Innovative Teaching Solutions	3	1,652	0.06	0.00	99.82	0.06	99.94	99.94	2.62	61.82	-15.15	4.30	-11.59	0.00	-9.57
Lakeshore Educational Management, Inc.	3	682	0.00	8.41	20.56	65.42	28.97	28.97	-9.46	35.51	-7.38				
LLL Licensing Inc.	1	107	0.29	0.73	0.59	97.36	1.91	1.91	-1.94	25.65	-21.20	8.35	-5.04		
Montessori Charter School of Flagstaff, Inc.	1	266	4.14	11.28	2.26	78.95	21.05	21.05	-28.43	30.43	-8.04	7.89	-8.34	0.00	-11.83
Montessori Schoolhouse of Tucson, Inc.	2	46	13.04	34.78	0.00	47.83	52.17	52.17	6.98			3.19	-10.40	0.00	-9.07
Nobel Learning Communities, Inc.	1	477	4.61	4.82	83.86	5.87	94.13	94.13	9.09			8.60	-6.43	1.47	-5.88
Professional Contract Management Inc.	1	153	0.65	30.07	50.98	18.30	81.70	81.70	-15.62	77.12	0.16	13.73	-2.16	0.00	-9.57
Rose Management Group	3	825	0.97	38.42	4.48	54.06	45.94	45.95	-17.50	61.83	24.21	8.60	-4.48	2.67	-8.79
Schoolhouse Services and Staffing, Inc.	3	1,334	0.00	0.07	95.88	4.05	95.95	95.95	21.68	24.34	-40.48	7.42	-8.51	0.00	-6.76
Select Management Inc.	1	303	0.00	2.97	96.70	0.00	100.00	100.00	13.18	85.81	8.00	15.84	-1.12	0.00	-11.54
Self Development Charter School	1	277	5.78	16.97	4.33	72.20	27.80	27.80	-18.61	13.00	-32.70	2.17	-7.65	0.00	-9.76
Smart Schools Management	1	922	0.76	2.49	1.19	94.36	5.53	5.53	-0.85	22.02	-6.72	11.17	-3.13	0.00	-2.12
Solid Rock Management Company	1	400	0.00	0.00	100.00	0.00	100.00	100.00	2.68	79.00	2.03	3.67	-12.22	0.00	-9.57
Southern Arizona Community Academy, Inc.	1	239	0.42	55.65	7.53	32.22	67.78	67.78	-0.18						
Summit Management Consulting	1	574	0.87	0.17	4.18	89.55	5.40	5.40	-10.45	30.49	-12.57	11.67	-3.04		
Superior Management Corporation	1	143	1.40	10.49	5.59	76.22	17.48	17.48	-14.18	24.48	-15.99				
Synergy Training Solutions	2	393	0.00	1.78	88.30	9.92	90.08	90.06	51.35	54.71	9.41	5.85	-7.48	7.12	-8.63
TAG Elementary, Inc.	1	321	3.74	17.76	7.17	69.16	30.84	30.84	-37.12	14.64	-22.77	5.61	-7.34	0.00	-12.05
Technical Academy Group LLC	1	959	0.00	1.04	97.71	1.25	98.75	98.75	91.13	73.10	20.67	3.96	-7.97	0.00	-36.45
Transitions Consultants LLC	1	546	0.00	0.00	97.44	2.56	97.44	97.44	-2.36	81.32	22.78	7.14	-4.96		
Visions Education Development Consortium	1	393	0.00	0.76	82.44	15.27	83.21	83.21	-0.93	93.89	25.11	9.67	-2.75	0.00	-3.95
Youth and Family Centered Services	1	145	0.00	12.41	22.07	57.93	37.93	37.93	-14.11	16.55	-32.16				
Grand Total	**550**	**245,774**	**1.88**	**18.31**	**40.79**	**36.33**	**61.59**	**61.49**	**1.80**	**54.35**	**2.30**	**9.79**	**-4.90**	**4.57**	**-2.92**

Nonprofit EMOs	N Schools	N Students	% AM	%Asian	%Hisp	%Black	%White	% Minority	Minority Diff.	% FRL	FRL Diff.	% IEP	IEP Diff.	% ELL	ELL Diff.
Large Nonprofit EMOs	**169**	**44,059**	**0.30**	**1.96**	**37.37**	**43.85**	**13.62**	**84.06**	**2.10**	**71.80**	**4.52**	**11.25**	**-1.86**	**6.49**	**-4.32**
Academy for Urban School Leadership	6	3,771	0.24	1.09	32.27	54.49	8.17	88.10	-1.46	95.99	20.67				
Achievement First	8	2,265	0.26	1.06	12.67	61.59	21.72	75.53	-16.17	65.49	-11.04	0.78	-8.11	0.00	-11.09
Alliance for College-Ready Public Schools	4	1,173	0.17	1.02	82.78	15.94	0.09	99.91	10.39	91.43	18.23	11.63	-38.65		
America CAN	10	3,947	0.23	0.28	51.36	43.45	4.69	95.31	8.89	80.51	15.12	12.29	3.25	16.73	-3.77
Aspire	14	4,759	0.33	4.09	51.04	19.78	15.68	79.34	-0.52	64.45	-0.64	9.49	-2.87		
Concept Schools	9	2,829	0.11	1.56	11.03	62.92	18.45	75.61	1.94	39.78	-30.18	5.24	-12.40	3.95	0.17
Constellation Schools	14	2,478	0.16	0.81	11.22	10.09	68.36	22.25	-20.79	64.07	10.29	10.16	-7.15	0.11	-1.80
Cosmos Foundation Inc.	6	2,011	0.30	14.37	45.75	15.96	23.62	76.36	-7.26	51.05	-8.37	2.98	-6.58	6.83	-10.63
Green Dot Public Schools	9	2,958	0.00	0.41	81.88	16.50	0.81	98.78	5.30	83.84	10.32	6.75	-1.37		
ICEF Public Schools	5	1,159	0.95	0.00	1.29	97.07	0.00	99.31	11.85	58.66	-4.15	10.85	1.83		
KIPP	39	10,431	0.23	1.73	38.06	55.91	3.08	96.02	9.56	75.94	7.17	7.04	-5.32	4.98	-6.96
Lighthouse Academies	6	1,669	0.12	0.18	11.56	79.21	8.33	91.07	10.70	80.45	6.46	6.27	-10.00	3.48	-2.07
PPEP and Affiliates	12	924	3.90	0.54	69.59	2.81	23.16	76.85	0.43	74.17	19.71	12.77	3.27	22.08	12.73
Shekinah Learning Institute, Inc.	4	927	0.22	1.94	41.75	34.20	21.90	78.09	9.83	64.69	7.38	9.56	-3.96	2.01	-3.64
Summit Academy Management	17	1,009	0.40	0.40	4.66	21.41	64.92	26.89	-18.25	66.82	10.21	95.73	78.14	0.00	-1.54
Uncommon Schools	6	1,749	0.00	0.00	16.98	81.99	0.86	98.97	6.13	83.25	9.72	0.00	-19.76	0.00	-7.18
Medium Nonprofit EMOs	**159**	**49,007**	**1.02**	**3.28**	**32.11**	**37.72**	**24.37**	**74.13**	**-0.27**	**48.77**	**-3.26**	**9.39**	**-3.19**	**3.50**	**-6.07**
American Quality Schools	8	7,017	0.01	1.03	19.92	73.35	3.43	94.31	3.70	73.02	0.40	8.29	-6.54	0.12	-3.75
Aspira, Inc. of Illinois	3	1,931	0.16	4.97	80.17	5.90	6.21	91.19	1.63	91.45	16.14				
Baltimore Curriculum Project	5	1,719	1.86	0.58	10.65	69.23	17.68	82.28	-10.03	89.05	16.83				
Career Success Schools	5	822	4.14	0.24	58.27	15.45	21.90	78.30	-5.60	53.73	1.63	8.88	-2.00	0.00	-20.32
Center for Academic Success, Inc.	5	623	0.16	1.61	69.34	5.46	23.44	76.75	25.90	62.31	6.52	5.78	-13.11	35.47	33.95
Choice Education and Development Corpora	6	1,360	3.09	2.50	24.93	6.10	63.38	36.61	-9.63	46.81	-4.12	13.99	2.65	3.06	-8.83
EdKey, Inc.	4	242	0.83	2.07	9.92	6.20	80.99	19.11	-16.75	41.77	-0.46	13.69	0.53	0.00	-5.85
Edvantages	8	1,458	0.07	0.21	1.37	62.96	24.01	64.59	11.04	72.15	16.48	12.61	-4.35	0.00	-2.27
Envision Schools	3	502	0.80	18.73	27.89	25.10	11.95	72.49	-9.85	50.92	-6.94	7.54	-2.83		
Friendship Public Charter School	3	3,429	0.00	0.09	0.50	99.36	0.06	99.94	5.69	14.14	-41.48	5.83	-7.74	0.09	-6.61
GEO Foundation	4	1,038	0.87	0.29	4.82	64.93	27.65	70.97	-0.88	62.79	-6.53				
Great Hearts Academies	1	252	0.00	0.79	3.97	0.79	94.44	5.56	-41.37			2.38	-7.64	0.00	-13.04
High Tech High	6	1,876	0.75	10.93	25.21	9.75	52.93	46.65	-29.51	25.32	-37.47				
Honors Academy	6	723	0.83	1.11	13.69	19.36	64.45	34.93	-21.72	51.88	-2.72	10.87	-1.14	1.45	-8.44
IDEA Public Schools	2	512	0.59	2.54	86.33	1.56	8.98	91.02	-8.42	60.16	53.39	4.87	-3.49	25.08	-7.99
Innovative Education Management, Inc.	1	505	0.79	5.35	6.53	1.19	65.74	13.86	2.06	0.00	-14.90				
Kingman Academy Of Learning	4	1,367	0.73	2.05	8.56	0.95	87.71	12.29	-8.92	18.65	-29.40	14.12	-0.16	0.22	-0.25
LEAD Charter Schools	3	390	0.51	1.54	2.31	1.03	94.62	5.39	-20.64	10.88	-5.45	7.95	-3.85	0.00	-2.39

Nonprofit EMOs	N Schools	N Students	% AM	%Asian	%Hisp	%Black	%White	% Minority	Minority Diff.	% FRL	FRL Diff.	% IEP	IEP Diff.	% ELL	ELL Diff.
Leadership Public Schools	4	1,089	0.28	7.44	62.99	22.22	4.78	92.92	6.44	65.75	11.71	63.41	53.47		
Learning Matters Educational Group	4	790	0.76	2.15	15.57	6.84	74.68	25.28	-15.47	26.54	17.82	7.34	-4.11	0.00	-7.52
Mastery Learning Institute	4	354	4.80	2.82	11.86	2.26	73.73	21.74	-28.38	8.49	-59.77				
Noble Network of Charter Schools	4	1,354	0.00	1.70	56.28	25.55	9.08	83.50	-6.06	63.03	-12.29				
Omega Schools	6	575	2.09	0.52	67.48	10.78	19.13	80.79	8.87	86.06	26.08	6.09	-5.53	35.13	10.10
Partnerships to Uplift Communities	7	1,987	0.35	2.82	65.12	11.32	20.38	79.66	-10.50	62.47	-10.74				
Perspectives Charter Schools	2	814	0.37	0.00	13.15	83.78	2.21	97.30	7.74	98.39	23.07				
Propel Schools	3	887	0.00	0.45	1.01	68.88	29.65	70.27	20.42	41.43	-1.92	19.51	-0.73	0.11	-0.83
Salvaging Teens at Risk, Inc.	3	432	0.23	0.93	21.53	21.06	56.25	43.84	-10.58	39.28	-4.26	15.05	3.03	4.86	-3.91
School of Excellence in Education	4	1,717	0.41	0.41	60.98	31.97	6.23	93.77	16.38	79.67	52.37	10.17	-2.13	1.83	-4.61
Skyline Schools, Inc.	3	2,810	8.72	4.80	17.44	10.85	58.19	41.82	5.62	6.15	-16.07	9.72	-3.24	1.32	-2.63
Student Alternatives Program Inc.	6	1,354	0.07	0.37	91.58	2.14	5.83	94.15	4.66	87.23	35.66	15.82	5.64	3.60	-17.77
Success Charter Network	1	155	0.65	0.00	20.65	76.77	0.65	98.06	19.93					0.00	-9.84
Trinity Charter Schools	4	218	0.00	0.00	49.08	17.89	33.03	66.85	25.14						
Tucson International Academy, Inc.	2	173	4.05	1.16	71.10	5.78	17.92	82.07	14.11	72.85	35.44	6.94	-6.02	11.56	-0.49
Universal Companies, Inc.	4	1,629	0.16	0.11	73.58	24.25	1.11	98.09	8.54	97.27	21.96				
UNO Charter School Network	8	1,889	0.00	4.91	1.53	92.27	1.29	98.71	13.67	84.85	16.15				
Uplift Education	2	1,317	0.38	38.72	17.92	6.07	36.90	63.12	-13.17	6.57	-47.79	3.97	-6.59	1.94	-15.80
Winfree Academy Charter Schools	5	1,823	0.66	1.97	26.06	16.18	55.13	44.93	-17.84	38.62	-6.93	0.00	-10.23	6.36	-3.33
YES Prep Public Schools	4	1,453	0.00	0.55	85.62	12.39	1.45	98.55	13.48	77.16	14.73	3.72	-5.15	0.28	-18.27
Small Nonprofit EMOs	**90**	**29,705**	**0.61**	**1.98**	**26.70**	**41.23**	**28.47**	**70.51**	**0.68**	**51.41**	**2.98**	**7.83**	**-4.83**	**2.00**	**-7.10**
Academies of Excellence, Inc.	3	216	0.00	0.46	4.63	18.52	72.22	23.60	-1.97	38.90	2.53				
Academy of Tucson Inc.	3	615	1.30	2.44	8.29	3.09	84.88	15.12	-36.18			5.20	-7.87	0.00	-12.05
Albert Einstein Academy	2	420	0.71	4.05	24.29	12.62	56.67	41.64	-31.81	29.70	-31.08				
Arizona Agribusiness and Equine Center, Inc	3	1,284	1.09	2.26	22.43	5.84	68.38	31.57	-22.37	10.56	-35.05	2.62	-8.53	2.62	-8.85
Arizona Community Development Corporati	3	1,207	0.50	3.07	38.19	14.83	43.41	56.56	-11.40	52.59	15.18	9.44	-3.51	4.23	-7.82
Aspira of Florida, Inc.	3	830	0.00	0.72	60.60	33.86	3.49	95.18	5.86	65.58	6.57				
BASIS School, Inc.	2	708	1.13	14.55	12.57	2.26	69.49	30.54	-21.92			2.55	-9.76	0.00	-9.92
Beginning with Children Foundation	2	731	0.41	0.68	38.58	57.05	3.28	96.73	7.69	71.95	3.71			4.66	-2.05
Betty Shabazz International Charter School	3	654	0.00	0.00	0.00	99.08	0.00	99.08	9.52						
Bright Star Schools	2	335	0.00	0.30	94.03	5.37	0.00	99.71	9.55	89.00	15.79				
Buckeye On-line School for Success	1	1,012	0.59	0.10	1.28	3.85	90.22	5.83	-0.35	0.00	-67.25				
CAFA, Inc.	3	423	0.00	0.35	18.41	81.15	0.09	99.91	5.66	64.67	9.05	5.82	-7.75	3.52	-3.17
Calli Ollin Academy	3	321	6.86	3.78	21.28	12.29	55.79	44.18	3.59	51.55	14.17	9.93	-0.46	2.13	-5.55
Central Florida Human Services, Inc.	1	97	6.85	0.00	89.10	1.87	2.18	97.83	17.66	84.10	34.29	13.44	0.01	0.00	-12.24
César Chávez Public Charter Schools	2	1,135	0.00	0.00	13.40	50.52	34.02	63.92	19.85	81.44	24.12				
Civitas Schools	3	5,943	0.02	1.21	21.82	70.54	4.02	93.59	4.03						
Community & Economic Development Orga	1	182	0.00	0.00	14.84	80.77	3.30	95.60	0.52	80.22	0.44				
Daisy Education Corporation	2	603	0.00	0.40	1.19	98.41	0.00	100.00	5.74	44.05	-11.57				
DC Prep	1	252	1.33	4.64	17.58	5.31	71.14	28.83	-34.78	12.27	-57.29	7.63	-5.06	0.66	-16.41
EDSYS, Inc.	1	507	0.20	0.20	0.39	58.19	41.03	58.97	-3.89	61.74	25.39	2.56	-20.22	0.00	-0.97
EightCAP Inc.	1	186	1.08	0.00	10.22	0.54	86.56	11.83	5.43	86.02	44.44	20.43	0.82	8.06	7.14
Espiritu Community Development Corporati	3	826	0.00	0.24	94.67	3.03	2.06	97.94	1.38	83.18	-1.92	2.66	-5.49	0.00	-26.66
Foundation for Behavioral Resources	2	393	0.00	2.29	3.05	10.94	83.46	16.25	-3.46	32.58	6.62	2.54	-8.88	0.00	-1.80
Galapagos Charter	1	242	0.41	0.00	0.00	98.76	0.00	99.17	9.62						
Harlem Village Academies	3	516	0.00	0.00	25.78	74.22	0.00	100.00	1.49	71.92	-5.15			0.00	-11.31
Hyde Leadership Schools	1	192	0.52	0.00	55.73	43.75	0.00	100.00	13.98	94.27	27.22			0.00	-8.62
ISUS International	3	322	0.00	0.00	1.24	44.72	51.86	46.00	-27.10	83.23	10.20	22.48	2.28	0.42	-1.33
Life School	2	2,171	0.18	1.57	21.51	46.75	29.99	70.01	28.40	41.54	21.52	12.25	2.75	4.97	2.64
Midland Charter Initiative	1	188	0.53	3.72	1.06	4.26	85.64	9.57	1.61	0.00	-19.93	8.51	-5.54	0.00	-0.28
Nataki Talibah Schoolhouse	1	413	0.00	0.00	0.00	100.00	0.00	100.00	2.68	33.41	-43.55	2.18	-13.71	0.00	-9.57
New City Public Schools	1	196	0.00	0.00	65.31	9.69	17.35	75.00	-2.13	66.33	-1.49				
New Visions Academy, Inc.	3	89	11.24	0.00	44.94	0.00	43.82	56.15	15.73			1.90	-9.90	0.00	-10.04
Not Your Ordinary School	2	234	0.00	0.00	28.63	59.83	11.54	88.59	15.52	73.59	12.72	6.00	-5.05	1.05	-15.50
One Stop Multiservice Charter School	3	559	0.00	0.00	98.21	0.18	1.61	98.39	0.41	94.63	77.27				
Paradigm Accelerated Charter School	1	75	0.00	0.00	33.33	0.00	66.67	33.33	-16.74	66.67	-0.43				
Pointe Schools	3	1,157	1.30	2.85	12.62	5.01	78.22	21.77	-21.00	15.26	3.91	6.91	-6.38	0.00	-14.53
See Forever Foundation	2	120	0.00	0.00	29.66	61.86	8.47	91.53	11.93			0.00	-21.97	0.00	-5.02
South Texas Education Technologies, Inc.	2	451	0.00	0.00	4.17	95.83	0.00	100.00	5.74	72.50	16.88	0.00	-13.57	0.00	-6.70
Southwest Winners Foundation, Inc.	3	920	0.22	3.99	78.49	1.55	15.74	84.25	-13.84	58.69	37.72	2.88	-7.10	11.53	-6.50
St. HOPE Public Schools	2	1,491	0.22	1.09	62.07	22.28	14.35	85.64	19.79	58.36	31.95	15.20	4.60	0.72	-5.49
SVRC Industries, Inc.	1	118	1.27	8.52	21.13	58.42	7.85	89.33	12.35	56.27	-6.68				
TechEdventures	2	476	2.73	0.42	1.68	64.71	30.25	69.76	3.75	69.77	28.34				
The SEED Foundation	1	327	0.00	0.00	1.22	98.78	0.00	100.00	5.74	73.09	17.47	0.00	-13.57	0.00	-6.70
Woodbridge Group, Inc.	2	568	0.35	1.58	1.94	8.10	88.03	11.95	0.41	36.20	0.84	11.43	-4.54	0.00	-1.08
Grand Total	**418**	**122,771**	**0.66**	**2.49**	**32.70**	**40.78**	**21.48**	**76.83**	**0.81**	**58.93**	**1.28**	**9.72**	**-3.08**	**4.15**	**-5.73**

Note: All data are from the 2006-07 school year.

Appendix B
Tables with Descriptive Statistics for Key Measures and the Differential Scores

Table B:1. Descriptive Statistics for Percent Minority and Minority Differential

		Percent Minority			***Minority Differential***			***Number Schools***
		Mean	***SD***			***Mean***	***SD***	
Total	All EMOs	66.62	34.30	Total	All EMOs	1.47	23.64	968
Type[1]	For-Profit	61.49	35.37	Type[2]	For-Profit	1.80	25.91	550
	Nonprofit	76.83	29.55		Nonprofit	0.81	18.32	418
Size[3]	Large	68.00	33.83	Size[4]	Large	4.45	22.56	563
	Medium	69.00	31.87		Medium	-1.15	20.28	243
	Small	58.57	37.77		Small	-6.41	28.77	162
Instructional Level[5]	Elementary	69.92	32.87	Instructional Level[6]	Elementary	4.58	21.72	444
	Middle	82.68	25.77		Middle	3.90	20.87	127
	High	70.28	29.48		High	0.78	21.20	208
	Other	49.39	37.61		Other	-6.09	28.56	189
For-Profit EMOs by Size[7]	Large	64.17	34.54	For-Profit EMOs by Size[8]	Large	5.01	23.51	394
	Medium	59.63	33.76		Medium	-2.78	23.12	84
	Small	47.58	38.36		Small	-12.93	34.52	72
Nonprofit EMOs by Size[9]	Large	84.06	25.07	Nonprofit EMOs by Size[10]	Large	2.10	17.92	169
	Medium	74.13	29.69		Medium	-0.27	18.59	159
	Small	70.51	33.45		Small	0.68	18.57	90
For-Profit EMOs by Instructional Level[11]	Elementary	67.81	33.54	For-Profit EMOs by Instructional Level[12]	Elementary	5.48	22.50	324
	Middle	77.44	25.24		Middle	7.99	17.26	39
	High	65.00	29.58		High	2.27	25.94	105
	Other	39.31	35.72		Other	-9.59	32.08	82
Nonprofit EMOs by Instructional Level[13]	Elementary	77.83	29.03	Nonprofit EMOs by Instructional Level[14]	Elementary	1.20	18.22	120
	Middle	85.51	25.81		Middle	1.69	22.39	88
	High	74.93	28.77		High	-0.53	15.95	103
	Other	70.14	32.77		Other	1.11	17.49	107

Significant at 0.05, Significant at 0.01

One-way ANOVA was used to test whether the differences between groups were statistically significant (see detailed findings below).

1 $F(1, 964) = 49.97$, $p < .001$
2 $F(1, 964) = .37$, $p = .542$
3 $F(2, 963) = 5.50$, $p = .004$; L>S M>S
4 $F(2, 963) = 15.52$, $p < .001$; L>M,S M>S
5 $F(3, 962) = 29.88$, $p < .001$; E>O M>E,H,O H>O
6 $F(3, 962) = 10.97$, $p < .001$; 1>4 2>4 3>4
7 $F(2, 640) = 8.23$, $p < .001$; L>S
8 $F(2, 640) = 19.60$, $p < .001$; L>M,S M>S
9 $F(2, 320) = 5.98$, $p = .003$; L>M,S
10 $F(2, 320) = .512$, $p = .600$
11 $F(3, 639) = 29.24$, $p < .001$; E>O M>O H>O
12 $F(3, 639) = 13.42$, $p < .001$; E>O M>O H>O
13 $F(3, 319) = 3.23$, $p = .023$; M>O
14 $F(3, 319) = .22$, $p = .881$

Table B:2. Descriptive Statistics for Percent FRL and FRL Differential

	Percent FRL				*FRL Differential*			*Number Schools*
		Mean	***SD***			***Mean***	***SD***	
Total	All EMOs	55.93	29.14	Total	All EMOs	1.95	26.55	804
Type[1]	For-Profit	54.35	28.41	Type[2]	For-Profit	2.30	25.22	444
	Nonprofit	58.93	30.33		Nonprofit	1.28	28.95	360
Size[3]	Large	58.60	28.51	Size[4]	Large	3.68	24.32	490
	Medium	50.08	30.48		Medium	-4.00	29.96	192
	Small	51.47	28.67		Small	2.21	30.42	122
Instructional Level[5]	Elementary	56.82	29.31	Instructional Level[6]	Elementary	2.02	26.40	382
	Middle	64.89	27.35		Middle	2.65	26.31	116
	High	52.12	28.00		High	1.18	26.08	156
	Other	51.23	29.52		Other	2.00	27.75	150
For-Profit EMOs by Size[7]	Large	54.94	28.58	For-Profit EMOs by Size[8]	Large	3.45	24.44	330
	Medium	52.50	24.85		Medium	-5.40	26.06	63
	Small	51.53	30.78		Small	1.38	29.18	51
Nonprofit EMOs by Size[9]	Large	71.80	24.12	Nonprofit EMOs by Size[10]	Large	4.52	23.96	160
	Medium	48.77	33.15		Medium	-3.26	31.96	129
	Small	51.41	26.88		Small	2.98	31.74	71
For-Profit EMOs by Instructional Level[11]	Elementary	56.19	28.85	For-Profit EMOs by Instructional Level[12]	Elementary	2.27	25.91	282
	Middle	60.69	27.72		Middle	6.88	26.21	33
	High	46.24	24.36		High	-1.09	24.34	68
	Other	50.27	28.19		Other	3.06	22.69	61
Nonprofit EMOs by Instructional Level[13]	Elementary	59.65	31.34	Nonprofit EMOs by Instructional Level[14]	Elementary	.89	28.66	100
	Middle	66.84	27.17		Middle	.69	26.32	83
	High	56.49	29.83		High	2.86	27.33	88
	Other	52.69	31.65		Other	.38	34.21	89

Significant at 0.05, Significant at 0.01

One-way ANOVA was used to test whether the differences between groups were statistically significant (see detailed findings below)

1 $F(1, 802) = 4.51$, $p = .034$
2 $F(1, 802) = .27$, $p = .604$
3 $F(2, 801) = 6.85$, $p = .001$; L>M
4 $F(2, 801) = 5.23$, $p = .006$; L>M
5 $F(3, 800) = 5.22$, $p = .001$; M>H,O
6 $F(3, 800) = .06$, $p = .981$
7 $F(2, 524) = .47$, $p = .628$
8 $F(2, 524) = 3.11$, $p = .046$; L>M
9 $F(2, 274) = 20.58$, $p < .001$; L>M,S
10 $F(2, 274) = 2,12$, $p = .122$
11 $F(3, 523) = 3.20$, $p = .023$; NONE
12 $F(3, 523) = .70$, $p = .556$
13 $F(3, 273) = 2.51$, $p = .059$
14 $F(3, 273) = .11$, $p = .956$

Table B:3. Descriptive Statistics for Percent Special Education and IEP Differential

	Percent IEP				***IEP Differential***			***Number Schools***
		Mean	***SD***			***Mean***	***SD***	
Total	All EMOs	9.77	8.53	Total	All EMOs	-4.40	8.76	598
Type[1]	For-Profit	9.79	6.37	Type[2]	For-Profit	-4.90	6.57	359
	Nonprofit	9.72	12.53		Nonprofit	-3.08	12.73	239
Size[3]	Large	9.66	9.20	Size[4]	Large	-4.72	9.74	340
	Medium	9.71	8.04		Medium	-3.88	7.96	149
	Small	10.18	6.80		Small	-3.98	6.02	109
Instructional Level[5]	Elementary	9.24	6.17	Instructional Level[6]	Elementary	-5.40	6.49	276
	Middle	7.59	5.39		Middle	-6.81	5.33	47
	High	9.35	7.08		High	-3.33	7.78	145
	Other	11.57	12.67		Other	-2.68	12.60	130
For-Profit EMOs by Size[7]	Large	9.32	5.94	For-Profit EMOs by Size[8]	Large	-5.31	6.75	240
	Medium	10.07	7.00		Medium	-4.67	6.63	61
	Small	11.32	7.23		Small	-3.57	5.66	58
Nonprofit EMOs by Size[9]	Large	11.25	18.00	Nonprofit EMOs by Size[10]	Large	-1.86	18.07	100
	Medium	9.39	8.89		Medium	-3.19	8.95	88
	Small	7.83	5.12		Small	-4.83	6.68	51
For-Profit EMOs by Instructional Level[11]	Elementary	9.41	6.38	For-Profit EMOs by Instructional Level[12]	Elementary	-5.38	6.76	213
	Middle	9.47	6.42		Middle	-6.63	5.48	11
	High	9.21	5.75		High	-4.62	5.80	73
	Other	10.93	6.59		Other	-3.80	6.50	62
Nonprofit EMOs by Instructional Level[13]	Elementary	8.26	4.79	Nonprofit EMOs by Instructional Level[14]	Elementary	-5.50	4.67	63
	Middle	6.66	4.67		Middle	-6.90	5.36	36
	High	9.49	8.26		High	-2.03	9.24	72
	Other	13.28	21.83		Other	.30	21.55	68

Significant at 0.05, Significant at 0.01

One-way ANOVA was used to test whether the differences between groups were statistically significant (see detailed findings below)

1 $F(1, 594) = .009$, $p = .924$
2 $F(1, 594) = 5.26$, $p = .022$
3 $F(2, 593) = .17$, $p = .842$
4 $F(2, 593) = .59$, $p = .555$
5 $F(3, 592) = 3.64$, $p = .013$ O>E
6 $F(3, 592) = 4.85$, $p = .002$; O>E
7 $F(2, 428) = 3.15$, $p = .044$; S>L
8 $F(2, 428) = 2.26$, $p = .106$
9 $F(2, 162) = .01$, $p = .405$
10 $F(2, 162) = .64$, $p = .529$
11 $F(3, 427) = 1.67$, $p = .173$
12 $F(3, 427) = 1.84$, $p = .140$
13 $F(3, 161) = 1.87$, $p = .137$
14 $F(3, 161) = 2.45$, $p = .065$

Table B:4. Descriptive Statistics for Percent English Language Learners and ELL Differential

	Percent ELL				***ELL Differential***			***Number Schools***
		Mean	***SD***			***Mean***	***SD***	
Total	All EMOs	4.44	11.86	Total	All EMOs	-3.78	11.81	547
Type[1]	For-Profit	4.57	13.31	Type[2]	For-Profit	-2.92	12.63	311
	Nonprofit	4.15	7.55		Nonprofit	-5.73	9.42	236
Size[3]	Large	4.41	10.08	Size[4]	Large	-3.13	9.34	298
	Medium	4.61	13.94		Medium	-4.40	13.24	141
	Small	4.37	13.85		Small	-4.84	15.55	108
Instructional Level[5]	Elementary	3.32	10.54	Instructional Level[6]	Elementary	-4.05	10.03	245
	Middle	5.30	9.95		Middle	-3.68	9.93	51
	High	6.22	10.21		High	-3.51	11.31	141
	Other	5.04	15.25		Other	-3.48	15.35	110
For-Profit EMOs by Size[7]	Large	3.94	10.29	For-Profit EMOs by Size[8]	Large	-2.87	9.65	201
	Medium	6.02	18.98		Medium	-2.29	15.39	57
	Small	5.68	17.08		Small	-3.57	18.28	53
Nonprofit EMOs by Size[9]	Large	6.49	8.87	Nonprofit EMOs by Size[10]	Large	-4.32	7.76	97
	Medium	3.50	7.97		Medium	-6.07	11.09	84
	Small	2.00	2.54		Small	-7.10	8.46	55
For-Profit EMOs by Instructional Level[11]	Elementary	3.40	11.19	For-Profit EMOs by Instructional Level[12]	Elementary	-3.81	10.30	181
	Middle	9.18	11.29		Middle	1.97	8.21	11
	High	5.97	11.52		High	-2.13	11.43	74
	Other	5.87	17.93		Other	-1.97	17.47	45
Nonprofit EMOs by Instructional Level[13]	Elementary	2.93	6.92	Nonprofit EMOs by Instructional Level[14]	Elementary	-5.12	8.73	64
	Middle	3.43	8.89		Middle	-6.39	9.67	40
	High	6.49	8.75		High	-4.94	11.12	67
	Other	3.12	4.99		Other	-6.97	7.80	65

Significant at 0.05, Significant at 0.01

One-way ANOVA was used to test whether the differences between groups were statistically significant (see detailed findings below)

1 $F(1, 540) = .15$, $p = .703$
2 $F(1, 540) = 6.52$, $p = .011$
3 $F(2, 539) = .016$, $p = .984$
4 $F(2, 539) = 1.09$, $p = .337$
5 $F(3, 538) = 1.76$, $p = .155$
6 $F(3, 538) = .093$, $p = .964$
7 $F(2, 374) = .85$, $p = .427$
8 $F(2, 374) = .17$, $p = .846$
9 $F(2, 161) = 4.85$, $p = .009$; L>S
10 $F(2, 161) = 1.12$, $p = .330$
11 $F(3, 373) = 1.54$, $p = .203$
12 $F(3, 373) = 1.21$, $p = .305$
13 $F(3, 160) = 2.42$, $p = .069$
14 $F(3, 160) = .46$, $p = .711$

Appendix C

Longitudinal Trends in EMO-Operated Schools

Table 12 in the report illustrates the longitudinal trends in the distribution of Minority Differential scores. In this appendix, we include parallel results for the other three outcome measures: Low-income differentials, special education differentials, and English language learners (ELL) differentials.

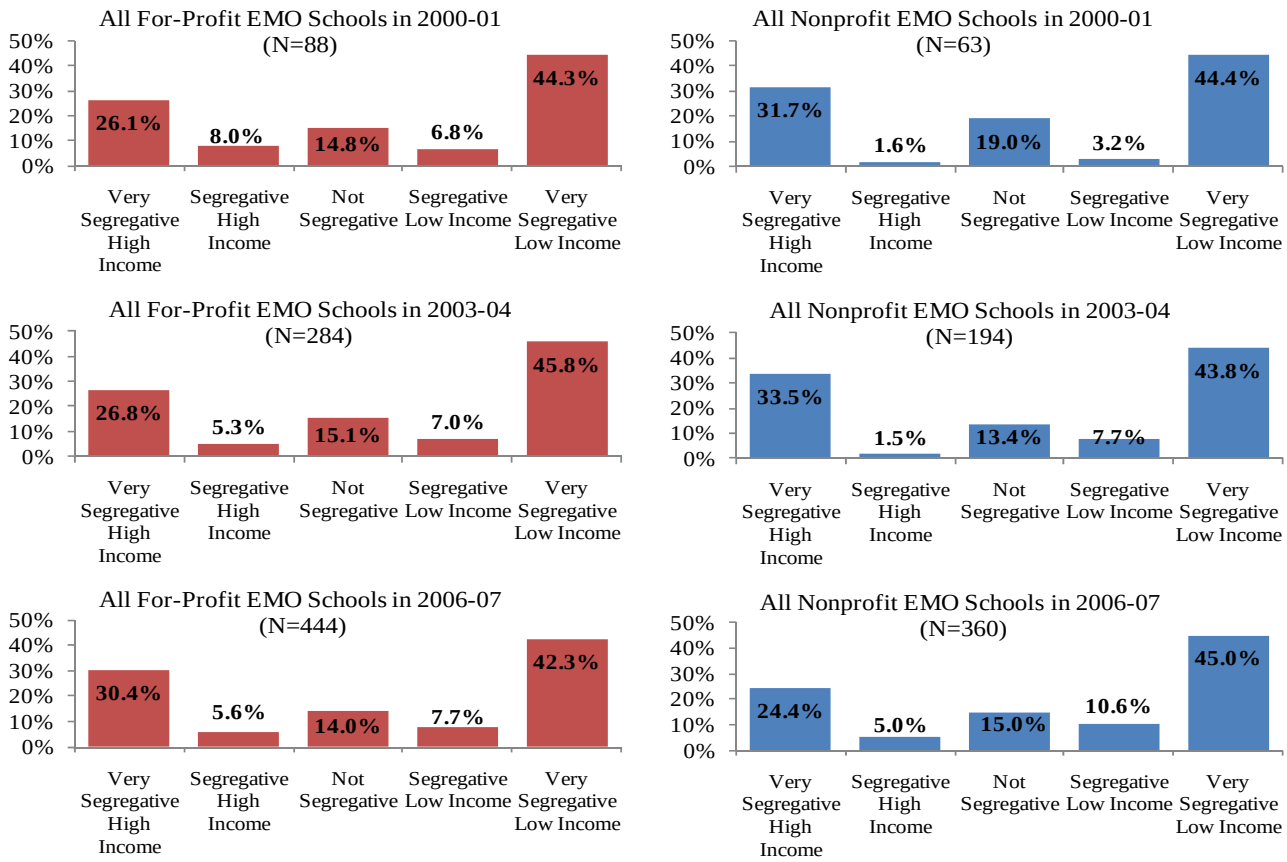


Figure C:1 Longitudinal Trends in Distribution of Schools Across Five Categories Ranging From Segregative High Income to Segregative Low-Income

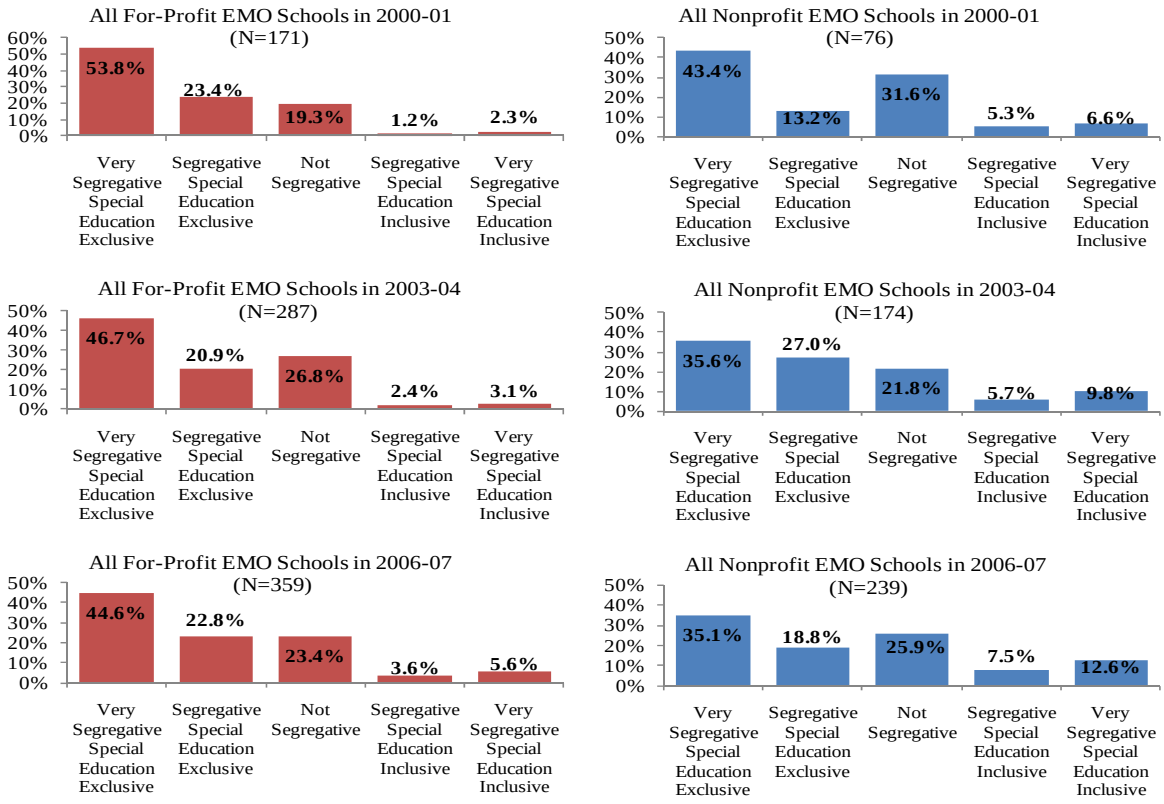


Figure C:2 Longitudinal Trends in Distribution of Schools Across Five Categories Ranging From Segregative Special Education Exclusive to Segregative Special Education Inclusive

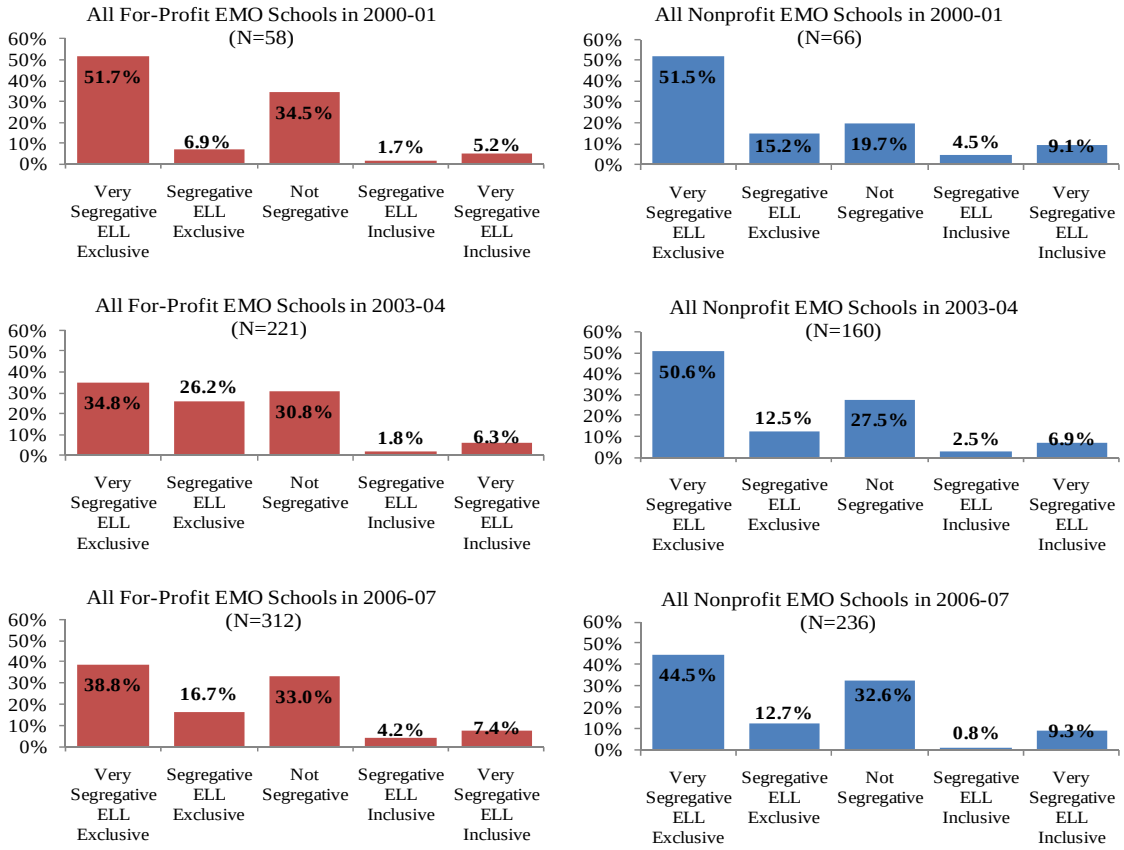


Figure C:3 Longitudinal Trends in Distribution of Schools Across Five Categories Ranging From Segregative ELL Exclusive to Segregative ELL Inclusive