

Failed Promises: Assessing Charter Schools in Twin Cities

Institute on Race and Poverty

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INTRODUCTION

Minnesota has the longest experience with charter schools of any state in the country. The state's first charter school opened in 1991. Seventeen years later, there were 116 charters with 22,500 students in the Twin Cities metropolitan area alone. Despite this long-term experience, little has been done until very recently to systematically evaluate how well charters have performed, especially regarding student performance in charters and their demographic composition. This work summarizes the recent studies—both in Minnesota and across the country—and provides its own evaluation of charter school performance in the Twin Cities metropolitan area.

Charter school proponents promoted charter schools as a means to improve the performance of students who would otherwise have no choice but to attend failing traditional public schools. They claimed that families of means always had school choice—they had the financial resources to either send their children to private schools or to move to better neighborhoods with higher quality public schools. Advocates of charter schools promised that charter schools would extend the same school choice to low-income parents and parents of color, who were stranded in low-performing traditional public schools. They further pledged that by severing the link between segregated neighborhoods and segregated schools, charter schools would liberate low-income parents of color from the racially segregated traditional public schools they attended. Overall, they claimed that charters would promote a race to the top for all parties that were involved.

This study finds that in Minnesota charter schools failed to deliver the promises made by charter school proponents. Despite nearly two decades of experience, charter schools in Minnesota still perform worse on average than comparable traditional public schools. Although a few charter schools perform well, most offer low income parents and parents of color an inferior choice—a choice between low-performing traditional public schools and charter schools that perform even worse. The study finds that other public school choice programs such as The Choice is Yours Program offer access to much better schools than the charter schools in Minnesota.

The analysis also shows that charter schools have intensified racial and economic segregation in Twin Cities schools. A geographical analysis shows that the racial make-ups of charter schools mimic the racial composition of the neighborhoods where they are located. This contrasts sharply with the claim that charter schools would sever the link between segregated neighborhoods and schools. On the contrary, the data show that charter schools are segregating students of color in non-white segregated schools that are even more segregated than the already highly-segregated traditional public schools. In some predominantly white urban and suburban neighborhoods, charter schools also serve as outlets for white flight from traditional public schools that are racially more diverse than their feeder neighborhoods.

Finally, the analysis implies that rather than engendering a race to the top, charter school competition in fact encourages a race to the bottom in the traditional public school system. Traditional public schools in the Twin Cities region have responded to charter school competition in two undesirable ways. First, in an attempt to recapture students that left for charters and to retain current enrollees, they have sponsored racially segregated and in some cases “ethno-centric” charter schools of their own, further contributing to the racial and economic segregation of the region’s education system. Second, in response to the “ethno-centric” programs offered by the charter schools, the traditional systems have created “ethno-centric” programs within traditional schools. Overall, charter school competition in ethnic niches triggered further racial segregation in the traditional public school system as public school districts initiated “ethno-centric” programs and schools to compete.

Charter school proponents put the responsibility for making schools accountable squarely on parents. Parents are expected to punish failing schools by choosing to send their children to better performing schools. Proponents argue that pressures coming from parents as informed consumers should prompt traditional public schools to implement changes to improve their student outcomes. While it is certainly reasonable to give parents ways to hold schools accountable, it is difficult to argue that this is all that it takes to improve school outcomes. It is very difficult to evaluate school performance, even for professionals. It is assuming a lot to suppose that parents have the time or expertise to make these assessments in ways that will push the system to improve.

Local proponents of charter schools who propelled this institution into the national landscape do not seem eager to hold charters to the standards originally used to promote them. They urge policy makers to modify the question of “How are charter schools doing?” to ask instead “How is chartering doing—as a mechanism for getting the new, different, and better schools it must now have?” This cynical move to switch attention from the performance of charter schools to the chartering process itself is a step toward relaxing the performance and social standards that taxpayers expect of all public schools, including especially the charter schools. It is time for charter schools to be held accountable. In their birthplace, where they have had the longest chance to flourish and mature, if charter schools still cannot outperform traditional public schools and are even more segregated than traditional public schools, it is time to reform the system to hold charters to the same standards as their competition.

SECTION I: CHARTER SCHOOLS AND SEGREGATION

Charter schools have experienced unprecedented growth within the public school system since their inception in 1991. Charter school attendance is growing particularly quickly among students of color. It is thus especially important to assess how charter schools impact the educational and life outcomes of students of color, who constitute a growing share of the nation's student body.

The impact of charter schools on the racial and economic diversity of the educational system is a crucial component of such an assessment. Proponents of charters argued that charter schools would improve student racial diversity by enabling families to choose schools outside the racially segregated neighborhoods in which they reside and by promoting fuller integration within schools where all students attend school by choice.¹

In contrast, many scholars have been concerned that charter schools accentuate the racial and economic segregation of students.² Some consider the possibility that charter schools might pull white students away from racially diverse districts, leaving traditional public schools with high levels of racial segregation.³ Many studies document cases where white charter students attend charter schools that are significantly whiter than their traditional public school counterparts.⁴ Examining the conditions under which such pockets of white segregation emerge, one study found that integration in school districts pushes white students into charter schools, leading to another form of white flight.⁵

¹ T. Kolderie, *Creating the Capacity for Change: How and Why Governors and Legislatures are Opening a New-Schools Sector in Public Education*. (Education Week Press, 2004); Chester E. Finn, B. V. Manno and G. Vanourek, *Charter Schools in Action: Renewing Public Education*. (Princeton, N. J.: Princeton University Press, 2000); Jay P. Greene, "Why school choice can promote integration." *Education Week*, 19:31 (2000), p. 72; Joe Nathan, *Charter Schools: Creating Hope and Opportunity for American Education*. (San Francisco: Jossey-Bass Publishers, 1996). In Michigan, for instance, civil rights advocates collaborated with market proponents to pass charter school legislation to empower poorly performing students of color. See Christopher Lubienski, "Public Schools in Marketized Environments: Shifting Incentives and Unintended Consequences of Competition-Based Educational Reforms," *American Journal of Education*, 111 (August 2005): 464-486, especially pp. 472-473.

² Amy Stuart Wells, Jennifer Jellison Holme, Alejandra Lopez and Camille Wilson Cooper, "Charter Schools and Racial and Social Segregation: Yet Another Sorting Machine?" in R. D. Kahlenberg (ed.) *A Notion At Risk: Preserving Public Education As An Engine for Social Mobility*. (New York: The Century Foundation/Twentieth Century Fund, 2000), pp. 169-222; C. D. Cobb and G. V. Glass, "Ethnic Segregation in Arizona Charter Schools," *Education Policy Analysis Archives*, 7: 1 (1999); S. Eckes and K. Rapp, "Charter Schools: Trends and Implications," in E. St. John (ed.) *Readings on Education*, vol. 19 (New York, NY: AMS Press, 2005), pp. 1-26; Jennifer L. Hochschild and Nathan Scovronick, *The American Dream and the Public Schools*. (New York: Oxford University Press, 2003).

³ Edward Fiske and Helen Ladd, "When Schools Compete: A Cautionary Tale," (Washington, D. C.: Brookings Institution, 2000); Erica Frankenberg and Chungmei Lee, "Charter Schools and Race: A Lost Opportunity for Integrated Education," (Harvard University, The Civil Rights Project, July 2003).

⁴ For a list of these studies, see Linda A. Renzulli and Lorraine Evans, "School Choice, Charter Schools, and White Flight," *Social Problems*, 52 (2005): 398-418, p. 401

⁵ Linda A. Renzulli and Lorraine Evans, "School Choice, Charter Schools, and White Flight," *Social Problems*, 52 (2005): 398-418.

While charter schools serve as pockets of white segregation in some places, there is also evidence that they are increasingly intensifying non-white segregation.⁶ Contrary to the claim of charter proponents that charter schools would enable students to escape the segregated traditional neighborhood schools they attend, charter schools seem to be further contributing to school segregation by locating in these very same segregated neighborhoods. One recent study finds that segregated school districts are fertile grounds for pockets of non-white segregated charter schools since they tend to have a larger percentage of black charter school students than integrated school districts.⁷ White and non-white segregation in charter schools are not mutually exclusive either; many states have examples of both white and non-white segregated charters.⁸

In some states differences between the racial mixes in charter schools and the districts in which they are located are substantial.⁹ In these states charter schools could very well be increasing segregation in the total public school system. In Minnesota, for instance, the share of students of color in charter schools exceeded the student of color averages of the host districts by 20 percent.¹⁰ In contrast, charter schools were nearly 60 percent whiter than the hosting school districts in Mississippi. This could very well mean that most of the charter schools in Minnesota are non-white segregated, while charter schools in Mississippi are more likely to be white-segregated. In both cases, this would contribute to segregation in the school system.

⁶ Robert Bifulco and Helen F. Ladd, "School Choice, Racial Segregation, and Test-Score Gaps: Evidence from North Carolina's Charter School Program," *Journal of Policy Analysis and Management*, 26: 1 (2006): 31-56; Kevin Booker, Ron Zimmer, and Richard Buddin, "The Effect of Charter Schools on School Peer Composition," RAND Education Working Paper, October 2005; Lance D. Fusarelli, "Texas: Charter Schools and the Struggle for Equity," in Sandra Vergari (ed.) *The Charter School Landscape* (Pittsburgh, PA: Pittsburgh University Press, 2002), pp. 175-191; Gary Miron and Christopher Nelson, *What's Public About Charter Schools?* (Thousand Oaks, CA: Corwin Press, 2002); Gary Miron, "Evaluation of the Delaware Charter School Reform: Year 1 Report," (Western Michigan University, The Evaluation Center, December 2004; Yongmei Ni, "Are Charter Schools More Racially Segregated Than Traditional Public Schools?" (Michigan State University, The Education Policy Center, Policy Report 30, March 2007).

⁷ Linda A. Renzulli, "District Segregation, Race Legislation, and Black Enrollment in Charter Schools," *Social Science Quarterly*, 87: 3, September 2006: 618-637.

⁸ For the simultaneous presence of white and non-white segregated charter schools in Delaware, see Gary Miron, Anne Cullen, Brooks Applegate and Patricia Farrell, "Evaluation of the Delaware Charter School Reform: Final Report," (Western Michigan University, The Evaluation Center, March 2007); in Michigan, see Christopher Lubienski and Charisse Gulosino, "Choice, Competition, and Organizational Orientation: A Geo-Spatial Analysis of Charter Schools and the Distribution of Educational Opportunities," October 2007; in North Carolina, see Robert Bifulco and Helen F. Ladd, "School Choice, Racial Segregation, and Test-Score Gaps: Evidence from North Carolina's Charter School Program" *Journal of Policy Analysis and Management*, 26: 1 (2006): 31-56; in Philadelphia, Ron Zimmer, Suzanne Blanc, Brian Gill, and Jolley Christman, "Evaluating the Performance of Philadelphia's Charter Schools," (Rand Education Working Paper, March 2008), p. 11.

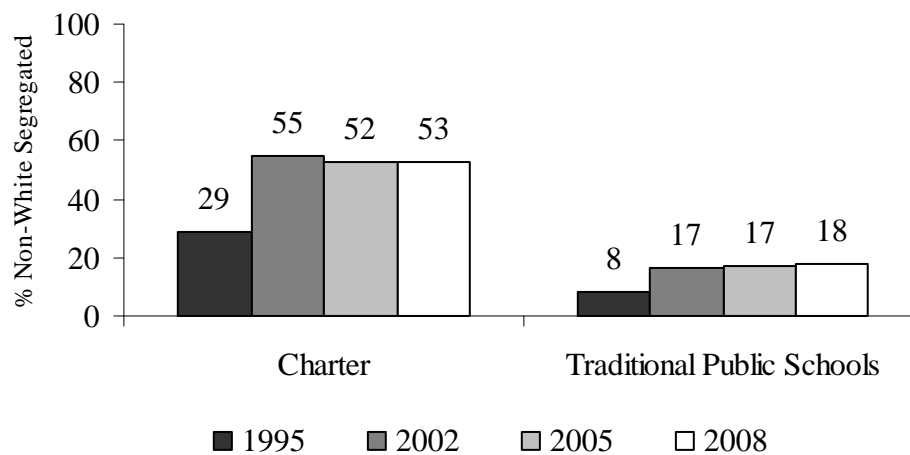
⁹ Todd Ziebarth, Mary Beth Celio, Robin J. Lake, and Lydia Rainey, "The Charter Schools Landscape in 2005," in Robin J. Lake and Paul T. Hill (eds.) *Hopes, Fears and Reality: A Balanced Look at American Charter Schools in 2005*. (University of Washington: National Charter School Research Project, 2005), Figure 6, p. 11.

¹⁰ Todd Ziebarth, Mary Beth Celio, Robin J. Lake, and Lydia Rainey, "The Charter Schools Landscape in 2005," in Robin J. Lake and Paul T. Hill (eds.) *Hopes, Fears and Reality: A Balanced Look at American Charter Schools in 2005*. (University of Washington: National Charter School Research Project, 2005), Figure 6, p. 11.

A close examination of the racial composition of charter schools in the Twin Cities region confirms this expectation. This study categorized charter and traditional public schools in Twin Cities into three distinct categories based on their racial make up: white segregated, non-white segregated, and integrated.¹¹ Charts 1 and 2 show the percentage of non-white segregated and integrated schools among charters and traditional public schools for four different years.

Chart 1 demonstrates that non-white segregated charter schools had become the dominant type among charter schools by 2002 and still maintain this status. By 2002, more than half of the charter schools were non-white segregated, compared to only 18 percent of traditional public schools. The share of non-white segregated charter schools increased significantly, jumping from less than a third in 1995 to more than a half in the 2000's.

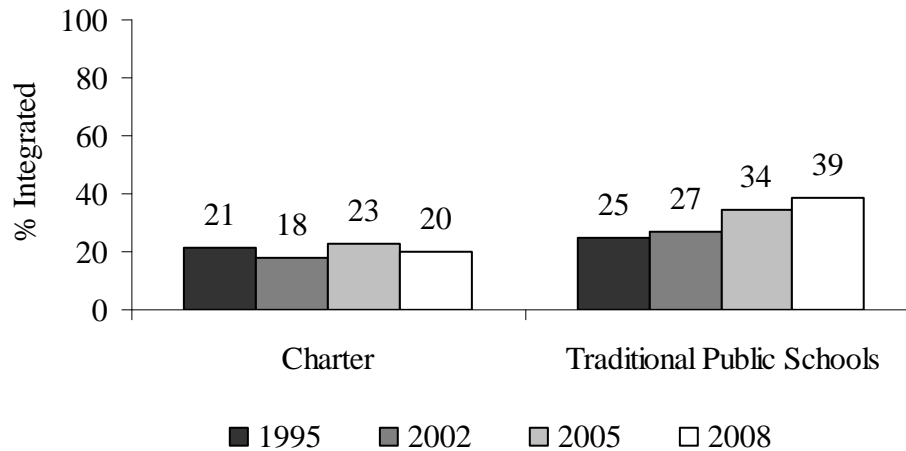
Chart 1: The Percentage of Non-White Segregated Schools in the Twin Cities Region



Integration trends were slightly different in charters and traditional public schools. The share of integrated schools among charters hovered around 20 percent from 1995 to 2008. In contrast, the trend was clearly upward in traditional public schools and 39 percent were integrated in 2008, up from 25 percent in 1995 and almost twice the percentage for charters (Chart 2). How did these school-level trends impact students of color?

¹¹ This typology is based on a more detailed typology, where schools are divided into twelve categories depending on their racial composition. For details of this typology, see Appendix I in Myron Orfield, Thomas Luce, Baris Gumus-Dawes and Geneva Finn, "Neighborhood and School Segregation in the Twin Cities Region," in Myron Orfield and Thomas Luce, *Region: Law, Policy and the Future of the Twin Cities*. (forthcoming). Each of these twelve categories was then assigned to one of the three categories discussed here. In this study, non-white segregated schools are defined either as schools where the share of blacks, Hispanics or Asian students exceeds 50 percent or as schools with varying combinations of black, Hispanic, and Asian students, where the relative share of white students in the schools does not exceed 30 percent. In white segregated schools, the share of each non-white group is smaller than 10 percent. Any school that is neither non-white segregated nor white segregated is considered integrated.

Chart 2: The Percentage of Integrated Schools in the Twin Cities Region



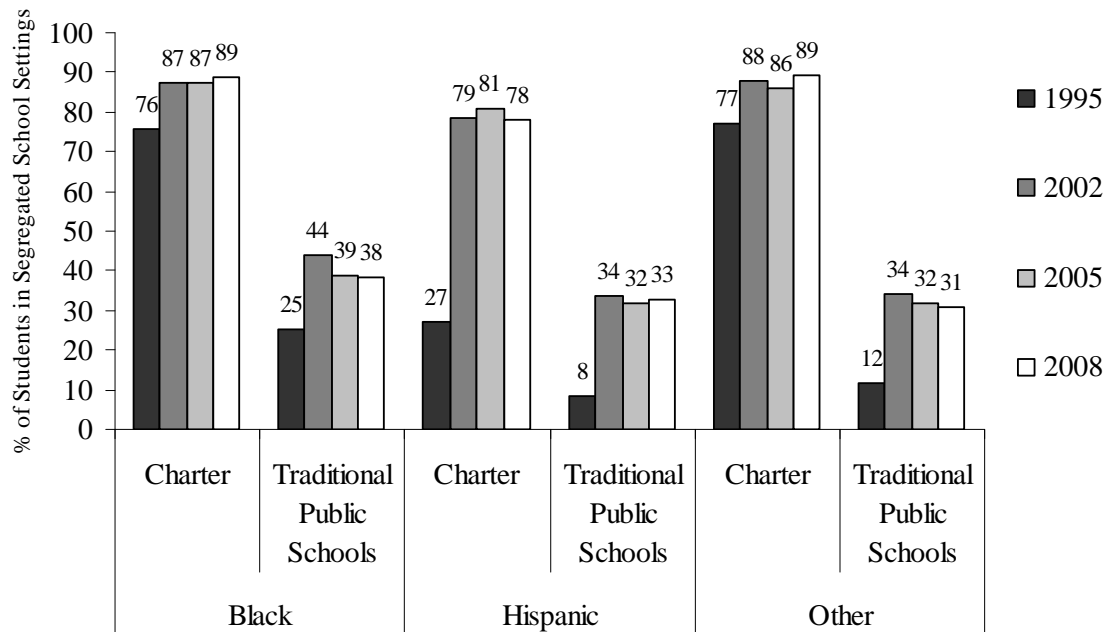
The share of students of color in segregated school settings was much higher in charters than in traditional public schools.¹² In 2008, 89 percent of black charter students were in segregated settings compared to just 38 percent of black traditional public school students (Chart 3). Similarly, Hispanics and other students of color were more than twice as likely to be in segregated settings in charter schools as in traditional public schools (Chart 3).

Attending racially segregated schools hurts students of color because virtually all non-white segregated schools have high concentrations of poverty.¹³ In the Twin Cities the poverty rate in non-white segregated schools was almost six times the poverty rate in predominantly white schools and more than two and a half times the poverty rate in

¹² For students of color, a “segregated setting” was defined as a school that was non-white segregated.

¹³ Studies document the close link between racial composition and poverty rates in schools. See, for instance, Gary Orfield and Chungmei Lee, *Brown at 50: King’s Dream or Plessy’s Nightmare* (Cambridge, MA: The Civil Rights Project at Harvard University, 2004), and Gary Orfield and Chungmei Lee, *Why Segregation Matters: Poverty and Educational Inequality* (Cambridge, MA: The Civil Rights Project at Harvard University, 2005). In 2002-2003, 88 percent of high-minority schools—defined as at least 90 percent minority—were high poverty schools where more than 50 percent of students received free or reduced-price lunches. In contrast, only 15 percent of low-minority schools—defined as less than 10 percent minority—were also high poverty schools. See Gary Orfield and Chungmei Lee, *Brown at 50: King’s Dream or Plessy’s Nightmare* (Cambridge, MA: The Civil Rights Project at Harvard University, 2004). According to the National Center for Education Research, larger percentages of black, Hispanic and American Indian students attend high-poverty schools than white students. See J. Wirt, S. Choy, P. Rooney, S. Provasnik, A. Sen and R. Tobin, *The Condition of Education 2005* (No. NCES 2005-094). Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2005.

**Chart 3: Students of Color in Segregated School Settings
by School Type, Twin Cities**



integrated schools in 2008.¹⁴ High-poverty schools are associated with a wide range of negative educational and life outcomes, including low test scores, high dropout rates, low college attendance rates, low earnings later in life, and greater risk of being poor as adults.¹⁵

Student poverty rates in charter schools were much higher than in traditional public schools in the Twin Cities region (Chart 4).¹⁶ Moreover, the gap between the poverty rates of charters and traditional public schools increased over time. In 2008, half of the

¹⁴ In 2008, the average poverty rate (measured by the percentage of free and reduced-price lunch eligible students) in non-white segregated schools was 81 percent, compared to 14 percent in predominantly white schools and 31% in integrated schools of the region.

¹⁵ Gary Orfield and Chungmei Lee, *Racial Transformation and the Changing Nature of Segregation* (Cambridge, MA: The Civil Rights Project at Harvard University, 2006), p. 30; Robert Balfanz and Nettie Legters, "Locating the Dropout Crisis: Which High Schools Produce the Nation's Dropouts," in Gary Orfield (ed.), *Dropouts in America: Confronting the Graduation Rate Crisis* (Cambridge, MA: Harvard Education Press, 2004). Chris Swanson, "Sketching A Portrait of Public High School Graduation: Who Graduates? Who Doesn't?" in Gary Orfield (ed.), *Dropouts in America: Confronting the Graduation Rate Crisis* (Cambridge, MA: Harvard Education Press, 2004); Richard D. Kahlenberg, *All Together Now* (Washington, D.C.: Brookings Institution Press, 2001), pp. 28-29, and 31.

¹⁶ Student poverty rates were measured by free-lunch eligibility of students rather than free and reduced-price lunch eligibility of students because reduced-price lunch statistics for 1995 were not available. For later years, another chart was constructed with free- and reduced-price lunch figures. Adding reduced-price lunch eligibility for later years did not alter the discrepancy between charters and traditional public schools for these years. In order to demonstrate the poverty trends from 1995 to 2008, Chart 4 depicts the shares of free-lunch eligible students in charters and traditional public schools.

students in charter schools were free lunch eligible compared to only slightly over a fifth of the students in traditional public schools (Charter 4).

It is possible to object to metro-wide comparisons of charters and traditional public schools because most charter schools are concentrated in urban school districts that are already highly racially segregated.¹⁷ In most places, charter schools are not randomly distributed across states or within metropolitan areas. This is also the case for the Twin Cities region.

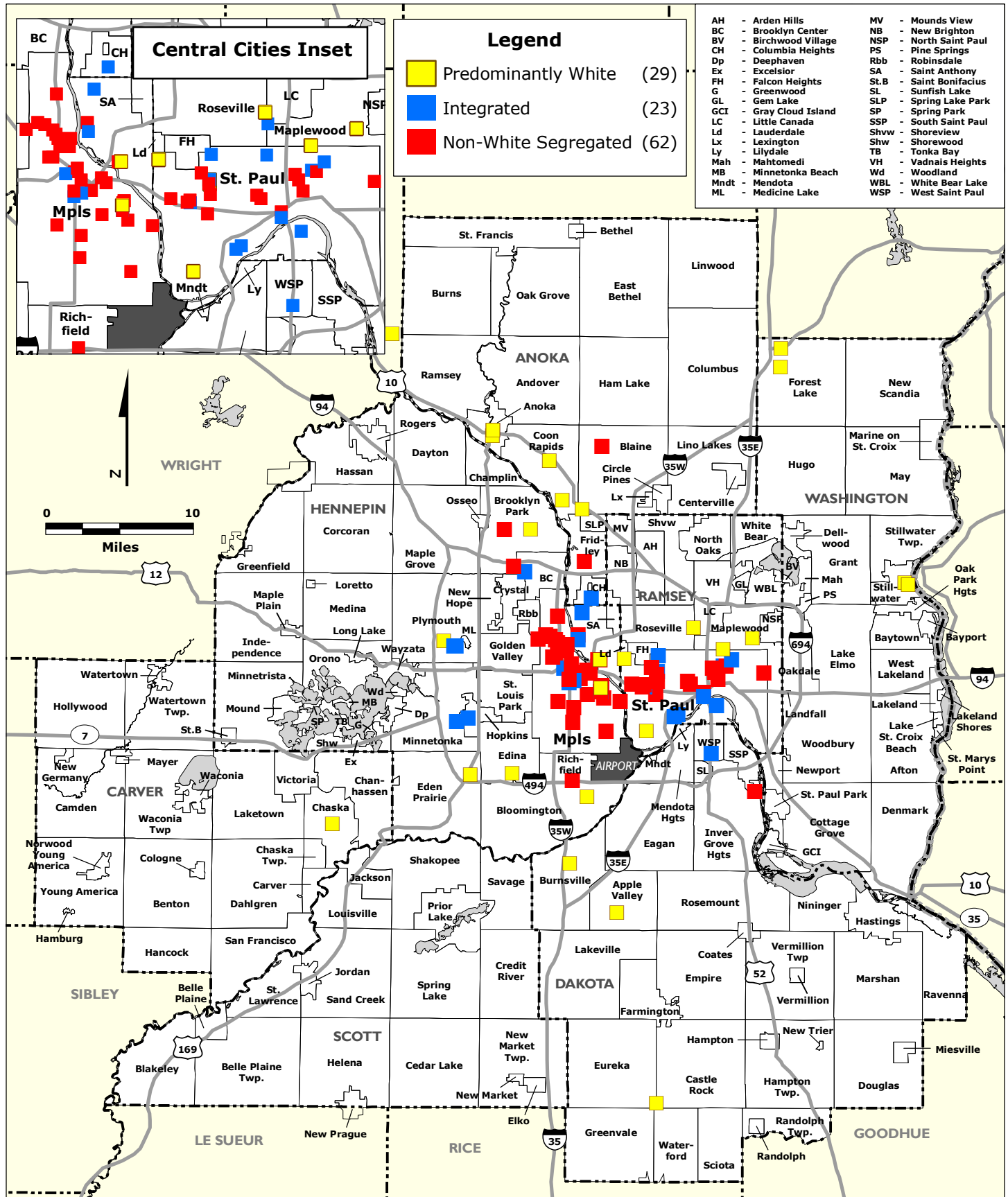
Chart 4: Student Poverty Rates in the Twin Cities Region



Map 1 shows that most non-white segregated charter schools are either in racially segregated urban school districts or in racially transitioning inner suburbs. In contrast, almost all of the white-segregated charter schools are located in white suburban school districts, with few notable exceptions that are located in white urban neighborhoods with racially diverse school districts (Map 1).

¹⁷ Nearly 70 percent of Minnesota's charter students are in the Twin Cities region, while nearly half of state's charter school students attend school in Minneapolis and St. Paul. Jon Schroeder, "Ripples of Innovation: Charter Schooling in Minnesota, the Nation's First Charter School State" (Progressive Policy Institute, 2004), p. 9, available at www.ppionline.org/documents/MN_Charters_0504.pdf (accessed 04/26/07).

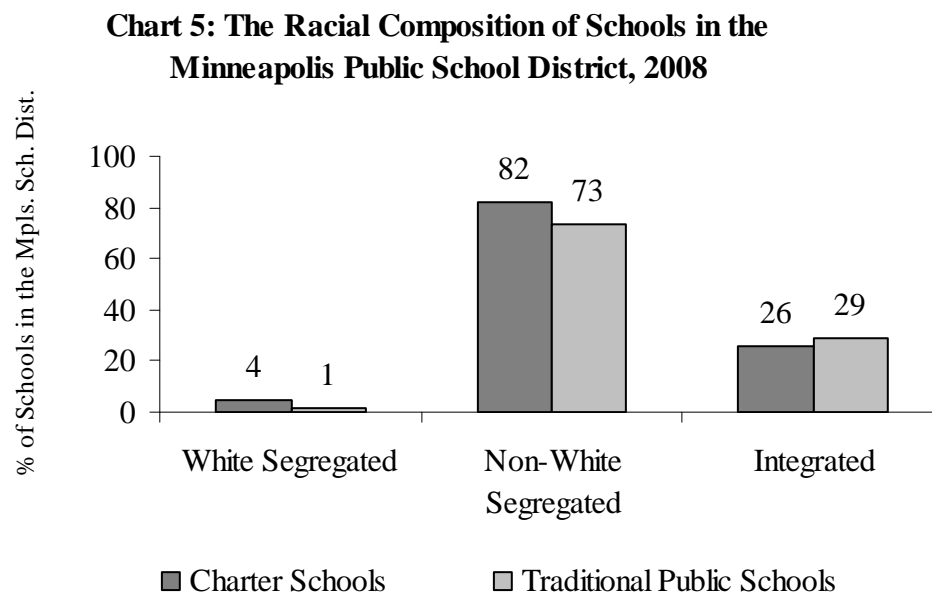
MINNEAPOLIS - SAINT PAUL REGION Charter Schools by Racial Composition, 2007-2008



The racial make up of the charter schools in Twin Cities closely mimics the racial composition of the neighborhoods in which they are located. This pattern refutes the claim of charter school proponents that charter schools sever the link between the racial composition of schools and neighborhoods. If charter schools can draw students from a number of districts with varying racial compositions, they have the potential to have an integrating impact.¹⁸ In Minnesota, however, charter schools don't seem to have an integrating impact on the student body.

Due to the skewed distribution of charter schools, comparing charter schools with traditional public schools at the metro level could make charter schools look artificially more segregated. It is thus more appropriate to compare the racial make up of charters with that of the traditional public schools that are located in the same urban school districts. In order to assess whether charter schools are more or less segregated, the comparison was made in the region's two urban school districts which have the highest concentrations of charter schools in the state—Minneapolis and St. Paul.

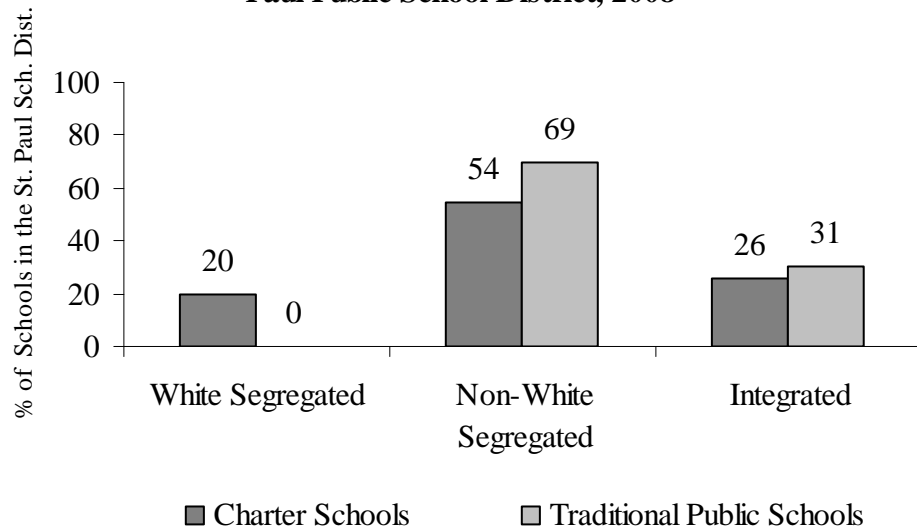
Chart 5 shows the racial composition of charters and traditional public schools in the Minneapolis Public School District. It is clear that the segregated nature of charter schools is not due solely to the geographic distribution of charter schools. Even when compared to the highly segregated traditional public schools in the Minneapolis Public School District, charter schools are still more segregated than their traditional public school counterparts.



¹⁸ Erica Frankenberg and Chungmei Lee, "Charter Schools and Race: A Lost Opportunity for Integrated Education," (Harvard University, The Civil Rights Project, July 2003); Yongmei Ni, "Are Charter Schools More Racially Segregated Than Traditional Public Schools?" (Michigan State University, The Education Policy Center, Policy Report 30, March 2007).

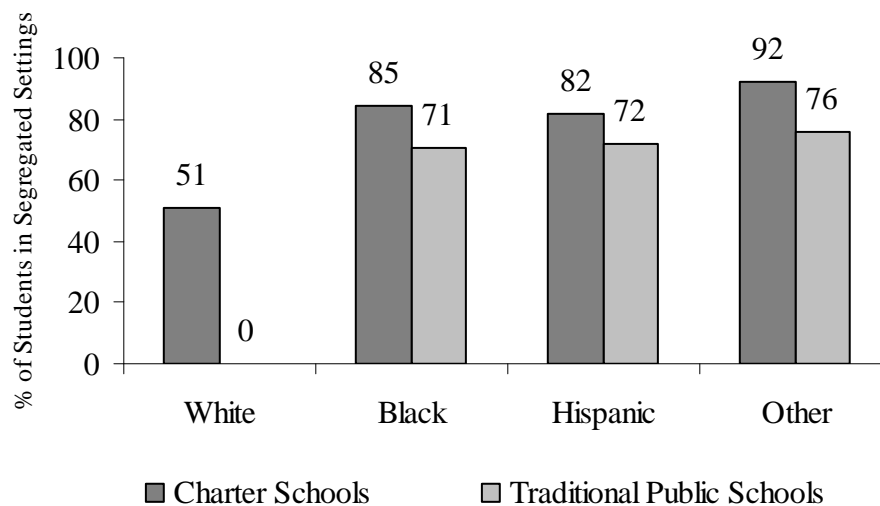
In St. Paul, while non-white segregation does not appear to be greater in charters than in traditional public schools, the overall percentage of segregated schools *is* higher due to the presence of several white-segregated charter schools. (Chart 6) The presence of these schools in a racially diverse public school district raises the possibility that a few charters are facilitating white flight.

Chart 6: The Racial Composition of Schools in the St. Paul Public School District, 2008



Comparing charters and traditional schools based on numbers of students in segregated settings provides a more disturbing pattern in St. Paul. (Chart 7) Fully half of the white students attending charter schools in the St. Paul Public School District attend predominantly white schools. (There are no predominantly white schools among traditional schools.) This means that charter schools are creating yet another avenue for white flight. Eleven percent of the district's white students attend predominantly white charter schools in a district where there are no predominantly white traditional schools.

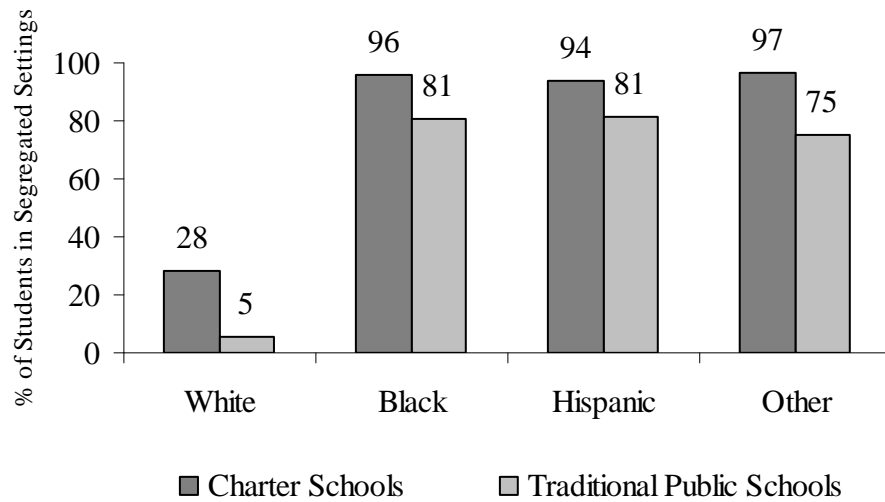
**Chart 7: Students in Segregated Settings
in St. Paul Schools, 2008**



Much more significant, however, is the impact of charters on students of color. As Chart 7 clearly demonstrates, the shares of students of color who attend school in segregated settings are even higher than the already high shares in their traditional public school counterparts. In fact, 88 percent of all students of color in charters in St. Paul attended non-white segregated schools in 2008 compared to 73 percent of students of color in traditional public schools.

Chart 8 shows an even worse pattern in Minneapolis. Minneapolis charter schools are even more segregated for students of color of all races and ethnicities than the district's already highly-segregated traditional public schools. Over 96 percent of all students of color who attended charter schools in the district did so in segregated settings compared to 80 percent in the traditional public schools in 2008.

**Chart 8: Students in Segregated Settings
in Minneapolis Schools, 2008**



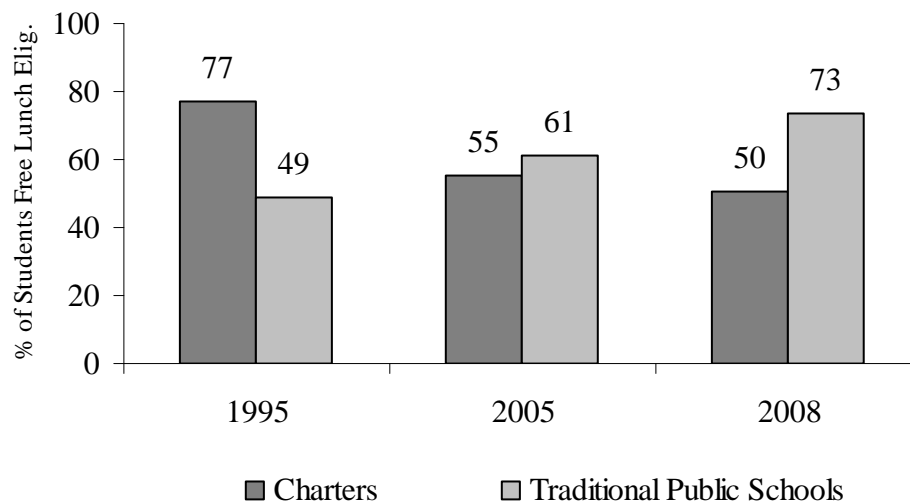
Meanwhile, student poverty rates in Minneapolis charter schools increased much more rapidly than in the district's traditional public schools. In 1995, poverty rates in charters and traditional public schools were comparable—slightly over half of these students were free lunch eligible (Chart 9). In 2008, nearly three quarters of charter students in Minneapolis was free lunch eligible, compared to 57 percent of the students in traditional public schools (Chart 9).

Chart 9: Poverty Rates in Minneapolis Public Schools



Student poverty rates in the St. Paul Public School District showed a more complicated pattern. In 1995, average student poverty rates in St. Paul were higher in charter schools than in traditional public schools (Chart 10). After more than a decade, the pattern was reversed. However, this change was due entirely to the growing number of white-segregated charter schools in the St. Paul Public School District. In 1995, the district had only one white-segregated charter school. By 2008, there were seven white-segregated charter schools with poverty rates well below average. The growth in the number of white segregated charter schools led to a decline in overall student poverty rates among the district's charters. The average student poverty rate in the district's white-segregated charter schools in 2008 was 18 percent. In contrast, the average student poverty rate in the district's non-white segregated charter schools in the same year was 84 percent—much higher than the 71 percent average poverty rate in the district's traditional public schools.

Chart 10: Poverty Rates in St. Paul Public Schools



This pattern once again confirms that segregation in charter schools hurt students of color much more than white students because students of color are much more likely to attend high-poverty schools than white students. In 2008, for instance, students of color in the Twin Cities metro were almost six times as likely to attend schools with high concentrations of poverty as white students.¹⁹

¹⁹ High-poverty schools are defined as schools where the percentage of free and reduced-price lunch eligible students exceeds 40 percent. In 2008, 56 percent of students of color attended high-poverty schools in the Twin Cities region, compared to 10 percent of white students. The discrepancies were even starker in very high-poverty schools—schools where the percentage of poor students exceeds 75 percent. Compared to less than two percent of white students who attended very high-poverty schools, 29 percent of students

Some proponents of charter schools argue that charter schools are a worthy educational innovation if they can educate students better than traditional public schools even in segregated school settings.²⁰ This argument, which is essentially a “separate but equal” justification for school segregation, relies on claims of quality educational performance in charter schools.²¹ In order to assess the validity of this argument, the next section focuses on the performance of charter schools.

of color attended such schools. Put differently, students of color in the Twin Cities were almost 20 times as likely as the region’s white students to be in schools where more than 75 percent of students were poor.

²⁰ See Bruno V. Manno, Gregg Vanourek, and Chester E. Finn, Jr., “Charter Schools: Serving Disadvantaged Youth,” *Education and Urban Society*, 31: 4 (August 1999), especially pp. 439-441.

²¹ Gary Orfield identifies this argument as a “separate but equal” justification of segregated charter schools based on performance. See Gary Orfield, “Foreword” in Erica Frankenberg and Chungmei Lee, “Charter Schools and Race: A Lost Opportunity for Integrated Education,” (Harvard University, The Civil Rights Project, July 2003), p. 3.

SECTION II: CHARTER SCHOOL PERFORMANCE

Few policy issues have generated the heated controversy that charter schools have since their conception in the early 1990s. The debate covers numerous aspects of charter schools ranging from their performance and accountability to their impact on traditional public schools. The academic performance of charters has undoubtedly been the most controversial issue in the ongoing debate.

The debate on the academic performance has failed to produce unanimity due both to the politically charged nature of the debate and the difficulties associated with statistical assessments of charter performance.²² It is difficult to assess the performance of charter schools because performance can be measured by a variety of yardsticks and because the data required to cover all statistical bases is very difficult to obtain.²³

Nevertheless, with the growing sophistication of education research and the availability of better data over time, a clearer picture of charter school performance has emerged among researchers.²⁴ Researchers now have a better understanding of the limitations of various measurement methodologies and there is some agreement on what needs to be studied in the future to better assess the performance of charter schools.²⁵

Much of the empirical analysis of charter school performance uses snapshot comparisons of charters with traditional public schools at a given time. National snapshots show that

²² For an overview of the heated political debates around charter school performance, see Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008); Jonathan Gyurko, "The Grinding Battle with Circumstances: Charter Schools and the Potential of School-Based Collective Bargaining," Columbia University, February 2008, pp. 14-15; Sandra Vergari, "The Politics of Charter Schools," *Educational Policy*, 21: 1 (January and March 2007), p. 31; Paul T. Hill, "Assessing Achievement in Charter Schools," in Robin J. Lake and Paul T. Hill (eds.) *Hopes, Fears and Reality: A Balanced Look at American Charter Schools in 2005*. (University of Washington: National Charter School Research Project, 2005), p. 22.

²³ Hill et al identify five different comparisons to assess the impact of charter school attendance on performance: "Charter school students are compared with: (1) students in the public schools that charter school students had previously attended; (2) students in public schools that are like, but not necessarily identical to, the public schools that the charter students would otherwise have attended; (3) students similar in age, race, and income level to charter school students, but not necessarily from the same or similar schools that the charter school students would have attended; (4) students who applied to the charter schools but were not admitted because all the seats had been taken; or (5) students' own rates of annual growth before and after entering charter schools." For a discussion of the specific advantages and disadvantages of each comparison, see Paul T. Hill, Lawrence Angel, and Jon Christensen, "Charter School Achievement Studies," *Education Finance and Policy*, 1: 1 (Winter 2006), pp. 142-143.

²⁴ In his book *Spin Cycle: How Research is Used in Policy Debates--The Case of Charter Schools*, veteran charter school researcher Jeffrey R. Henig, who is not strongly allied with either point of view, paints a well-balanced and detailed picture of the emerging consensus. See Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), especially Chapter 5.

²⁵ For a recent statement of this methodological consensus, see, for instance, see Julian Betts and Paul T. Hill (as part of the The Charter School Achievement Consensus Panel) "Key Issues in Studying Charter Schools and Achievement: A Review and Suggestions for National Guidelines," (University of Washington: Center on Reinventing Public Education, The National Charter School Project White Paper No. 2, May 2006).

charter school test scores are lower than those of traditional public schools.²⁶ State-level snapshots, on the other hand, show mixed results, with charters outperforming traditional public schools in some states while underperforming in others.²⁷

The problem with snapshot comparisons is that while they can control for observable student characteristics such as poverty and race, they cannot fully control for variations in unobservable characteristics like student motivation. Any observed performance differences between charter and traditional public school students could simply result from these unobserved differences in the characteristics of students who self-select into charter schools rather than from differences in the quality of the schools (“self-selection bias”).²⁸ Snapshot comparisons also fail to capture the changes in the effectiveness of individual schools over time (“maturation effects”).²⁹ Institutions mature over time and their performance usually changes along the way.

Charter school proponents argue that snapshot comparisons fail to demonstrate superior performance by charter schools due to negative selection bias. This means that charter schools are at a disadvantage compared to traditional public schools because they attract the students who, all else equal, had the worst educational outcomes in the schools they had left behind. Charter school opponents, in contrast, argue that charters benefit from positive selection bias because students who self-select into charters are likely to be more highly-motivated or from families with more motivated parents than demographically equivalent students who remain in traditional schools. Selection bias could obviously work both ways and the exact impact of selection bias on charter school performance needs to be studied empirically with methods that adequately control for selection bias.

²⁶ Following controversies about performance—especially the one surrounding the AFT study and the follow-up study by Caroline Hoxby in 2004—new studies that had better student controls confirmed the finding that charter school test scores lagged behind the scores of the traditional public schools. For an account of this controversy, see Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), p. 104. See also Caroline M. Hoxby, “Achievement in Charter Schools and Regular Public Schools in the United States: Understanding the Differences,” Harvard University, unpublished manuscript, December 2004; Joydeep Roy and Lawrence Mishel, “Advantage None Re-Examining Hoxby's Finding of Charter School Benefits,” Economic Policy Institute Briefing Paper No. 158, April 15, 2005; National Center for Education Statistics (NCES), *The Nation's Report Card. America's Charter Schools: Results from the NAEP 2003 Pilot Study*. (Washington, D. C.: U. S. Department of Education, National Center for Education Statistics, 2004); Henry Braun, Frank Jenkins, and Wendy Grigg, *A Closer Look at Charter Schools Using Hierarchical Linear Modeling*. (Washington, D. C.: U. S. Department of Education, National Center for Education Statistics, Institute of Education Sciences, August 2006.

²⁷ See Bryan C. Hassel, Michelle Godard Terrell, Ashley Kain and Todd Ziebarth, “Charter School Achievement: What We Know,” (National Alliance for Public Charter Schools, 4th edition, October 2007), pp. 7-10, and Paul T. Hill, “Assessing Achievement in Charter Schools,” in Robin J. Lake and Paul T. Hill (eds.) *Hopes, Fears and Reality: A Balanced Look at American Charter Schools in 2005*. (University of Washington: National Charter School Research Project, 2005), pp. 23-24.

²⁸ Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), pp. 105-106.

²⁹ Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), pp. 106-107.

Maturation effects could work both ways as well.³⁰ Charter school advocates claim that new schools have a learning curve and need some time to mature before they can generate the positive educational outcomes they promise.³¹ They also argue that in its infancy, the charter school movement is likely to include a number of charter schools that are poorly run. As the charter movement matures, they suggest, these schools are likely to disappear, resulting in better overall educational outcomes over time.

Opponents contend that the early advantages of charter school innovations can, on the contrary, diminish over time. For instance, founders of charter schools might be exceptionally innovative and experienced leaders but over time as these schools become more institutionalized, these founders get replaced by others who might not have the same characteristics. Similarly, charters might benefit from very high motivation among teachers early in their histories, with this advantage disappearing over time as teachers experience ‘burnout’. Finally, over time, well-capitalized for-profit corporate charters could drive out smaller mission-oriented charter schools that are among the most dynamic schools in the charter movement. Large corporate charters can increase their market share by aggressive marketing strategies and use their growing market power to set barriers for smaller charter schools. If large corporate charters compete with small charters by exploiting their market power and superior resources rather than by academically outperforming them, the impact of this over time would be a decline in educational outcomes.³²

The best way to deal with negative selection bias and maturation effects is to track individual students’ test scores over time.³³ By doing this, researchers could study academic gains of students from year to year rather than comparing them at a given point in time. However, there is not a single gold standard method for doing this either—there are several methods, each with strengths and weaknesses.³⁴ Nevertheless, tracking individual performance over time is the best way to assess the performance of charter school students. The problem, of course, is that the data needed to do this is hard to come by.

³⁰ Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), pp. 106-107.

³¹ See, for instance, Bryan C. Hassel, Michelle Godard Terrell, Ashley Kain and Todd Ziebarth, “Charter School Achievement: What We Know,” (National Alliance for Public Charter Schools, 4th Edition, October 2007).

³² Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), p. 107.

³³ Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), p. 108.

³⁴ Despite arguments that the randomized experimental design, which compares the performance of students who are lotteried in and out of charter schools, is the gold standard of school effects research, randomized studies using lotteries in charter schools have a number of shortcomings that undermine the generalizability of their results. Similarly, fixed effect studies that focus on the performance of students who switch in and out of charter schools also have their shortcomings. For a discussion of these methodological issues, see Julian Betts and Paul T. Hill (as part of the The Charter School Achievement Consensus Panel) “Key Issues in Studying Charter Schools and Achievement: A Review and Suggestions for National Guidelines,” (University of Washington: Center on Reinventing Public Education, The National Charter School Project White Paper No. 2, May 2006), especially pp.10-23.

Existing studies that track the performance of students over time find that charter schools perform worse, at least initially.³⁵ While there is some evidence that the performance gap of charter schools diminishes over time, the literature is mixed about the magnitude of the initial performance gap and whether it disappears or reverses over time.³⁶ How does one interpret these performance results?

Even avid charter school proponents now admit that the performance of charter schools has not met their expectations. Chester Finn, a nationally prominent advocate of charter schools, acknowledges the mixed performance of charter schools: “some are fantastic, some are abysmal, and many are hard to distinguish from the district schools to which they are meant to be alternatives.”³⁷ Other charter proponents such as the Charter School Leadership Council and the National Alliance for Public Charter Schools also confirm the mixed nature of charter school performance.³⁸

But perhaps more importantly, performance results are much less ambiguous for students of color. Since charter schools have been promoted as an effective way to reduce the achievement gap between white students and students of color, it makes sense to assess their performance by race. Given the very strong impact of student peer composition on the performance of individual students,³⁹ how charter schools sort students racially and economically is likely to impact how charter students perform academically. If students from different racial and ethnic backgrounds attend charter schools with significantly different peer compositions, their performances will be affected by these differences.

³⁵ For a detailed discussion of these studies, see Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), pp. 108-109.

³⁶ Bryan C. Hassel, Michelle Godard Terrell, Ashley Kain and Todd Ziebarth, “Charter School Achievement: What We Know,” (National Alliance for Public Charter Schools, 4th edition, October 2007), pp. 9-10; Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), pp. 108-109; Randall W. Eberts and Kevin M. Hollenbeck, “An Examination of Student Achievement in Michigan Charter Schools,” in Timothy J. Gronberg and Dennis W. Jansen (eds.), *Improving School Accountability: Check-Ups or Choice*, Vol 14. Advances in Microeconomics Series, (Elsevier, 2006), pp. 103-130, see especially pp. 107-108.

³⁷ Chester E. Finn Jr., “All Aboard the Charters? The State of a Movement,” *National Review Online*, October 9, 2006.

³⁸ See Gregg Vanourek, “State of the Charter Movement: Trends, Issues, and Indicators,” Charter School Leadership Council, May 2005, p. 14, and the National Alliance for Public Charter Schools, “Renewing the Compact: A Statement by the Task Force on Charter School Quality and Accountability,” (Washington, D. C., August 2005), p. 5. A growing number of scholars with differing view points confirm the mixed performance of charter schools as well. See, for instance, Bryan Hassel, “Studying Achievement in Charter Schools: What Do We Know?” Charter School Leadership Council, January 31, 2005; Sandra Vergari, “The Politics of Charter Schools,” *Educational Policy*, 21: 1 (January and March 2007), p. 31; Paul T. Hill, “Assessing Achievement in Charter Schools,” in Robin J. Lake and Paul T. Hill (eds.) *Hopes, Fears and Reality: A Balanced Look at American Charter Schools in 2005*. (University of Washington: National Charter School Research Project, 2005), p. 24.

³⁹ Jeffrey R. Henig, *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008), p. 123.

This might help explain why charter schools serve some groups of students better than others. In Milwaukee, for instance, while whites and Hispanics experienced larger math gains in charter schools, performance findings were weaker and more mixed for blacks.⁴⁰ Another study that tracked individual students over time examines the performance of charter school students by race in two urban districts in California.⁴¹ The study, which focuses on the impact of charter schools on the achievement gap, finds that in some cases charter schools in fact have a negative impact on the achievement of minority students. It concludes that charter schools in these two urban districts are not consistently improving performance for minority students above and beyond traditional public schools.⁴²

Similarly, a longitudinal examination of individual students in North Carolina shows that charter schools in the state increased the racial isolation of white and black students and widened the achievement gap.⁴³ This study finds that the negative effect of charter schools on the achievement of black students is largely due to the growing racial isolation of these students in segregated charter schools.⁴⁴

Charter School Performance in the Twin Cities Region

Few studies have examined the performance of charter schools in Minnesota despite the fact that charters originated in this state as an alternative to poorly performing traditional public schools. A 2003 Brookings Institution study of charter performance in 10 states found that a third of the charter schools in Minnesota failed to perform adequately according to the state's definition, compared to just 13 percent of all traditional public schools.⁴⁵

A 2004 evaluation of the Minnesota charter sector as a whole by one of its founders does not offer a systematic assessment, focusing instead on anecdotes of individual schools.⁴⁶ The study points to the inadequacy of snapshot test scores for adequately measuring the performance of charter schools, suggesting that mixed performance by this measure

⁴⁰ John Witte, David Weimer, Arnold Shober, and Paul Schlomer, "The Performance of Charter Schools in Wisconsin," *Journal of Policy Analysis and Management*, 26: 3 (2007), p. 561.

⁴¹ Ron Zimmer and Richard Buddin, "Charter School Performance in Two Large Urban Districts," *Journal of Urban Economics*, 60 (2006): 307-326.

⁴² Ron Zimmer and Richard Buddin, "Charter School Performance in Two Large Urban Districts," *Journal of Urban Economics*, 60 (2006): 307-326, p. 324.

⁴³ Robert Bifulco and Helen F. Ladd, "School Choice, Racial Segregation, and Test-Score Gaps: Evidence from North Carolina's Charter School Program" *Journal of Policy Analysis and Management*, 26: 1 (2006): 31-56.

⁴⁴ Robert Bifulco and Helen F. Ladd, "School Choice, Racial Segregation, and Test-Score Gaps: Evidence from North Carolina's Charter School Program" *Journal of Policy Analysis and Management*, 26: 1 (2006): 31-56, p. 47.

⁴⁵ Tom Loveless, "Charter Schools: Achievement, Accountability, and the Role of Expertise," (Washington, D. C.: The Brookings Institution, 2003), Table 3-2, p. 31.

⁴⁶ Jon Schroeder, "Ripples of Innovation: Charter Schooling in Minnesota, The Nation's First Charter School State," (Progressive Policy Institute, 2004).

reflects the demographics of the charter school student body as well as the relatively short time that charter schools had been in operation.⁴⁷

Reflecting a common recent trend among charter proponents, the author suggests that the question “How are charter schools doing?” should be modified to ask “How is chartering doing—as a mechanism for getting the new, different, and better schools it must now have?” Clearly, switching attention from the performance of charter schools to the chartering process itself is a step toward relaxing the strict performance standards the taxpayers demand from all traditional public schools, and including especially the charters.

More recently, the Great Lakes Center conducted a longitudinal evaluation of the impact charter schools have on student achievement in the Great Lakes states including Minnesota.⁴⁸ Directly addressing the two concerns raised by charter school proponents, the study compared student achievement at several points in time in charter schools to achievement in traditional public schools while controlling statistically for demographic characteristics. By looking at several points in time, the study could also investigate whether charter school performance relative to traditional schools was improving over time.⁴⁹

The study found that charter schools in Minnesota performed worse, on average, than demographically identical traditional schools. Over 60 percent of charters showed average test scores that were lower than expected, given their student characteristics.⁵⁰ The study also showed that the overall test score performance (pass rates) of charter schools did not improve over time for five of the six math and reading tests—only the 5th grade reading score showed slight improvement.. In addition, charters showed little or no improvement over time compared to demographically equivalent traditional schools. Minnesota charters ranked fifth out of the six states in this comparison.⁵¹

While this study is an improvement over previous studies regarding the performance of charter schools in Minnesota, it nevertheless has its limitations. Despite its focus on the performance of charter schools over time, this study does not track the performance of

⁴⁷ Jon Schroeder, “Ripples of Innovation: Charter Schooling in Minnesota, The Nation’s First Charter School State,” (Progressive Policy Institute, 2004), pp. 32-33.

⁴⁸ Gary Miron, Chris L. Coryn, and Dawn M. Mackety, “Evaluating the Impact of Charter Schools on Student Achievement: A Longitudinal Look at the Great Lakes States,” (Western Michigan University, The Evaluation Center, June 2007). See especially Appendix E on Minnesota charter school performance.

⁴⁹ The study controls for a number of demographic variables including school enrollment, ethnicity, free and reduced-price lunch eligible student enrollment, and locale of charter schools as well as special education and limited English proficiency enrollments. See Table 2 in Appendix E.

⁵⁰ Gary Miron, Chris L. Coryn, and Dawn M. Mackety, “Evaluating the Impact of Charter Schools on Student Achievement: A Longitudinal Look at the Great Lakes States,” (Western Michigan University, The Evaluation Center, June 2007), Appendix E, pp. 7-8.

⁵¹ Gary Miron, Chris L. Coryn, and Dawn M. Mackety, “Evaluating the Impact of Charter Schools on Student Achievement: A Longitudinal Look at the Great Lakes States,” (Western Michigan University, The Evaluation Center, June 2007), Appendix E, pp. 12, 16 and 17. The states included in the study were Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

individual students over time.⁵² The study also cannot track the performance of cohorts of students over time, following for instance one age-group of students from 5th through 12th grades. Data limitations mean that all that can be done is to track the performance of schools (as measured by the performance of cohorts of students in identical grades) over time. This raises the possibility that performance differences over time could be the result of changing student bodies rather than a result of the school's contribution to performance.

The type of analysis used in the Great Lakes study cannot reveal whether the differences between charters and traditional schools are statistically significant. The analysis simply measures the residual differences between the performance of traditional public schools and charters, after controlling for a host of variables, and reports these residuals over time.

Finally, the study lumps rural and metropolitan charter schools together. The analysis includes an urbanicity variable, which is intended to capture the impact of a school's locale on its performance. However, this approach cannot control completely for differences between metropolitan and rural areas. For instance, the relationship between poverty and performance—the most important relationship in the model—could very easily be different in rural areas than in metropolitan areas.

Rural poverty differs significantly from metropolitan poverty in important ways, including family structure and race. Poor people in rural areas also do not typically experience the same set of disadvantages associated with concentration of poverty frequently encountered in metropolitan neighborhoods. Failing to control for this could bias the measured relationship between charter schools and performance.

The most recent study of charter schools in Minnesota was performed by the Office of the Legislative Auditor (OLA) in 2008.⁵³ The OLA study compared charter schools with demographically similar public schools in four geographic areas: Minneapolis, St. Paul, the Greater Metropolitan Area, and outstate Minnesota. The matches were made based on the percentages of non-white and free or reduced-price lunch eligible students in each school. Any traditional public school with non-white or low-income student percentages within a 10 percentage point (minus or plus) range of a given charter school was considered a match for the charter school.

The OLA study found that when compared to district schools with similar demographics, charter schools generally did not perform as well. Only 15 percent of charter schools performed better than their traditional counterparts. More than half performed worse in math and about forty percent performed worse in reading tests.⁵⁴ When the study accounted for the higher student mobility rates in charter schools, the difference between

⁵² There are no studies to date that do this with Minnesota data. IRP staff are currently investigating the possibility of doing this.

⁵³ State of Minnesota Office of the Legislative Auditor, "Evaluation Report: Charter Schools," (June 2008).

⁵⁴ State of Minnesota Office of the Legislative Auditor, "Evaluation Report: Charter Schools," (June 2008), p. x.

the performances of charter school and district schools narrowed but charter schools still performed worse than traditional schools.⁵⁵

The OLA study has a number of methodological shortcomings that raises some concerns with the findings. Matching charter schools to district schools based on a number of characteristics makes sense especially when comparing the performance of charter and district schools in geographical settings that are vastly different from each other. National studies that deal with dramatically different populations of charter schools in different states use this matching technique to ensure apples are being compared to apples. The technique is appropriate to the extent that it enables the researchers to control for significant geographical differences.

However, matching is considered an improvement over traditional statistical procedures like multiple regression analysis only when one can be fairly certain that the matched groups are very similar in several dimensions.⁵⁶ One way to ensure this is by matching observations (schools in this case) using several characteristics.⁵⁷ The OLA study matches observations on only two dimensions—race and poverty rate—in one analysis and with only one dimension—mobility—in the other. In addition, the method means that schools that are within 20 percentage points of each other in a particular characteristic are considered identical for the purposes of the analysis. This creates a very loose match, and a very high margin of error in the performance comparisons. For instance, the statistical analysis reported below shows that a 20 percentage point range in poverty rates would, on average be associated with a nine percentage point range in performance.⁵⁸ This seriously undermines the results given that the study's findings show differences between charter and district school performance that are much smaller, for the most part, than the margin of error introduced by the matching technique.

This matching technique also severely limits the number of student body characteristics one can simultaneously control for. For instance, creating matched groups based on just five different criteria (race, income, special education needs, language proficiency, and student mobility) that are known to impact student performance would be very difficult given the number of schools available for comparison within each geographic area. The difficulty of doing so is evident in the OLA study, which matched charter and district schools based on just two criteria (race and income). Even then, the authors were unable

⁵⁵ State of Minnesota Office of the Legislative Auditor, "Evaluation Report: Charter Schools," (June 2008), p. xi.

⁵⁶ Joydeep Roy and Lawrence Mishel, "Advantage None: Reexamining Hoxby's Finding of Charter School Benefits," Economic Policy Institute, Briefing Paper, 2005, p. 18.

⁵⁷ For an example of such summary scores as they apply to charter schools in Washington, D.C., see Jack Buckley and Mark Schneider, "Making the Grade: Comparing D.C. Charter Schools to Other D.C. Public Schools" *Educational Evaluation and Policy Analysis*, 25:2 (2003).

⁵⁸ Table 1 below implies that each percentage point of difference in poverty rates is associated with .44 point (reading) and .47 point (math) differences in pass rates. Multiplying these rates by 20 percentage points gives a variation of 8.8 points for reading and 9.4 points for math.

to match 22 percent of the charter school sites and had to remove 18 percent of the charter school students from their analysis.⁵⁹

This leads to the loss of a significant amount of information. For instance, the OLA study omitted 7 charter school sites in Minneapolis because none of these charter schools could be matched to traditional schools based on their unique student demographics. Five of these unmatched schools were high-poverty schools and two were low-poverty schools. In St. Paul, all of the charter schools that were omitted due to their unique student demographics were low poverty schools. By eliminating schools at the extremes of this very important characteristic, the analysis is almost certainly compressing the range of achievement scores, making it more difficult to discern differences between different types of schools.

Simultaneously controlling for several variables that are known to impact student performance would require matching charter and district schools based on all of these criteria. The OLA study does not do this. Instead, after comparing charters and traditional schools based on groups using race and income, the study then explores the differences in mobility within the matched groups, comparing the performance levels of schools with high versus low mobility rates. The study uses the same method to analyze the impact of other student demographics such as the percentage of students with special education needs and language proficiency limitations. The problem is that the method cannot “control” for all of these characteristics simultaneously. This means that correlations among the demographic characteristics can distort the results.

For instance, when the mobility rate was included in a multiple regression analysis that already controlled for a number of variables that are likely to impact student performance, it was found to have no significant impact on student performance.⁶⁰ The fact that the OLA study found a separate relationship for mobility is almost certainly due to the fact that mobility and poverty are highly correlated. This means that any effect found for mobility, without fully controlling for poverty, could simply be the result of this correlation—the impact of mobility on the analysis is likely to simply be reflecting the more important poverty effect.

Another problem with the method is that it generates statistics with completely unknown properties. This means that there is no way to evaluate how likely it is that the findings represent “real” effects or are simply the result of sampling error or the specific selection criteria used to generate the comparison groups. Similarly, this method generates comparison groups for the charter schools that are of different sizes—some include fewer than 10 traditional schools while others include more than 100 schools. It is not at all clear how comparisons using groups so different in size be “accumulated” to generate average performance differences. Overall, the method’s results cannot be validated either intuitively or in a strict statistical fashion.

⁵⁹ State of Minnesota Office of the Legislative Auditor, “Evaluation Report: Charter Schools” (June 2008), p. 21.

⁶⁰ See Table 1 below.

To remedy some of these shortcomings, a statistical analysis of data for the 2007-2008 academic year was performed for elementary schools in the 11-county metropolitan area.⁶¹ The percentages of students proficient in reading or math were the dependent variables—the measures to be explained by the statistical model—in the two multiple regression models.⁶² Both of the models controlled simultaneously for student poverty, racial mix, special education needs, limited-language abilities, student mobility rates and school size. Finally two variables were included to test whether test scores were systematically lower in charter schools or suburban schools participating in the Choice Is Yours Program—the other education program in the metropolitan area designed to provide students in high-poverty environments an alternative to their traditional neighborhood school.

While this method is not ideal—it cannot, for instance, track individual students over time as the ideal method would—it provides results that are grounded in well-known statistical procedures. These procedures provide much more efficient ways to control for a wide variety of student characteristics that may affect school performance. They also generate interpretable comparisons that can be evaluated statistically rather than simply by whether differences “look” substantial or not.

Table 1 summarizes the results of the two multiple regression models—one for reading test scores and one for math scores. The coefficients that are shown represent the

⁶¹ The multiple regression analysis was for elementary schools only. There are multiple reasons for this choice. First, performance rates differ by type of school—pass rates are lower for middle and high school students than for elementary students. An analysis of all schools would have to account for these differences carefully, complicating the analysis significantly. Average math pass rates were 69 percent for elementary schools, 61 percent for middle schools and 32 percent for high schools. In reading, they were 70, 66 and 64 percent respectively. Second, there are reasons to believe that school poverty data is more reliable at the elementary school level than it is at the middle and high school levels. Low-income students at the middle and high-school level frequently avoid declaring free and reduced-price lunch eligibility to avoid the stigma of poverty. Elementary school students are likely to be less prone to this behavior, and as a result, the discrepancy between reported and actual eligibility rates is likely to be smaller for this age group. Third, middle and high schools are limited in number, making the multiple regression analysis less reliable due to small sample size. There were over 400 elementary schools with data for all of the relevant variables, but only 128 middle schools and 115 high schools. The regression model was run for middle and high schools separately and the results were similar to those reported for elementary schools. In particular, the measured charter school effects were negative.

⁶² Unlike the OLA study which matched charter and districts schools and controlled for student level determinants of performance inadequately, the IRP used a multiple regression that simultaneously controls for multiple determinants of performance. This method has been criticized for making the unrealistic assumption that racial composition and student poverty rates affect student performance similarly across different geographies. See, for instance, Caroline M. Hoxby, “Achievement in Charter Schools and Regular Public Schools in the United States: Understanding the Differences,” Mimeo. Harvard University, December, 2004, p. 4, available at http://edgeweb.heritage.org/research/education/upload/hoxbycharter_dec2.pdf (accessed 9/11/08). This assumption is clearly problematic when one is comparing the effects of student poverty on student performance in rural versus metropolitan Minnesota, for instance. Since the Institute’s analysis was limited to the 11-county metropolitan area rather than the entire state, the only geographical differences of concern were the differences between the central cities and the suburban areas. Separate regression analyses were run for central cities and suburbs to account for possible differences between the two. The results of these separate regressions were very similar to the findings from the overall model reported in Table 1.

expected effect on the percentage of students showing proficiency in the relevant subject of a change of one in the value of each variable. For instance, the value of -.436 for “% Free or Reduced Cost Lunch Eligible” in the reading score regression (the first column) means that the expected difference in reading proficiency rates between two schools that are exactly identical (in the variables included in the model) except for a one percentage point difference in the free or reduced cost lunch rate would be .436 percentage points, with the school with the higher poverty rate showing the lower proficiency rate.

Consistent with the extensive literature that emphasizes the importance of student poverty rate on academic performance, the percentage of poor students is the most significant determinant of elementary school performance in the Twin Cities region. Poverty rate shows the strongest correlation with test scores of all of the included variables in both models.⁶³

In both models, the coefficient for the charter school variable was significant at the 99 percent confidence level and negative.⁶⁴ This means that in both reading and math, a lower percentage of charter school students reached proficiency compared to students who attended traditional elementary schools which had *identical* characteristics across *all* of the variables included in the model. For reading proficiency, the average difference was 8.77 percentage points and for math it was 9.59 percentage points. Other variables that showed statistically significant effects on both proficiency rates included some of the race measures and special education shares. The student mobility rate was not significant in either model, suggesting that the effect found in the OLA study was largely due to its correlation with poverty.⁶⁵

⁶³ This can be seen by comparing the t statistics shown in parenthesis below each regression coefficient. The higher the t statistic, the stronger is the correlation after controlling for all of the other variables in the analysis. Poverty also had the largest relative impact in each regression. The standardized coefficients (not shown in Table 1) are larger for poverty than for any of the other included variables. The charter school variable shows the second largest effect in both models.

⁶⁴ “Significant at the 99 percent confidence level” means that the chance that the relationship found in the regression analysis is simply the result of chance or sampling error is less than one percent.

⁶⁵ The correlation is +.69 in the 428 elementary schools included in the analysis. This represents a very strong correlation for a sample of this size.

Table 1: Multiple Regression Results
The Determinants of Elementary School Performance

<u>Independent Variable</u>	<u>Dependent Variables</u> <u>Percentage of Students Proficient in:</u>	
	<u>Reading</u>	<u>Math</u>
% Free or Reduced Cost Lunch Eligible	-0.436 ** (10.83)	-0.465 ** (9.68)
Charter Schools	-8.77 ** (6.00)	-9.59 ** (5.50)
Choice is Yours Receiving Schools	2.53 (1.87)	5.07 ** (3.18)
% Limited English	-0.016 (0.39)	0.208 ** (4.01)
% Special Education	-0.292 * (2.70)	-0.340 ** (2.64)
Mobility Rate (2007)	0.000 (0.01)	0.060 (0.97)
Total Enrollment	-0.003 (1.38)	-0.002 (0.99)
% Black	-0.122 ** (3.38)	-0.172 ** (4.04)
% Hispanic	-0.125 ** (2.57)	-0.156 ** (2.68)
% Asian/Pacific Islander	-0.101 * (2.36)	-0.103 (1.96)
% Native American	-0.091 (1.10)	-0.138 (1.41)
Intercept	96.76 ** (49.14)	93.82 ** (40.24)
R-squared	0.84	0.76
Number of Schools (N)	426	423

t statistics are in parentheses.

**: Coefficient significant at 99% confidence level.

*: Coefficient significant at 95% confidence level.

All variables are measured in the 2007-08 school year except the mobility rate. The most recent year available for mobility rate is 2007.

All elementary schools in the 11 Minnesota counties of the Twin Cities metropolitan area with data for all variables are included in the analysis.

Another very interesting result is that the results imply that, all else equal, suburban schools participating in the Choice Is Yours Program outperform both other traditional public schools and charter schools. The effect is five percentage points in math (significant at the 99 percent confidence level) and 2.5 percentage points in reading (significant at 90 percent confidence). The clear implication is that, according to testing proficiency rates, the Choice Is Yours Program provides better alternative schools than the charter system does.

Given the strength of the student poverty effect, another way to demonstrate the results visually is with a scatter diagram plotting school performance against free and reduced cost lunch eligibility rates. Charts 11 and 12 do this. The “predicted” line in these charts represents the performance level one would expect from a school at each possible level of poverty. The charts show how closely performance levels correlate with poverty and compare the performance of charters, traditional public schools and Choice Is Yours schools.⁶⁶

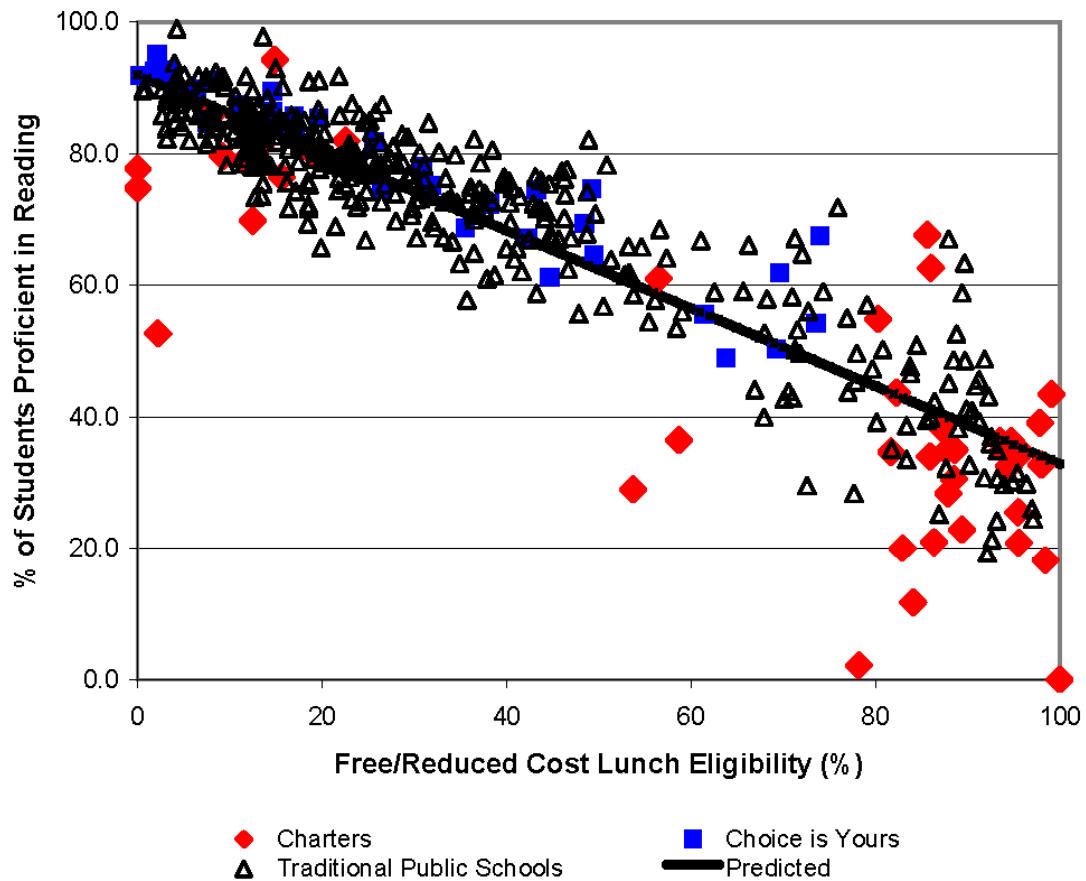
As these charts reveal majority of the charter schools are performing below what would be expected given their poverty rates. In 2008, three-quarters of charter schools performed worse than expected in reading while nearly four-fifths performed worse than expected in math. In striking contrast, much higher percentages of the schools receiving students through the Choice is Yours Program performed better than expected given their poverty levels—79 percent in reading and 88 percent in math. As far as public school choice programs go, the Choice is Yours program seems to offer students a much better selection of schools than charter schools.

Overall, the evidence regarding charter school performance in Minnesota hardly supports the argument that charters outperform traditional public schools. Although the data cannot support a “bullet-proof” study of the question at this point, the statistical analyses that have been performed support the contrary position—on average, traditional public schools outperform equivalently situated charters by substantial margins.

⁶⁶ Under the inter-district transfer component of the Choice is Yours program, children of Minneapolis residents who qualify for free or reduced-cost lunch programs are eligible for priority placement in participating schools in eight suburban school districts, including Columbia Heights, Edina, Hopkins, Richfield, St. Louis Park, St. Anthony/New Brighton, Robbinsdale, and Wayzata.

Chart 11: Poverty and Reading Proficiency Rates in Twin Cities Elementary Schools, 2007-08

(simple correlation = $-.91$)

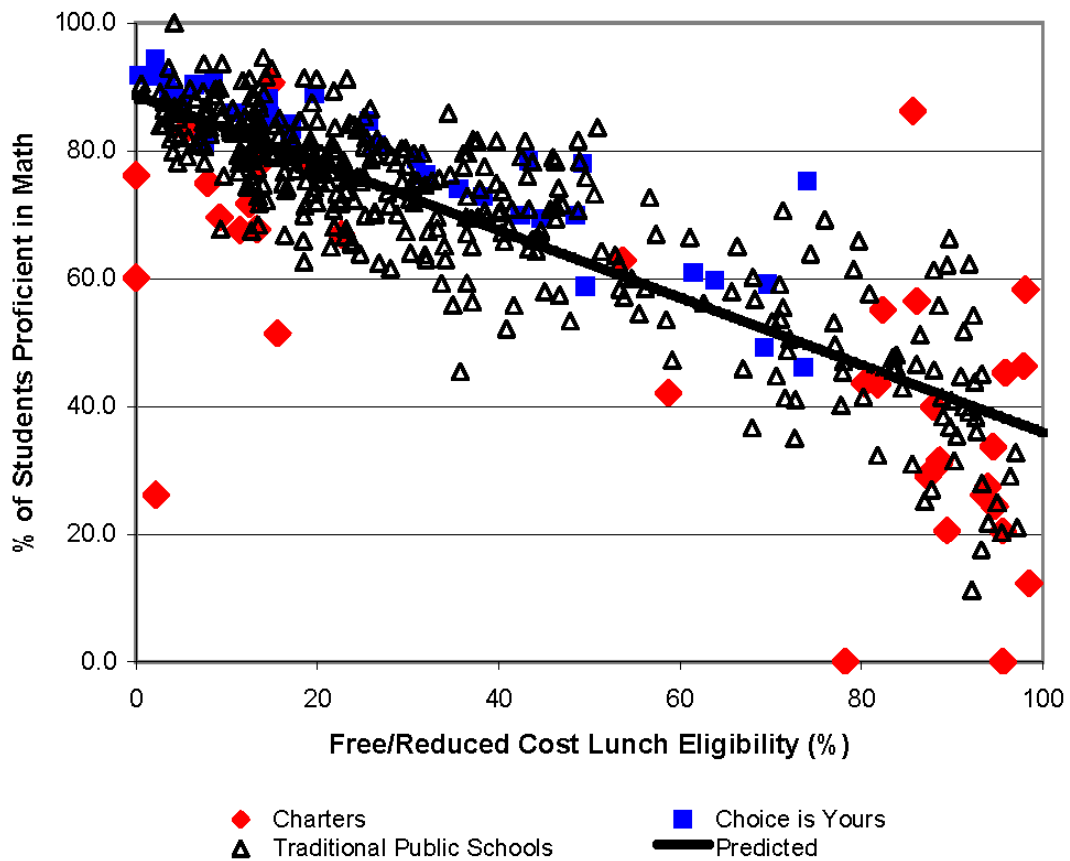


School Performance by School Type

	<u>% Performing Better Than Expected Given Poverty Rate</u>	<u>% Performing Worse Than Expected Given Poverty Rate</u>
Charter	24	76
Choice is Yours	79	21
Traditional	54	46

Chart 12: Poverty and Math Proficiency Rates in Twin Cities Elementary Schools, 2007-08

(simple correlation = -0.84)



School Performance by School Type

	% Performing Better Than Expected <u>Given Poverty Rate</u>	% Performing Worse Than Expected <u>Given Poverty Rate</u>
Charter	21	79
Choice is Yours	88	12
Traditional	53	47

SECTION III: THE EFFECTS OF CHARTER SCHOOL COMPETITION ON TRADITIONAL PUBLIC SCHOOLS

An important argument in favor of charter schools is that they provide competition for traditional public schools to improve.⁶⁷ Charter schools are meant to impact the public school system by creating market incentives to change the behavior of traditional public schools and parents for the better.⁶⁸

Proponents of charter schools believe that as higher-quality charter schools expand the choices available to students, parents would select the schools that achieve better student outcomes. The prospect of losing students to charter schools should then prompt traditional public schools to implement changes to improve student outcomes and retain enrollments.⁶⁹

Competition would thus force low-quality traditional public schools to improve their *technical efficiency* by pushing teachers to work more efficiently and by introducing innovative educational practices and programs. Proponents of charter schools also expect charter schools to increase the overall *allocative efficiency* of education markets by sorting students into more homogenous subgroups based on their interests and learning needs, and offering curricula tailored to meet these specific interests and needs.⁷⁰

Empirical evidence regarding the impact of charters on traditional public school performance has been relatively scant and very mixed.⁷¹ Compared to the charter school performance literature, which has been extensive, the literature on the impact of charter school competition on traditional public school outcomes is fairly new. Two methodological problems contribute to the inconclusive findings of this literature. First, selection problems associated with the fact that students self-select into charter schools complicate the measurement of competition just as they complicate the measurement of performance.⁷² The specific methodology that one chooses to deal with these selection

⁶⁷ Bruno V. Manno, Chester E. Finn, and Gregg Vanourek, "Beyond the Schoolhouse Door: How Charter Schools are Transforming US Public Education," *Phi Delta Kappan*, 81:10 (2000): 736–744; Timothy J. Gronberg and Dennis W. Jansen, "Texas Charter Schools: An Assessment in 2005," (Texas Public Policy Foundation, 2005), p. 45.

⁶⁸ David Arsen and Yongmei Ni, "The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools," March 2008, p. 3.

⁶⁹ See, for instance, George M. Holmes, Jeffrey DeSimone, and Nicholas G. Rupp, "Does School Choice Increase School Quality?" *National Bureau of Economic Research Working Paper Series*, no. W9863, May 2003.

⁷⁰ Christopher Lubienski, "School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change," *Educational Policy*, 20:2 (May 2006): 323–344, p. 328.

⁷¹ For reviews of this literature that note the mixed nature of the findings, see David Arsen and Yongmei Ni, "The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools," March 2008, pp. 11–12; Scott A. Imberman, "The Effect of Charter Schools on Non-Charter Students: An Instrumental Variables Approach," November 2007, p. 5; Nevbahar Ertas, "Public School Responses to Charter School Presence," Ph. D. Thesis (Georgia Institute of Technology and Georgia State University, August 2007), pp. 12 and 26.

⁷² Dan Goldhaber and Eric Eide, "Research Note: Methodological Thoughts on Measuring the Impact of Private Sector Competition on the Educational Marketplace," *Education Evaluation and Policy Analysis*, 25:2 (2003): 217–232. *Student selection* is an issue that is also central to the charter school performance

problems influences the findings regarding the competitive impact of charter schools.⁷³ Second, competition can be measured in a number of ways that might influence the findings of existing studies.⁷⁴

In addition to these methodological problems, the competitive effect of charter schools itself is uncertain and conditional on local factors such as enrollment dynamics and funding formulas.⁷⁵ For instance, the intensity of competition changes depending on the enrollment dynamics of school districts. In districts with growing enrollments, traditional public schools may not feel much competition from charter schools and they might even welcome them as a release valve to ease their enrollment pressures.⁷⁶ In districts with declining enrollments, in contrast, charter schools can create intense zero-sum competition for students and resources, triggering a downward spiral in some of the traditional public schools that are already facing declining enrollments.⁷⁷

literature. This pertains to the possibility that students choosing charters are systematically different than those who remain in traditional public schools in terms of their previous performance, socio-economic background, parental motivation, and academic ability—factors that influence performance. If charter schools attract low-performing students, for instance, the average performance of students in traditional public schools would automatically improve regardless of competition. This would bias the findings regarding the competitive impact of charter schools. *School selection* is another issue that complicates the evaluation of competitive effects. Charter schools are not randomly distributed; they tend to locate in places where traditional public schools perform poorly, generating demand for alternative schools. This creates some methodological issues. If it is observed, for instance, that low-quality among traditional public schools is associated with high levels of competition from charter schools, there is no way of knowing the direction of this association. One can plausibly argue that low-quality public schools trigger the emergence of alternatives like charter schools. However, one can as plausibly suggest that competition from charter schools reduce the quality of public schools. These two effects need to be untangled to properly assess the competitive impact of charter schools on traditional public schools. For a detailed discussion of the selection issues and the methodological ways to address them, see David Arsen and Yongmei Ni, “The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools,” March 2008, p. 8.

⁷³ Imberman’s study on the effects of charter schools on non-charter students demonstrates the sensitivity of research findings to different methodologies used to address selection problems. See Scott A. Imberman, “The Effect of Charter Schools on Non-Charter Students: An Instrumental Variables Approach,” November 2007.

⁷⁴ As Ertas notes, scholars used a variety of competition measures which could be classified as *enrollment-based* and *spatial* measurements of charter school competition. Enrollment-based measures detect charter competition based on the percentage of students enrolled in charter schools, whereas spatial measures detect charter competition based on the presence of charter schools within a certain distance from a traditional public school. It is not clear how the choice of one measure over the other might impact the findings. However, a cursory look at the existing literature suggests that scholars who use an enrollment-based measure rather than a spatial measure tend to find more favorable competitive effects compared to scholars who use a spatial measure of charter school competition. For a list of different competition measures used in the literature, see Nevbahar Ertas, “Public School Responses to Charter School Presence,” Ph. D. Thesis (Georgia Institute of Technology and Georgia State University, August 2007), p. 26.

⁷⁵ David Arsen and Yongmei Ni, “The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools,” March 2008, pp. 7 and 44.

⁷⁶ David Arsen and Yongmei Ni, “The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools,” March 2008, p. 7. For an example, see Matthew Ladner and Matthew J. Brouillette, “The Impact of Limited School Choice on Public School Districts,” Mackinac Center for Public Policy, August 2000, p. 17.

⁷⁷ David Arsen and Yongmei Ni, “The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools,” March 2008, p. 44. For instance, such a downward spiral took place in Detroit

Despite inconclusive findings regarding the competitive impact of charter schools, a growing body of interdisciplinary literature has accumulated empirical evidence about how charters compete and how the presence of charters affects the behavior of traditional public schools and parents.⁷⁸ This literature investigates the specific ways charters, traditional public schools, and parents respond to the market incentives created by competition, and analyzes the outcomes these responses produce.

Public Schools. See David Arsen, David N. Plank and Gary Sykes, "A Work in Progress," *Education Next*, (Winter 2001): 14-19, p. 19.

⁷⁸ See, for instance, David Arsen and Yongmei Ni, "The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools," March 2008; Nevbahar Ertas, "Public School Responses to Charter School Presence," Ph. D. Thesis (Georgia Institute of Technology and Georgia State University, August 2007); Christopher Lubienski, "School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change," *Educational Policy*, 20:2 (May 2006): 323-344; Christopher Lubienski, "Public Schools in Marketized Environments: Shifting Incentives and Unintended Consequences of Competition-Based Educational Reforms," *American Journal of Education* 111 (August 2005): 464-486; Scott F. Abernathy, "Charter Schools, Parents, and Public Schools in Minnesota," *CURA Reporter*, 34: 1 (Winter 2004): 1-7; Thomas S. Dee and Helen Fu, "Do Charter Schools Skim Students or Drain Resources?" *Economics of Education Review* 23 (2004): 259-271; Nathalis G. Wamba and Carol Ascher, "An Examination of Charter School Equity," *Education and Urban Society*, 35:4 (August 2003): 462-476; Christopher Lubienski, "Innovation in Education Markets: Theory and Evidence On the Impact of Competition and Choice in Charter Schools," *American Educational Research Journal*, 40:2 (2003): 395-443; Jeffrey R. Henig and Jason A. MacDonald, "Locational Decisions of Charter Schools: Probing the Market Metaphor," *Social Science Quarterly*, 83:4 (December 2002): 962-980; Amy Stuart Wells, "Beyond the Rhetoric of Charter School Reform: A Study of Ten California School Districts." (Los Angeles: UCLA Charter School Study, 1998); Judy Jackson May, "The Charter School Allure: Can Traditional Schools Measure Up?" *Education and Urban Society*, 39:1 (November 2006): 19-45; Linda A. Renzulli and Lorraine Evans, "School Choice, Charter Schools, and White Flight," *Social Problems*, vol. 52 (2005): 398-418; Courtney A. Bell, "Space and Place: Urban Parents' Geographical Preferences for Schools," *The Urban Review*, 39:4 (November 2007): 375-404; Courtney A. Bell, "All Choices Created Equal? How Good Parents Select 'Failing' Schools," *National Center for the Study of Privatization Working Paper*, October 2005; Natalie Lacireno-Paquet and Charleen Brantley, "Who Chooses Schools and Why?" Education Policy Research Unit and Education and the Public Interest Center Policy Brief, January 2008; Gregory R. Weiher and Kent L. Tedin, "Does Choice Lead to Racially Distinctive Schools? Charter Schools and Household Preferences," *Journal of Policy Analysis and Management*, 21:1 (2002): 79-92; Robert Bifulco, Helen F. Ladd, and Stephen Ross, "Public School Choice and Integration: Evidence from Durham, North Carolina," *National Center for Analysis of Longitudinal Data in Education Research Working Paper 14*, February 2008; Emily Van Dunk and Anneliese Dickman, "School Choice Accountability: An Examination of Informed Consumers in Different Choice Programs," *Urban Affairs Review*, 37: 6 (July 2002): 844-856; Justine S. Hastings, Richard Van Weelden, Jeffrey Weinstein, "Preferences, Information, and Parental Choice Behavior in Public School Choice," *National Bureau of Economic Research Working Paper 12995*, March 2007; Courtney A. Bell, "Real Options? The Role of Choice Sets in the Selection of Schools," *Teachers College Record*, January 9, 2006; Mark Schneider, Paul Teske, Christine Roch, Melissa Marschall, "Networks to Nowhere: Segregation and Stratification in Networks of Information About Schools," *American Journal of Political Science*, 41:4 (October 1997): 1201-1223.

Do Charter Schools Compete with Traditional Public Schools by Creating Innovations that Improve Academic Performance and School Productivity?

Most prominent charter supporters and leading policy makers have promoted charter school competition to foster educational innovations in classrooms.⁷⁹ Some even go so far as to describe charter schools as the “R&D centers” or “laboratories of innovation” from which the traditional public sector can learn.

The autonomy of charter schools gives them more immediate control over their budgets and the flexibility to channel resources in response to local conditions and needs. As a result, charter schools have been effective in providing parents with a diverse set of alternatives in class size, technology, and programmatic options.⁸⁰ Organizational practices such as new forms of delivering educational content (by online charter schools for instance) and individualized education planning are among some of the notable charter school innovations.

At the administrative level, charter schools have also been argued to be more entrepreneurial than traditional public schools.⁸¹ In fact, charters have introduced a number of innovations in school governance, management, and employment practices.⁸² These administrative innovations include practices such as incorporating parents into school governance through parental contracts, cooperative management of schools by teachers, merit pay, and the hiring of non-credentialed teachers.

Many studies that have surveyed charter school innovations, however, report that despite these administrative innovations, charter schools are not typically embracing innovative curricular and instructional practices.⁸³ In fact, many of the educational practices listed as

⁷⁹ The expectation of educational innovations from charter schools has been consistently present in the charter school movement. For a detailed history of expectations of innovation, see Christopher Lubienski, “Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools,” *American Educational Research Journal*, 40:2 (2003): 395-443, especially pp. 398-401.

⁸⁰ Christopher Lubienski, “Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools,” *American Educational Research Journal*, 40:2 (2003): 395-443, p. 418.

⁸¹ See for instance, Chester E. Finn, Bruno V. Manno and G. Vanourek, *Charter Schools in Action: Renewing Public Education*. (Princeton, NJ: Princeton University Press, 2000); Bill Triant, “Autonomy and Innovation: How Do Massachusetts Charter School Principals Use Their Freedom?” (Washington, DC: Thomas B. Fordham Foundation, 2001); Paul Teske, Mark Schneider, Jack Buckley, and Sara Clark, “Does Charter School Competition Improve Traditional Public Schools?” (New York: Manhattan Institute for Policy Research, 2001).

⁸² On the innovative record of charter schools, see Katrina Bulkley and Jennifer Fisler, “A Decade of Charter Schools: From Theory to Practice,” *Educational Policy*, 17:3 (July 2003): 317-342, pp. 323-326. For a list of such innovations, see Christopher Lubienski, “Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools,” *American Educational Research Journal*, 40:2 (2003), p. 415.

⁸³ For a list of international and domestic studies, see Christopher Lubienski, “School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change,” *Educational Policy*, 20:2 (May 2006): 323-344, pp. 332-33; Christopher Lubienski, “Public Schools in Marketized Environments: Shifting Incentives and Unintended Consequences of Competition-Based Educational Reforms,” *American Journal of Education*, 111 (August 2005): 464-486, p. 470; and Christopher

innovations are practices introduced and commonly used by traditional public schools—practices merely adapted to local settings by charter schools.⁸⁴ One prominent recent analysis goes even further, arguing that rather than promoting diverse curricular and instructional practices, charter schools are instead using their freedom from rules and regulations to *avoid* innovation in classroom practices, reverting instead to traditional forms of curriculum and instruction.⁸⁵

The argument is that charter schools lack one of the most important market incentives for innovation—they do not have the option to charge more for their innovations. They do not, therefore, have a strong incentive to undertake substantive classroom innovations necessary to enhance a school’s effectiveness—innovations that are costly and potentially risky.⁸⁶ Instead, they choose to increase their revenues through a safer route by engaging in administrative innovations which enable them to simultaneously increase their enrollments and reduce their costs. For instance, some charters try to attract higher-quality students by emulating traditionally prestigious institutions in superficial ways rather than by engaging in innovative classroom practices.⁸⁷

One indicator of this is the increasing propensity of charters in many areas to compete through marketing strategies or with non-performance related characteristics like uniforms or unusual physical plants.⁸⁸ Rather than pursuing the risky and costly strategy of educational innovations, many charter schools are instead pursuing innovations in administrative strategies that enhance their positions in local education markets by shaping their student admissions through marketing, student selection practices, and traditional approaches to curriculum and discipline.⁸⁹ This strategy has greater implications for educational equity since it directly relates to the charge that charter

Lubienski, “Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools,” *American Educational Research Journal*, 40:2 (2003), p. 418. See also Peter McDermott, Julia Johnson Rothenberg, and Kim Baker, “Lessons Learned From the First Year of an Urban Charter School,” *The Educational Forum*, 70:4 (2006): 352-362, p. 353.

⁸⁴ Christopher Lubienski, “Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools,” *American Educational Research Journal*, 40:2 (2003), p. 414.

⁸⁵ See Christopher Lubienski, “School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change,” *Educational Policy*, 20:2 (May 2006): 323-344, p. 324, and Christopher Lubienski, “Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools,” *American Educational Research Journal*, 40:2 (2003), pp. 417-419. Numerous studies show that a substantial share of charter schools are using a “back-to-basics” or “core knowledge” approaches in the classroom—standard curricular approaches used by traditional public schools.

⁸⁶ Many economists argue that without the ability to charge customers more for new options, most producers face a disincentive to innovate. See, for instance, Christopher Lubienski, “Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools,” *American Educational Research Journal*, 40:2 (2003), p. 422.

⁸⁷ Christopher Lubienski, “School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change,” *Educational Policy*, 20:2 (May 2006): 323-344, p. 335.

⁸⁸ Christopher Lubienski, “School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change,” *Educational Policy*, 20:2 (May 2006): 323-344, p. 332.

⁸⁹ Christopher Lubienski, “School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change,” *Educational Policy*, 20:2 (May 2006): 323-344, p. 333.

schools might be competing with traditional public schools not by innovating but instead by skimming the least-costly to educate students from the public school system.

Do Charter Schools Compete with Traditional Public Schools by Skimming the Least-Costly to Educate Students from the Public School System?

A large body of literature investigates whether or not charter schools compete by skimming the most able, least-costly to educate students from traditional public schools.⁹⁰ This kind of competition would likely be zero- or even negative-sum. Charters might outperform traditional public schools by skimming the best performing students but performance in traditional public schools could suffer by as much or more as they became increasingly dominated by concentrations of poorly performing students. The loss of skill diversity and peer effects could mean that the students “left behind” in the traditional system end up performing even more poorly than before, while higher-performing students perform much the same as they did prior to segregating themselves into charters.

In theory, charter schools cannot pick and choose their students because they are public schools. In practice, however, charter schools have far more control over their student characteristics than their traditional public school counterparts. In fact, charter schools

⁹⁰ Robert Bifulco and Helen F. Ladd, “School Choice, Racial Segregation, and Test-Score Gaps: Evidence from North Carolina’s Charter School Program,” *Journal of Policy Analysis and Management*, 26: 1 (2006): 31-56; Robert Bifulco, Helen F. Ladd, and Stephen Ross, “Public School Choice and Integration: Evidence from Durham, North Carolina,” *National Center for Analysis of Longitudinal Data in Education Research Working Paper 14*, February 2008; Kevin Booker, Ron Zimmer, and Richard Buddin, “The Effect of Charter Schools on School Peer Composition,” RAND Education Working Paper, October 2005; C. D. Cobb and G. V. Glass, “Ethnic Segregation in Arizona Charter Schools,” *Education Policy Analysis Archives*, 7: 1 (1999); Thomas S. Dee and Helen Fu, “Do Charter Schools Skim Students or Drain Resources?” *Economics of Education Review* 23 (2004): 259-271; Nevbahar Ertas, “Public School Responses to Charter School Presence,” Ph. D. Thesis (Georgia Institute of Technology and Georgia State University, August 2007); Edward Fiske and Helen Ladd, “When Schools Compete: A Cautionary Tale,” (Washington, D. C.: Brookings Institution, 2000); Erica Frankenberg and Chungmei Lee, “Charter Schools and Race: A Lost Opportunity for Integrated Education,” (Harvard University, The Civil Rights Project, July 2003); Jeffrey R. Henig and Jason A. MacDonald, “Locational Decisions of Charter Schools: Probing the Market Metaphor,” *Social Science Quarterly*, 83:4 (December 2002): 962-980; Goodwin Liu and William Taylor, “School Choice to Achieve Desegregation,” *Fordham Law Review*, 74 (2005): 791-824; Christopher Lubienski and Charisse Gulosino, “Choice, Competition, and Organizational Orientation: A Geo-Spatial Analysis of Charter Schools and the Distribution of Educational Opportunities,” October 2007; Yongmei Ni, “Are Charter Schools More Racially Segregated Than Traditional Public Schools?” (Michigan State University, The Education Policy Center, Policy Report 30, March 2007); Linda A. Renzulli, “District Segregation, Race Legislation, and Black Enrollment in Charter Schools,” *Social Science Quarterly*, 87: 3 (September 2006): 618-637; Linda A. Renzulli and Lorraine Evans, “School Choice, Charter Schools, and White Flight,” *Social Problems*, vol. 52 (2005): 398-418; Amy Stuart Wells, “Beyond the Rhetoric of Charter School Reform: A Study of Ten California School Districts,” (Los Angeles: UCLA Charter School Study, 1998); Amy Stuart Wells, Jennifer Jellison Holme, Alejandra Lopez and Camille Wilson Cooper, “Charter Schools and Racial and Social Segregation: Yet Another Sorting Machine?” in R. D. Kahlenberg (ed.) *A Notion At Risk: Preserving Public Education As An Engine for Social Mobility*. (New York: The Century Foundation/Twentieth Century Fund, 2000), pp. 169-222.

frequently shape their student enrollment through their recruitment and marketing efforts, their parental involvement requirements, and their discipline or expulsion practices.⁹¹

How and where charter schools choose to advertise affects who they recruit as students. Their admission process usually requires parent meetings with school officials, where the fit between the school and family is informally scoped out. During these meetings, students may be steered to apply or not apply based on the expectations of both parties. Many charter schools also ask parents to sign a parental involvement contract, which requires parents to volunteer a certain amount of hours to the charter school. Students whose parents cannot commit to these parental involvement contracts can be denied admissions. Finally, charter schools have the liberty to weed out the bad apples after admission through their specific discipline and expulsion practices. Unlike traditional public schools, charter schools can state and enforce strict expectations regarding student performance, effort, and behavior in their contracts. As a result, it is much easier for charter schools to expel the students who violate the contract.

Another way charter schools can shape their incoming student bodies is through their location decisions.⁹² For instance, one study finds that school districts that are relatively racially integrated are locations where white enrollments in charter schools are high.⁹³ The study shows that the extent of racial integration in a school district is strongly associated with white student enrollment in charter schools after controlling for other determinants of charter school enrollment, and concludes that charter schools provide an avenue for white flight especially for those parents who cannot afford to move to predominantly white school districts.⁹⁴

This opens up the possibility that charter schools may strategically locate in racially diverse school districts where they are likely to attract white enrollments and serve as outlets for white flight from traditional public schools. While this type of harmful competition is limited in the Twin Cities, there are signs of it in some predominantly white urban and suburban neighborhoods where traditional public schools are more diverse by race or income.

In St. Paul, for instance, Nova Classical Academy, which is located in the predominantly white Groveland-Highland neighborhood of St. Paul, effectively siphons off white middle-class students from the racially diverse traditional public schools in the area.⁹⁵

⁹¹ Amy Stuart Wells, "Beyond the Rhetoric of Charter School Reform: A Study of Ten California School Districts." (Los Angeles: UCLA Charter School Study, 1998), p. 43; Geoffrey Walford, "Diversity, Choice, and Selection in England and Wales," *Educational Administration Quarterly*, 33:2 (1997): 158-169.

⁹² Jeffrey R. Henig and Jason A. MacDonald, "Locational Decisions of Charter Schools: Probing the Market Metaphor," *Social Science Quarterly* 83:4 (December 2002): 962-980.

⁹³ Linda A. Renzulli and Lorraine Evans, "School Choice, Charter Schools, and White Flight," *Social Problems*, 52 (2005): 398-418.

⁹⁴ Linda A. Renzulli and Lorraine Evans, "School Choice, Charter Schools, and White Flight," *Social Problems*, 52 (2005): 398-418, pp. 412-413.

⁹⁵ As Henig and MacDonald show in the case of Washington, D. C., charter schools could also skim non-white middle-class students in racially diverse school districts. Jeffrey R. Henig and Jason A. MacDonald, "Locational Decisions of Charter Schools: Probing the Market Metaphor," *Social Science Quarterly* 83:4 (December 2002): 962-980. Yinghua Academy, a mostly-Asian Chinese immersion school in St. Paul,

Similarly, some suburban school districts where individual schools are beginning to show signs of racial and economic transition have seen predominantly white charters spring up near those schools. Examples of such schools include Beacon Academy and Beacon Preparatory School in Plymouth, Paideia Academy in Apple Valley, and Seven Hills Classical Academy in Bloomington.⁹⁶ All of these schools have admission interviews, parental involvement requirements and strict disciplinary policies that can be used to selectively admit students. The result in many cases is an increase in the rate of transition in surrounding traditional schools.

While in other states such as California, student skimming by charter schools is a widespread phenomenon, it is relatively limited in the Twin Cities metro area. The degree to which charter schools skim the least-costly to educate students from the traditional school system depends on the financial incentives they face. In states, where per-pupil funding formulas do not compensate for additional costs of educating high-cost students—low-income students and students with special education and language needs—charter schools face incentives to reduce their costs by targeting easier to educate students. In states like Minnesota, where the state allocates additional resources for the education of high-cost students, charter schools do not have the same incentive to avoid these students.

In fact, the funding formula in Minnesota may create incentives for charter schools to seek high-cost students because these students bring high per-pupil revenues.⁹⁷ The progressive structure of education funding in the state might have contributed to the prevalence of charter schools that target at-risk students in the Twin Cities metro. This funding structure no doubt contributes to the fact that non-white segregated charter schools with concentrated poverty represent the most common type of charter school in the metro area.

presents an example of such non-white skimming. The student poverty rate at Yinghua Academy fluctuates around 10 percent—much lower than the poverty rates of surrounding public schools.

⁹⁶ In 2005, 22 of the 34 charter schools located in the Twin Cities suburbs were predominantly white, four of them were non-white segregated and eight of them were integrated. Of these 22 predominantly white schools, three went out of business, 1 was an online school and four were specialty schools that did not compete with public schools. Of the remaining 14 predominantly white suburban charter schools, six of them located in areas where the closest traditional public school showed increases in the non-white share of students or of the share of low-income students of at least 5 percentage points in the five years prior to the emergence of the charter school. In fact, as the superintendent of Rosemount-Apple Valley-Eagan school district notes, the emergence of Paideia Academy in Apple Valley certainly increased the percentage of students of color at Cedar Park Magnet school—a school that came into existence as a result of the school district's effort to desegregate its racially identifiable schools. Of the 18 students who left Cedar Park for Paideia Academy, 16 of them were white and only two were black. Similarly, of the 142 students that left Cedar Park this academic year, 72 percent were white. Personal communication with John Currie, the Superintendent of District 196, November 2, 2008.

⁹⁷ Henig and MacDonald note that skimming patterns “could be mediated or even reversed by a redistributive funding mechanism that skewed reimbursements in favor of students otherwise considered to be educationally disadvantaged.” See Jeffrey R. Henig and Jason A. MacDonald, “Locational Decisions of Charter Schools: Probing the Market Metaphor,” *Social Science Quarterly* 83:4 (December 2002), p. 966.

Traditional Public School Response to Charter Competition: The Harms of Niche-Based Competition

Most charter schools compete with traditional public schools in niche markets.⁹⁸ Unlike traditional public schools that have to be “all things to all people,” charter schools tend to specialize in serving specific groups based on interest, ethnicity, risk factors, or other characteristics.⁹⁹ Many charter schools focus on students with specific interests and needs, serving, for instance, students interested in Montessori-style learning, language-immersion, fine-arts focused education, or students with alcohol problems or hearing disabilities. While some of this specialized competition might be desirable as it expands the curricular options available to students at the district level, some forms of this specialized competition can be quite detrimental for students.

Charter school competition in ethnic niches is an example of such harmful competition which has detrimental results for students of color. Many charter schools in the Twin Cities region serve ethnic niches by offering “cultural-specific” or “ethno-centric” programs. For instance, there were seven Hmong-focused charter schools in the Twin Cities in 2008.¹⁰⁰ While in theory, these schools are open to anybody interested in Hmong culture, in practice, they are more than 95 percent Hmong. The proliferation of charter schools offering “ethno-centric” programs directly contributes to the racial segregation of students of color in the Twin Cities public schools.

Proponents of these charter schools argue that these programs empower Hmong students by immersing them in Hmong culture and boosting their self-esteem. While there is some truth to these claims, all of these positive experiences come at the expense of sufficiently preparing these students for the American mainstream. Being proficient in English is perhaps the most essential requirement for succeeding in the U.S. educational system and economy. Hmong students attending these “ethno-centric” charter schools face additional challenges in learning English because of the high concentration of students with limited English proficiency in these schools.

Among the Hmong-focused charter schools, the percentage of students with limited English proficiency ranged from 64% in HOPE Community Academy to 100% in Noble Academy in 2008.¹⁰¹ These schools offer relatively limited instruction time in English since they also teach in Hmong. The only other avenue for these students to be exposed to English is by interacting with their peers in school. The heavy concentration of

⁹⁸ Nathalis Guy Wamba and Carol Ascher, “An Examination of Charter School Equity,” *Education and Urban Society*, 35:4 (August 2003): 462-476, p. 472; Sandra Vergari (ed.) *The Charter School Landscape*. (Pittsburgh, PA: University of Pittsburgh Press, 2002).

⁹⁹ Christopher Lubienski, “Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools,” *American Educational Research Journal*, 40:2 (2003), p. 413.

¹⁰⁰ Wameng Moua, “Are Hmong Students Making the Grades?” *Twin Cities Daily Planet*, March 25, 2008.

¹⁰¹ The Hmong-focused charter schools in the Twin Cities region are Hmong Academy, Hmong Academy Middle School, HOPE Community Academy, Community School of Excellence, Noble Academy, Long Tieng Academy and the New Millenium Academy. Limited English Proficiency data are from the individual School Report Cards for 2008, available at the Minnesota Department of Education website.

students with limited English proficiency in these schools severely limits the exposure of Hmong students to English. At the most extreme example, how can the Hmong students in Noble Academy be expected to be proficient in English when none of the students attending the Academy are proficient in English?

But perhaps more important is the degree to which ethnic-niche based competition concentrates poverty in schools and hurts the academic performance of students of color who attend racially and economically segregated charter schools. Student poverty rates in six of the seven Hmong-focused charter schools were around 80 percent in 2008. The lone exception was the New Millenium Academy, where the poverty rate was 54 percent. These are extraordinarily high poverty rates in light of the extensive literature which reveals that the harmful effects of concentrated poverty in schools exist at rates as low as 40 percent.

As mentioned above, high-poverty schools are associated with a wide range of negative educational and life outcomes, including low test scores, high dropout rates, low college attendance rates, low earnings later in life, and greater risk of being poor as adults. It is thus not very surprising to see that with such high poverty rates, these Hmong-focused charter schools perform very poorly.¹⁰² With such high concentrations of poverty, low test scores are not likely to be the only problems faced by the Hmong students who are isolated in these charter schools.

Charter school competition in niches can also impose an undesirable kind of specialization onto traditional public schools. One common way public school districts compete with charter schools is to initiate charter schools of their own. When district-initiated charter schools specialize in ways that expand the curricular options for students in the district without contributing to racial and economic segregation, they can be beneficial. An example of such a school is the Main Street School of Performing Arts, a specialized school chartered by the Hopkins Public School District. The Main Street School is a high performing school that offers the residents of Hopkins the option of a well-developed performing arts curriculum while also maintaining a racially and economically diverse student body.

Unfortunately, school-district sponsored charter schools in Minnesota rarely fit this profile since the education funding formula in Minnesota encourages charter schools to specialize in serving expensive-to-educate students (i.e. low-income students and students with special education and language needs). Especially in urban school districts with high concentrations of costly to educate students, niche competition creates incentives for all charter schools (district-sponsored or not) to target students who would bring in higher per pupil revenues. This, in turn, encourages school districts to respond with district-sponsored charter schools that are racially and economically segregated.

¹⁰² Wameng Moua finds the average reading proficiency rate of the students attending these Hmong-focused charter schools to be 21.75 percent, which is far below the state average of 68 percent. She considers these deficiencies alarming. See Wameng Moua, "Are Hmong Students Making the Grades?" *Twin Cities Daily Planet*, March 25, 2008.

In fact, five of the eight existing charter schools sponsored by the St. Paul School District were non-white segregated schools with high concentrations of poverty.¹⁰³ Of the remaining three integrated district-chartered schools, one had a very high poverty level.¹⁰⁴ Racial and economic segregation was also the norm among the Minneapolis district-sponsored charters. Four of the five district-chartered schools were non-white segregated and had very high concentrations of poverty, while the only school with a low poverty rate was a predominantly white charter school.¹⁰⁵ Two of the non-white segregated schools were “ethno-centric” charter schools.¹⁰⁶

Another way public school districts respond to niche-based competition from charter schools is by creating specialized programs of their own within existing schools. Charter competition in ethnic niches thus triggers further racial segregation within the traditional public school system as public school districts initiate “ethno-centric” programs and schools to compete.

This type of harmful ethnic competition can be seen in the Twin Cities, especially in the urban school districts which faced severe competition from “ethno-centric” charters. As the Minneapolis and St. Paul public school districts continued to lose their Hmong students to Hmong-focused charter schools, they decided to compete by starting Hmong-focused programs or magnet schools of their own.¹⁰⁷

Hmong International Academy, a Hmong-focused program, was the Minneapolis Public School District’s response to the district’s declining Hmong enrollment. The Academy started as a program within the Lucy Laney Elementary School building, a north Minneapolis school attended by a relatively small group of Hmong students along with African-American students who constituted the majority of the student body. As the program expanded, Hmong International Academy subsequently moved to a separate location in North Minneapolis. What started as a “school within a school” program that separated Hmong students from the African-American students eventually led to the creation of two separate school facilities that each primarily serves a specific racial group.

¹⁰³ These district-chartered schools are: Achieve Language Academy, Community of Peace Academy, Community of Peace Academy Secondary, Face to Face Academy, High School for Recording Arts, New Spirit School, Twin Cities Academy, and Twin Cities Academy High School.

¹⁰⁴ The poverty rate at Face to Face Academy was 80 percent in 2008. See the Face to Face Academy School Report Card for 2008, available at the Minnesota Department of Education website.

¹⁰⁵ These district-chartered schools are: Cedar-Riverside Community School, Cybervillage Academy, Friendship Academy of Fine Arts, Harvest Preparatory School, and Oh Day Aki Academy. Cybervillage Academy, a Minneapolis Public School District sponsored charter school based in St. Paul, is an online school which requires class attendance in the St. Paul campus three days a week. White students constituted 90 of the student body in Cybervillage Academy, where only 23 percent of the students were free and reduced-price lunch eligible. Oh Day Aki Academy was recently closed by its sponsor for financial improprieties.

¹⁰⁶ Of the two non-white segregated district-chartered schools, Harvest Preparatory School has an Afro-centric curriculum, and Oh Day Aki had a Native-American focus.

¹⁰⁷ Wameng Moua, “Are Hmong Students Making the Grades?” *Twin Cities Daily Planet*, March 25, 2008.

Similarly, the St. Paul school district responded to losses of Hmong students to Hmong-focused charters by creating a Hmong-focused magnet school in the district's heavily Hmong-populated Phalen Lake area.¹⁰⁸ This decision, which transformed a neighborhood school that was already 63 percent Asian and 93 percent poor, will almost certainly increase the concentration of Hmong students at the school. The change was needed for the district to be able to provide the same transportation options to Hmong students in other parts of the city as Hmong-focused charters do. Unless these changes drastically reduce the extremely high poverty rate in the school, the overall opportunities available to Hmong students in the district will not be enhanced.

The ultimate impact of niche-based competition on the traditional public schools depends on the type of niche that competition is based upon. Encouraging market competition in niches based on race, disability and income is counterproductive given that student body diversity leads to better academic outcomes.¹¹³ Creating niches based on race and disability is an ill-advised attempt to restore the "separate but equal" approach to education—a belief which has been thoroughly discredited by decades of educational research before and after *Brown v. The Board of Education*.

Traditional Public School Response to Charter Competition Does Not Necessarily Produce Improvements in Academic Performance

Finally, traditional public school and district responses to competition from charter schools can vary widely depending on the local context and policy frameworks.¹¹⁴ Among other things, school districts open new schools, upgrade their facilities, change leadership, set higher performance goals, engage in marketing campaigns, and create add-on programs (such as all-day kindergarten and extracurricular activities) in an effort to

¹⁰⁸ Wameng Moua, "Are Hmong Students Making the Grades?" *Twin Cities Daily Planet*, March 25, 2008.

¹¹³ For a detailed account of the educational benefits of an economically and racially diverse student body, see Richard D. Kahlenberg, *All Together Now: Creating Middle-Class Schools through Public School Choice*. (Washington, D. C.: Brookings Institution Press, 2001).

¹¹⁴ Arsen et al. single out five dimensions of the local context that shape the strategic responses of schools and districts to competition: socio-economic status of an area, socio-economic diversity of an area, school district enrollment size, population density, and population growth. Similarly, they note how four different policy choices affect competition at the local level: how much money students bring with them, whether or not schools could select their students, rules limiting the supply of charter schools, and the rules affecting the accountability of schools. David Arsen, David N. Plank and Gary Sykes, "A Work in Progress," *Education Next*, (Winter 2001): 14-19, pp.16-17.

compete with charter schools.¹¹⁵ Some of these responses have the potential to improve academic performance and enhance school productivity and others do not.¹¹⁶

For instance, competition frequently encourages public schools to mount marketing campaigns, which divert resources away from classrooms.¹¹⁷ One study shows that the growing pressures to launch such campaigns and the costs of marketing them are unevenly distributed across school districts.¹¹⁸ These costs unduly burden those school districts that can least afford such expenditures, such as the urban school districts which have to divert disproportionate amounts of resources just to maintain their enrollment. In contrast, suburban school districts with more advantageous market positions can enjoy the advantages of unfunded marketing in the form of positive word of mouth—a type of marketing which tends to limit the benefits of good schools to those who are already familiar with it.¹¹⁹

How Do Parents' Choices Influence Traditional Public Schools?

Charter proponents argue that the behavior of parents is an important catalyst for traditional schools to improve.¹²⁰ In theory, parents are expected to choose the schools with better student outcomes over those that are not performing as well. These market pressures, in turn, should prompt traditional public schools to implement changes to improve their student outcomes in order to avoid loss of enrollments. This argument rests on a number of assumptions, each of which is challenged by empirical findings.

First, the argument makes strong assumptions about the parents' motivations. If parents do not act to move children from failing schools then expanded choice will not lead to improved performance in traditional or charter schools. In fact, evidence shows that few parents actually choose new schools for their children when their current schools are

¹¹⁵ Frederick M. Hess, *Revolutions at the Margins: The Impact of Competition on Urban School Systems*. (Washington, DC: Brookings Institution Press, 2002), p. 26; David Arsen and Yongmei Ni, "The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools," March 2008, pp. 5 and 14.

¹¹⁶ David Arsen and Yongmei Ni, "The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools," March 2008, p. 5.

¹¹⁷ Christopher Lubienski, "Innovation in Education Markets: Theory and Evidence on the Impact of Competition and Choice in Charter Schools," *American Educational Research Journal*, 40:2 (2003), p. 425; Christopher Lubienski, "Public Schools in Marketized Environments: Shifting Incentives and Unintended Consequences of Competition-Based Educational Reforms," *American Journal of Education*, 111 (August 2005): 464-486, p. 477; Katrina Bulkley and Jennifer Fisler, "A Decade of Charter Schools: From Theory to Practice," *Educational Policy*, 17:3 (July 2003): 317-342, p. 336.

¹¹⁸ Christopher Lubienski, "Public Schools in Marketized Environments: Shifting Incentives and Unintended Consequences of Competition-Based Educational Reforms," *American Journal of Education*, 111 (August 2005): 464-486, p. 476.

¹¹⁹ Christopher Lubienski, "Public Schools in Marketized Environments: Shifting Incentives and Unintended Consequences of Competition-Based Educational Reforms," *American Journal of Education*, 111 (August 2005): 464-486, p. 476.

¹²⁰ David Arsen and Yongmei Ni, "The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools," March 2008, p. 3.

failing.¹²¹ Only between one and three percent of the 3.5 million parents entitled to move their children from failing schools in the No Child Left Behind program (NCLB) have done so.¹²²

In addition, the argument assumes that parents make their school choices primarily based on academic achievement. However, there is evidence that a host of other factors affect the school choice decisions of parents, including location, safety, transportation, and parent preferences related to child development, family life, and college preparation.¹²³ Any or all of these other factors matter to parents and for some parents outweigh academic performance, even among higher socio-economic groups.¹²⁴

For instance, a Minneapolis Public School District-sponsored survey of charter school parents in 2007 showed that availability of transportation (busing) to school was as important a reason as academic achievement when parents chose charter schools.¹²⁵ As a cost-saving measure, the Minneapolis Public School District picks up students only from designated stops, requiring students to walk to these stops. Most charter school parents surveyed expressed their concern with the safety of their children as they walked from home to the designated bus stops.¹²⁶

Minneapolis Public School District is required by law to provide transportation for charter school students, if requested by the school. Since the students in a given charter are likely to be relatively scattered geographically, this requirement effectively means that the school district ends up providing door-to-door transportation for charter school students—better service, in other words, than their own students. As the survey of charter school parents demonstrate, this played a key role in parents' choice of charters over district schools.

Perhaps more importantly, there is strong evidence that parents choose schools based on the racial and economic composition of the students rather than on its academic performance.¹²⁷ Parents in some surveys claim that they base their school choice decisions on academic achievement, but studies of their actual behavior demonstrate that the racial and economic composition of schools plays a very significant role in their

¹²¹ See, for instance, N., Asimov, "Few parents seize chance to transfer schools 'No Child Left Behind' made offer mandatory", *The San Francisco Chronicle*, October 9, 2003, p. A1 and R. Gupta, "Few in Martin take advantage of options under U.S. school law," *Palm Beach Post*, July 20, 2004, p. 1B.

¹²² Courtney A. Bell, "Space and Place: Urban Parents' Geographical Preferences for Schools," *The Urban Review*, 39:4 (November 2007): 375-404, p. 376.

¹²³ Courtney A. Bell, "Space and Place: Urban Parents' Geographical Preferences for Schools," *The Urban Review*, 39:4 (November 2007): 375-404, p. 400.

¹²⁴ James Harvey and Paul T. Hill, "Doing School Choice Right: Preliminary Findings," *Center on Reinventing Public Education*, April 2006, p. 10 and 12.

¹²⁵ Minneapolis Public Schools Strategic Planning Update, Summary of Phase 2 "Current Situation Findings," September 25, 2007, p. 18, available at www.mpls.k12.mn.us/sites/f7071225-9844-4da6-96c0-996b9c74b221/uploads/20070925_Board_Presentation.ppt (accessed 9/12/08).

¹²⁶ James Sanna, "Fewer students, fewer dollars—blame the charters?" *TC Daily Planet*, July 06, 2008.

¹²⁷ For a review of the literature on this issue, see Natalie Lacireno-Paquet and Charleen Brantley, "Who Chooses Schools and Why?" Education Policy Research Unit and Education and the Public Interest Center Policy Brief, January 2008, pp. 16-18.

choices.¹²⁸ When parents choose schools based on income and race, rather than on academic quality, choice leads to segregation and undermines academic outcomes for those who are segregated rather than resulting in improved academic outcomes.¹²⁹

The way parents shop for schools has implications for segregation and performance as well. Information regarding schools is complicated and often not available in a readily accessible form. Empirical studies show that even when it is available, most parents do not base their choices on official sources of information.¹³⁰ In fact, most parents make school choices based on a number of shortcuts. Many studies show that parents go through a two-stage process in finalizing their choice: first, they eliminate a vast number of choices based on criteria such as race and geography, and then they examine the limited number of remaining choices more thoroughly.¹³¹

¹²⁸ Mark Schneider and Jack Buckley, "Charter Schools: Hype or Hope?" *Education Finance and Policy*, 1:1 (Winter 2006): 123-138, p. 129. In a number of states which track their individual students, researchers were able to track the flow patterns of district students to charter schools and found that the racial composition of the schools rather than the academic achievement preferences of the parents predicted the type of charters students eventually attended. See, for example, Gregory R. Weiher and Kent L. Tedin, "Does Choice Lead to Racially Distinctive Schools? Charter Schools and Household Preferences," *Journal of Policy Analysis and Management*, 21:1 (2002): 79-92, and Robert Bifulco, Helen F. Ladd, and Stephen Ross, "Public School Choice and Integration: Evidence from Durham, North Carolina," *National Center for Analysis of Longitudinal Data in Education Research Working Paper 14*, February 2008.

¹²⁹ Mark Schneider and Jack Buckley, "Charter Schools: Hype or Hope?" *Education Finance and Policy*, 1:1 (Winter 2006): 123-138, p. 131.

¹³⁰ See, for instance, Emily Van Dunk and Anneliese Dickman, "School Choice Accountability: An Examination of Informed Consumers in Different Choice Programs," *Urban Affairs Review*, 37: 6 (July 2002): 844-856, and Natalie Lacireno-Paquet and Charleen Brantley, "Who Chooses Schools and Why? The Characteristics and Motivations of Families Who Actively Choose Schools," Education and the Public Interest Center and Education Policy Research Unit Policy Brief, January 2008. In contrast, another study suggests that information costs impact parents' school choice decisions dramatically, and finds that receiving simplified information regarding schools leads to a significant increase in the average test score of the chosen school. See Justine S. Hastings, Richard Van Weelden, Jeffrey Weinstein, "Preferences, Information, and Parental Choice Behavior in Public School Choice," *National Bureau of Economic Research Working Paper 12995*, March 2007, available at <http://www.nber.org/papers/w12995>. These two studies reflect two contrasting models on information use. Behavioral psychologists and sociologists tend to look at the cognitive and social context of decision making in analyzing how individuals process information. They tend to focus on the cognitive limits of processing large amounts of information, and examine the social shortcuts individuals rely on to simplify their decision-making process. Economists, on the other hand, tend to think that the quality of decision making mostly depends on the quality and availability of information. Accordingly, they tend to focus on information costs as the primary impediment to effective decision-making. The two models differ in their implications in the sense that the availability of information would result in better outcomes for the economic model, whereas it would not affect the decisions of parents within the first model because parents use cognitive and social shortcuts which only tangentially use actual information in choosing schools.

¹³¹ See, for instance, James Harvey and Paul T. Hill, "Doing School Choice Right: Preliminary Findings," *Center on Reinventing Public Education*, April 2006, p. 12, and Natalie Lacireno-Paquet and Charleen Brantley, "Who Chooses Schools and Why? The Characteristics and Motivations of Families Who Actively Choose Schools," Education and the Public Interest Center and Education Policy Research Unit Policy Brief, January 2008, p. 14.

Social networks, customary attendance patterns, and a child's past academic achievement play an important role in shaping the actual choice set of parents.¹³² Parents use their social networks to gather information and advice about schools. The size and quality of these networks differ significantly by race and income. Higher socio-economic status households and white parents tend to have access to wider networks with higher-quality information and these networks tend to be racially segregated.¹³³ Customary attendance patterns—feeder systems or where siblings attended school for instance—also affect which schools parents are willing to consider. One study finds that customary attendance patterns of middle-class parents tend to include higher quality schools than those of their lower-income counterparts.¹³⁴ Finally, the persistence of a racial achievement gap tends to shape the perceptions of parents of color, limiting their expectations and the subset of schools these parents consider as real options for their children.

As a result of these three factors, the set of schools parents consider for their children differ significantly by race and income.¹³⁵ Despite the belief of charter proponents that choice is a great equalizer, not all choices are created equal. In fact, white and middle-class parents often choose from a better set of schools than lower income parents and parents of color.¹³⁶ Existing social and economic inequalities that shape the lives of parents thus directly shape their school choices and the set of schools they consider for their children, further reproducing these inequalities.¹³⁷

Summary of Findings Regarding the Competitive Impact of Charter Schools

The evidence regarding the impact of charter school competition on traditional public schools is mixed. While the arguments for positive influences sound reasonable, the

¹³² Courtney A. Bell, "Real Options? The Role of Choice Sets in the Selection of Schools," *Teachers College Record*, January 9, 2006.

¹³³ Mark Schneider, Paul Teske, Christine Roch, Melissa Marschall, "Networks to Nowhere: Segregation and Stratification in Networks of Information About Schools," *American Journal of Political Science*, 41:4 (October 1997): 1201-1223.

¹³⁴ Courtney A. Bell, "Real Options? The Role of Choice Sets in the Selection of Schools," *Teachers College Record*, January 9, 2006.

¹³⁵ Harvey and Hill find that low-income parents make choices exactly like their high-income counterparts. James Harvey and Paul T. Hill, "Doing School Choice Right: Preliminary Findings," *Center on Reinventing Public Education*, April 2006, p. 12. While agreeing with Harvey and Hill on this point, Bell notes, however, that the same choice process produces access to unequal choice sets. She argues that it is not that low-income parents make poor choices; it is the case that they have access to different choice sets. See Courtney A. Bell, "All Choices Created Equal? How Good Parents Select 'Failing' Schools," *National Center for the Study of Privatization Working Paper*, October 2005, p. 28, and Courtney A. Bell, "Real Options? The Role of Choice Sets in the Selection of Schools," *Teachers College Record*, January 9, 2006.

¹³⁶ Bell uses a metaphor to describe the differences: "We don't all choose from the same set of goods. When purchasing a car, some Americans choose between a Lexus and a BMW, others choose between a Saturn and a Ford. Everyone is free to choose, but consumers' choice sets differ dramatically." Courtney A. Bell, "All Choices Created Equal? How Good Parents Select 'Failing' Schools," *National Center for the Study of Privatization Working Paper*, October 2005, p. 31.

¹³⁷ Courtney A. Bell, "Real Options? The Role of Choice Sets in the Selection of Schools," *Teachers College Record*, January 9, 2006; Natalie Lacireno-Paquet and Charleen Brantley, "Who Chooses Schools and Why? The Characteristics and Motivations of Families Who Actively Choose Schools," Education and the Public Interest Center and Education Policy Research Unit Policy Brief, January 2008.

empirical evidence generally does not support them. Charter behavior regarding innovation is one area where findings ran counter to what charter proponents have hoped. Rather than promoting diverse curricular and instructional practices, charter schools seem to revert to traditional forms of curriculum and instruction.

Moreover, there is evidence that in some places charter schools may be competing with traditional public schools not by innovating but instead by skimming the least-costly to educate students from the public school system. The degree to which charter schools skim such students depends on the financial incentives they face through the structure of the per-pupil education funding formulas.

While student skimming is relatively limited in the Twin Cities, it is beginning to show up in some predominantly white urban and suburban neighborhoods where the schools are more racially diverse than the neighborhoods. Charter schools that skim students create new avenues for white flight and deepen racial and economic segregation in the traditional public school system.

More important in the Twin Cities has been charter school competition in ethnic niches, a practice particularly detrimental for students of color because it contributes to racial and economic segregation. In the Twin Cities, this type of competition has increased as charter schools offering “ethno-centric” programs have proliferated. By concentrating poverty in ethnically-segregated schools, ethnic-niche based competition increases the number of students of color in exactly the kinds of schools that research shows to be the lowest-performing.

Charter school competition in niches has also triggered undesirable responses from the traditional public schools in Twin Cities. One common way public school districts compete with charter schools is to initiate charter schools of their own. In response to ethnic-niche based competition from charter schools and the financial incentives that reward educating costly-to-educate students, school districts have created their own highly-segregated charter schools. This trend, along with new “ethno-centric” programs within traditional schools and some magnet schools have further intensified segregation within the traditional public school system.

Ultimately, the impact of niche-based competition on traditional public schools depends on the type of niche that competition is based upon. Given that research clearly implies that student body diversity is associated with better academic outcomes, niche competition based on race, disability, or income is counter-productive.

Traditional public school and district responses to competition from charter schools also vary widely depending on the local context and policy frameworks. While some of these responses have the potential to improve academic performance and enhance school productivity, others do not. For instance, charter school competition frequently encourages public schools to mount marketing campaigns, diverting resources away from classrooms.

Finally, contrary to what charter proponents expected, the evidence shows that school choice decisions by parents are often not based primarily on academic performance. In fact, evidence shows that parents choose based on a host of other factors including location, safety, transportation, and special educational preferences.

There is strong evidence, in particular, that parents of color as well as white parents often choose a school because it mostly serves students of the same race as their child. When parents choose schools based on race instead of academic quality, the result will virtually always be that students of color end up in segregated schools with very high poverty rates, undermining academic outcomes for those schools and for students of color.

A choice environment of this sort is not the great equalizer, as charter proponents argue, because not all choices are created equal. This is because the choice set available to white and middle-class parents invariably includes better performing schools than those available to lower income parents and parents of color. Existing social and economic inequalities that shape the lives of parents thus directly shape their school choices and the set of schools they consider for their children, further reproducing these inequalities.

SECTION IV: CONCLUSION

This report finds that charter schools in the Twin Cities metro have not served the students of the Twin Cities metro well. Charter schools in the region are performing worse than the traditional public schools academically (measured by test scores) and socially (measured by segregation rates). Other choice programs—the Choice is Yours in particular—offer students of color and low-income students access to better-performing, less segregated schools. In some areas where the schools are more racially diverse than their neighborhoods, charter schools segregate white students as well in white-segregated charter schools, acting as an avenue for white flight. Finally, charter school competition hurts the traditional public school system because it has led to ethnic-based niche competition. Traditional public schools in the Twin Cities metro have responded to charter competition either by creating district-sponsored ethno-centric charter schools or by initiating ethno-centric programs and magnet schools within their school districts. Overall, charter school competition in ethnic niches has been particularly detrimental for students of color and low-income students because this type of competition deepens the level of racial and economic segregation in the traditional public school system.

Many of the problems associated with charter schools result from the fact that there is no legal mandate to socially and economically integrate charter schools. Charter schools do not have to be segregated; on the contrary, they should more proactively integrate the region's students across social and economic fault lines. Currently, in Minnesota charter schools are exempt from the state's desegregation rule that applies to other public schools. As a result, they do not participate in the state's School District Integration Revenue Program, which distributed around \$79 million in integration revenue funds to 80 school districts in 2005. At a bare minimum, charter schools, which are much more segregated than the region's traditional public schools, should be subject to the same desegregation and integration standards as traditional public schools. Charters are, after all, public schools and receive tax-payer funding.

However, simply subjecting charter schools to Minnesota's existing desegregation rule is unlikely to reduce social and economic segregation in these schools because in its current form the rule does not effectively promote integration in the traditional public school system. The main problem with the existing rule is that it is simply intended to increase "racial contact" among students of different racial and ethnic backgrounds, rather than to actually decrease the extent of racial segregation in schools.

In the name of promoting "racial contact," school districts have used integration revenue funds to do a wide array of things ranging from one-day multicultural events to inter-district magnet schools and cross-district transportation. The majority of these activities have achieved very little to encourage the physical integration of school districts, schools, and classrooms. The purpose of the rule should be changed from merely promoting "racial contact" to unambiguously and proactively supporting the actual integration of school districts, schools, and classrooms.

The existing rule has also been criticized for creating perverse financial incentives—it does not really encourage districts to eliminate segregation. Under its current formula, a district would cease to receive integration aid once it became desegregated. In its current form, the program simply distributes additional resources to segregated districts and schools. The rule should be restructured to provide better incentives that reward the school districts and schools that actually manage to integrate their schools and classrooms. School districts and schools that fail to proactively reduce segregation should lose integration revenue funding and funds should be awarded to maintain programs that actually make schools more integrated than they would be in absence of the program.

Substantially increasing the financial incentives of the School District Integration Revenue program could have a significant impact at a time like now when school districts are facing severe budget pressures. One way to do this could be to provide state school desegregation aid to all school districts that maintain a racial balance in their schools within ten percent of the regional mean. Since students of color as well as low-income students are concentrated in the core of the region, primarily non-white schools in the core of the region and primarily white schools in the suburban parts of the region would probably face difficulties in achieving this degree of integration. To create additional incentives for schools that are severely racially unbalanced, integration aid should also be awarded to individual schools that manage to be fifteen percent more integrated than their surrounding community. While such a funding model might not induce every school—charter or traditional—to integrate, it would at least provide financial incentives for desegregation efforts and support the work of school districts and schools that provide integrated educational opportunities.

References

- Abernathy, Scott F. "Charter Schools, Parents, and Public Schools in Minnesota," *CURA Reporter*, 34: 1 (Winter 2004): 1-7
- Arsen, David, David N. Plank and Gary Sykes. "A Work in Progress," *Education Next*, (Winter 2001): 14-19.
- Arsen, David and Yongmei Ni. "The Competitive Effect of School Choice Policies on Performance in Traditional Public Schools," March 2008.
- Ashenfelter, Orley, William J. Collins, and Albert Yoon. "Evaluating the Role of *Brown vs. Board of Education* in School Equalization, Desegregation, and the Income of African Americans," *American Law and Economics Review*, 8: 2 (2006): 213-248.
- Asimov, N. "Few parents seize chance to transfer schools 'No Child Left Behind' made offer mandatory", *The San Francisco Chronicle*, October 9, 2003, p. A1.
- Balfanz, Robert and Nettie Legters. "Locating the Dropout Crisis: Which High Schools Produce the Nation's Dropouts," in Gary Orfield (ed.), *Dropouts in America: Confronting the Graduation Rate Crisis* (Cambridge, MA: Harvard Education Press, 2004).
- Ballou, Dale, Bettie Teasley, and Tim Zeidner. "Charter Schools in Idaho," paper presented at the National Conference on Charter School Research at Vanderbilt University, September 2006.
- Bell, Courtney A. "All Choices Created Equal? How Good Parents Select 'Failing' Schools," *National Center for the Study of Privatization Working Paper*, October 2005.
- Bell, Courtney A. "Real Options? The Role of Choice Sets in the Selection of Schools," *Teachers College Record*, January 9, 2006.
- Bell, Courtney A. "Space and Place: Urban Parents' Geographical Preferences for Schools," *The Urban Review*, 39:4 (November 2007): 375-404.
- Betts, Julian, Y. Emily Tang and Andrew C. Zau. "Madness in the Method? A Critical Analysis of Popular Methods of Estimating the Effect of Charter Schools on Achievement," Unpublished paper presented at the annual meetings of the American Educational Research Association, Chicago, April 2007.
- Betts, Julian and Paul T. Hill (as part of the The Charter School Achievement Consensus Panel). "Key Issues in Studying Charter Schools and Achievement: A Review and Suggestions for National Guidelines," (University of Washington: Center on Reinventing Public Education, The National Charter School Project White Paper No. 2, May 2006).

Bifulco, Robert and Helen F. Ladd. "School Choice, Racial Segregation, and Test-Score Gaps: Evidence from North Carolina's Charter School Program," *Journal of Policy Analysis and Management*, 26: 1 (2006): 31-56.

Bifulco, Robert, Helen F. Ladd, and Stephen Ross. "Public School Choice and Integration: Evidence from Durham, North Carolina," *National Center for Analysis of Longitudinal Data in Education Research Working Paper 14*, February 2008.

Booker, Kevin, Ron Zimmer, and Richard Buddin. "The Effect of Charter Schools on School Peer Composition," RAND Education Working Paper, October 2005.

Borman, Geoffrey D. and N. Maritza Dowling. "Schools and Inequality: A Multilevel Analysis of Coleman's Equality of Educational Opportunity Data," (2006) Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Borman, Kathryn, Tamela McNulty Eitle, Deanna Michael, David J. Eitle, Reginald Lee, Larry Johnson, Deirdre Cobb-Roberts, Sherman Dorn and Barbara Shircliffe. "Accountability in a Postdesegregation Era: The Continuing Significance of Racial Segregation in Florida's Schools," *American Educational Research Journal*, 41: 3 (2004): 605-631.

Boozer, Michael A., Alan B. Krueger, Shari Wolkon, John C. Haltiwanger and Glenn Loury. *Race and School Quality Since Brown v. Board of Education*, *Brookings Papers on Economic Activity. Microeconomics*. (1992), pp. 269-338.

Braddock, Jomills H. and James M. McPartland. "How Minorities Continue to be Excluded from Equal Employment Opportunities: Research on Labor Market and Institutional Barriers," *Journal of Social Issues*, 43: 1 (1987): 5-39.

Braddock, Jomills H., Robert L. Crain, and James M. McPartland. "A Long-Term View of School Desegregation: Some Recent Studies of Graduates as Adults," *Phi Delta Kappan*, 66: 4 (1984): 259-264.

Braun, Henry, Frank Jenkins, and Wendy Grigg. *A Closer Look at Charter Schools Using Hierarchical Linear Modeling*. (Washington, D. C.: U. S. Department of Education, National Center for Education Statistics, Institute of Education Sciences, August 2006).

Buckley, Jack and Mark Schneider. "Making the Grade: Comparing D.C. Charter Schools to Other D.C. Public Schools" *Educational Evaluation and Policy Analysis*, 25:2 (2003).

Bulkley, Katrina and Jennifer Fisler. "A Decade of Charter Schools: From Theory to Practice," *Educational Policy*, 17:3 (July 2003): 317-342.

- Cobb, C. D. and G. V. Glass. "Ethnic Segregation in Arizona Charter Schools," *Education Policy Analysis Archives*, 7: 1 (1999).
- Crain, R. L. and J. Strauss. *School Desegregation and Black Occupational Attainments: Results from a Long-Term Experiment*. (Baltimore: Center for Social Organization of Schools, 1985), Report No: 359.
- Dee, Thomas S. and Helen Fu. "Do Charter Schools Skim Students or Drain Resources?" *Economics of Education Review* 23 (2004): 259-271.
- Eberts, Randall W. and Kevin M. Hollenbeck. "An Examination of Student Achievement in Michigan Charter Schools," in Timothy J. Gronberg and Dennis W. Jansen (eds.), *Improving School Accountability: Check-Ups or Choice*, Vol 14. Advances in Microeconomics Series, (Elsevier, 2006), pp. 103-130.
- Eckes, S. and K. Rapp. "Charter Schools: Trends and Implications," in E. St. John (ed.) *Readings on Education*, vol. 19 (New York, NY: AMS Press, 2005), pp. 1-26.
- Ertas, Nevbahar. "Public School Responses to Charter School Presence," Ph. D. Thesis (Georgia Institute of Technology and Georgia State University, August 2007).
- Finn, Chester E. "All Aboard the Charters? The State of a Movement," *National Review Online*, October 9, 2006.
- Finn, Chester E., Bruno V. Manno and G. Vanourek. *Charter Schools in Action: Renewing Public Education*. (Princeton, N. J.: Princeton University Press, 2000).
- Fiske, Edward and Helen Ladd. "When Schools Compete: A Cautionary Tale," (Washington, D. C.: Brookings Institution, 2000).
- Frankenberg, Erica and Chungmei Lee. "Charter Schools and Race: A Lost Opportunity for Integrated Education," (Harvard University, The Civil Rights Project, July 2003).
- Fusarelli, Lance D. "Texas: Charter Schools and the Struggle for Equity," in Sandra Vergari (ed.) *The Charter School Landscape* (Pittsburgh, PA: Pittsburgh University Press, 2002), pp. 175-191.
- Goldhaber, Dan and Eric Eide. "Research Note: Methodological Thoughts on Measuring the Impact of Private Sector Competition on the Educational Marketplace," *Education Evaluation and Policy Analysis*, 25:2 (2003): 217-232.
- Greene, Jay P. "Why school choice can promote integration." *Education Week*, 19:31 (2000).
- Gronberg, Timothy and Dennis W. Jansen. "Texas Charter Schools: An Assessment in 2005," (Austin, Texas: Texas Public Policy Foundation, 2005).

Gupta, R. "Few in Martin take advantage of options under U.S. school law," *Palm Beach Post*, July 20, 2004, p. 1B.

Gyurko, Jonathan. "The Grinding Battle with Circumstances: Charter Schools and the Potential of School-Based Collective Bargaining," Columbia University, February 2008.

Hallinan, Maureen and Richard Williams. "Students' Characteristics and the Peer Influence Process," *Sociology of Education*, 63 (April 1990): 122-132.

Hallinan, Maureen and Richard Williams. "The Stability of Students' Interracial Friendships," *American Sociological Review*, 52 (1987): 653-664.

Harvey, James and Paul T. Hill. "Doing School Choice Right: Preliminary Findings," *Center on Reinventing Public Education*, April 2006.

Hassel, Bryan. "Studying Achievement in Charter Schools: What Do We Know?" Charter School Leadership Council, January 31, 2005.

Hassel, Bryan C., Michelle Godard Terrell, Ashley Kain and Todd Ziebarth. "Charter School Achievement: What We Know," (National Alliance for Public Charter Schools, 4th edition, October 2007).

Hastings, Justine S., Richard Van Weelden, Jeffrey Weinstein. "Preferences, Information, and Parental Choice Behavior in Public School Choice," *National Bureau of Economic Research Working Paper 12995*, March 2007.

Hess, Frederick M. *Revolutions at the Margins: The Impact of Competition on Urban School Systems*. (Washington, DC: Brookings Institution Press, 2002).

Henig, Jeffrey R. *Spin Cycle: How Research Is Used in Policy Debates--the Case of Charter Schools*. (New York: Russell Sage Foundation and the Century Foundation, 2008).

Henig, Jeffrey R. and Jason A. MacDonald. "Locational Decisions of Charter Schools: Probing the Market Metaphor," *Social Science Quarterly*, 83:4 (December 2002): 962-980.

Hill, Paul T. "Assessing Achievement in Charter Schools," in Robin J. Lake and Paul T. Hill (eds.) *Hopes, Fears and Reality: A Balanced Look at American Charter Schools in 2005*. (University of Washington: National Charter School Research Project, 2005).

Hill, Paul T., Lawrence Angel, and Jon Christensen. "Charter School Achievement Studies," *Education Finance and Policy*, 1: 1 (Winter 2006): 139-150.

Hochschild, Jennifer L. and Nathan Scovronick. *The American Dream and the Public Schools*. (New York: Oxford University Press, 2003).

Holme, Jennifer Jellison, Amy Stuart Wells, Anita Tijerina Revilla. "Learning through Experience: What Graduates Gained by Attending Desegregated High Schools," *Equity and Excellence in Education*, 38: 1 (2005): 14-24.

Holmes, George M., Jeffrey DeSimone, and Nicholas G. Rupp. "Does School Choice Increase School Quality?" *National Bureau of Economic Research Working Paper Series*, no. W9863, May 2003.

Hoxby, Caroline M. "Achievement in Charter Schools and Regular Public Schools in the United States: Understanding the Differences," Mimeo. Harvard University, December, 2004, available at http://edgeweb.heritage.org/research/education/upload/hoxbycharter_dec2.pdf

Imberman, Scott A. "The Effect of Charter Schools on Non-Charter Students: An Instrumental Variables Approach," November 2007.

Kahlenberg, Richard D. *All Together Now: Creating Middle-Class Schools through Public School Choice*. (Brookings Institution Press, 2001).

Killen, Melanie and Clark McKown. "How Integrative Approaches to Intergroup Attitudes Advance the Field," *Journal of Applied Developmental Psychology*, 26 (2005): 612-622.

Kolderie, Ted. *Creating the Capacity for Change: How and Why Governors and Legislatures are Opening a New-Schools Sector in Public Education*. (Education Week Press, 2004).

Lacireno-Paquet, Natalie and Charleen Brantley. "Who Chooses Schools and Why?" Education Policy Research Unit and Education and the Public Interest Center Policy Brief, January 2008.

Ladner, Matthew and Matthew J. Brouillette. "The Impact of Limited School Choice on Public School Districts," Mackinac Center for Public Policy, August 2000.

Liu, Goodwin and William Taylor. "School Choice to Achieve Desegregation," *Fordham Law Review*, 74 (2005): 791-824.

Loveless, Tom. "Charter Schools: Achievement, Accountability, and the Role of Expertise," (Washington, D. C.: The Brookings Institution, 2003).

Lubienski, Christopher. "Innovation in Education Markets: Theory and Evidence On the Impact of Competition and Choice in Charter Schools," *American Educational Research Journal*, 40:2 (2003): 395-443.

Lubienski, Christopher. "Public Schools in Marketized Environments: Shifting Incentives and Unintended Consequences of Competition-Based Educational Reforms," *American Journal of Education*, 111 (August 2005): 464-486.

Lubienski, Christopher. "School Diversification in Second-Best Education Markets: International Evidence and Conflicting Theories of Change," *Educational Policy*, 20:2 (May 2006): 323-344.

Lubienski, Christopher and Charisse Gulosino. "Choice, Competition, and Organizational Orientation: A Geo-Spatial Analysis of Charter Schools and the Distribution of Educational Opportunities," October 2007.

Manno, Bruno V., Gregg Vanourek, and Chester E. Finn, Jr. "Charter Schools: Serving Disadvantaged Youth," *Education and Urban Society*, 31: 4 (August 1999): 429-445.

Manno, Bruno V., Chester E. Finn Jr., and Gregg Vanourek. "Beyond the Schoolhouse Door: How Charter Schools are Transforming US Public Education," *Phi Delta Kappan*, 81:10 (2000): 736-744.

May, Judy Jackson. "The Charter School Allure: Can Traditional Schools Measure Up?" *Education and Urban Society*, 39:1 (November 2006): 19-45.

McDermott, Peter, Julia Johnson Rothenberg, and Kim Baker. "Lessons Learned From the First Year of an Urban Charter School," *The Educational Forum*, 70:4 (2006): 352-362.

Mickelson, Roslyn Arlin. "Segregation and the SAT," *Ohio State Law Journal*, 67 (2006): 157-199.

Mickelson, Roslyn Arlin. "The Academic Consequences of Desegregation and Segregation: Evidence from the Charlotte-Mecklenburg Schools," *North Carolina Law Review*, 81 (2003): 1513-1562.

Minneapolis Public Schools Strategic Planning Update, Summary of Phase 2 "Current Situation Findings," September 25, 2007, available at www.mpls.k12.mn.us/sites/f7071225-9844-4da6-96c0-996b9c74b221/uploads/20070925_Board_Presentation.ppt

Miron, Gary. "Evaluation of the Delaware Charter School Reform: Year 1 Report," (Western Michigan University, The Evaluation Center, December 2004).

Miron, Gary, Chris L. Coryn, and Dawn M. Mackety. "Evaluating the Impact of Charter Schools on Student Achievement: A Longitudinal Look at the Great Lakes States," (Western Michigan University, The Evaluation Center, June 2007).

- Miron, Gary, Anne Cullen, Brooks Applegate and Patricia Farrell. "Evaluation of the Delaware Charter School Reform: Final Report," (Western Michigan University, The Evaluation Center, March 2007).
- Miron, Gary and Christopher Nelson. *What's Public About Charter Schools?* (Thousand Oaks, CA: Corwin Press, 2002).
- Moua, Wameng. "Are Hmong Students Making the Grades?" *Twin Cities Daily Planet*, March 25, 2008.
- Nathan, Joe. *Charter Schools: Creating Hope and Opportunity for American Education*. (San Francisco: Jossey-Bass Publishers, 1996).
- National Alliance for Public Charter Schools. "Renewing the Compact: A Statement by the Task Force on Charter School Quality and Accountability," (Washington, D. C., August 2005).
- National Center for Education Statistics (NCES). *The Nation's Report Card. America's Charter Schools: Results from the NAEP 2003 Pilot Study*. (Washington, D. C.: U. S. Department of Education, National Center for Education Statistics, 2004).
- Ni, Yongmei. "Are Charter Schools More Racially Segregated Than Traditional Public Schools?" (Michigan State University, The Education Policy Center, Policy Report 30, March 2007).
- Orfield, Gary and Chungmei Lee. *Racial Transformation and the Changing Nature of Segregation* (Cambridge, MA: The Civil Rights Project at Harvard University, 2006).
- Orfield, Gary and Chungmei Lee. *Why Segregation Matters: Poverty and Educational Inequality* (Cambridge, MA: The Civil Rights Project at Harvard University, 2005).
- Orfield, Gary and Chungmei Lee. *Brown at 50: King's Dream or Plessy's Nightmare* (Cambridge, MA: The Civil Rights Project at Harvard University, 2004).
- Orfield, Myron, Thomas Luce, Baris Gumus-Dawes and Geneva Finn. "Neighborhood and School Segregation in the Twin Cities Region," in Myron Orfield and Thomas Luce, *Region: Law, Policy and the Future of the Twin Cities*. (forthcoming).
- Pettigrew, Thomas and Linda Tropp. "A Meta-Analytic Test of Intergroup Contact Theory," *Journal of Personality and Social Psychology*, 90 (2006): 751-783.
- Renzulli, Linda A. "District Segregation, Race Legislation, and Black Enrollment in Charter Schools," *Social Science Quarterly*, 87: 3 (September 2006): 618-637.
- Renzulli, Linda A. and Lorraine Evans. "School Choice, Charter Schools, and White Flight," *Social Problems*, vol. 52 (2005): 398-418.

Roy, Joydeep and Lawrence Mishel. "Advantage None: Reexamining Hoxby's Finding of Charter School Benefits," Economic Policy Institute, Briefing Paper, 2005.

Sanna, James. "Fewer students, fewer dollars—blame the charters?" *TC Daily Planet*, July 06, 2008.

Schneider, Mark, Paul Teske, Christine Roch, Melissa Marschall. "Networks to Nowhere: Segregation and Stratification in Networks of Information About Schools," *American Journal of Political Science*, 41:4 (October 1997): 1201-1223.

Schneider, Mark and Jack Buckley. "Charter Schools: Hype or Hope?" *Education Finance and Policy*, 1:1 (Winter 2006): 123-138.

Schofield, Janet Ward. "Maximizing the Benefits of Student Diversity: Lessons from School Desegregation Research," in Gary Orfield and Michael Kurlaender (eds.) *Diversity Challenged: Evidence on the Impact of Affirmative Action* (Cambridge, MA: Harvard Education Press, 2001).

Schroeder, Jon. "Ripples of Innovation: Charter Schooling in Minnesota, the Nation's First Charter School State" (Progressive Policy Institute, 2004).

State of Minnesota Office of the Legislative Auditor. "Evaluation Report: Charter Schools." (June 2008).

Swanson, Chris. "Sketching A Portrait of Public High School Graduation: Who Graduates? Who Doesn't?" in Gary Orfield (ed.), *Dropouts in America: Confronting the Graduation Rate Crisis* (Cambridge, MA: Harvard Education Press, 2004).

Teske, Paul, Mark Schneider, Jack Buckley, and Sara Clark. "Does Charter School Competition Improve Traditional Public Schools?" (New York: Manhattan Institute for Policy Research, 2001).

Triant, Bill. "Autonomy and Innovation: How Do Massachusetts Charter School Principals Use Their Freedom?" (Washington, DC: Thomas B. Fordham Foundation, 2001).

Turck, Mary. "Loving It and Leaving It: Phalen Lake Hopes to Reverse the Trend," *Twin Cities Daily Planet*, February 25, 2008.

Van Dunk, Emily and Anneliese Dickman. "School Choice Accountability: An Examination of Informed Consumers in Different Choice Programs," *Urban Affairs Review*, 37: 6 (July 2002): 844-856.

Vanourek, Gregg. "State of the Charter Movement: Trends, Issues, and Indicators," Charter School Leadership Council, May 2005.

Vergari, Sandra (ed.). *The Charter School Landscape*. (Pittsburgh, PA: University of Pittsburgh Press, 2002).

Vergari, Sandra. "The Politics of Charter Schools," *Educational Policy*, 21:1 (January and March 2007): 15-39.

Walford, Geoffrey. "Diversity, Choice, and Selection in England and Wales," *Educational Administration Quarterly*, 33:2 (1997): 158-169

Wamba, Nathalis G. and Carol Ascher. "An Examination of Charter School Equity," *Education and Urban Society*, 35:4 (August 2003): 462-476.

Wells, Amy Stuart. "Beyond the Rhetoric of Charter School Reform: A Study of Ten California School Districts." (Los Angeles: UCLA Charter School Study, 1998).

Wells, Amy Stuart, Jennifer Jellison Holme, Alejandra Lopez and Camille Wilson Cooper. "Charter Schools and Racial and Social Segregation: Yet Another Sorting Machine?" in R. D. Kahlenberg (ed.) *A Notion At Risk: Preserving Public Education As An Engine for Social Mobility*. (New York: The Century Foundation/Twentieth Century Fund, 2000), pp. 169-222.

Weiher, Gregory R. and Kent L. Tedin, "Does Choice Lead to Racially Distinctive Schools? Charter Schools and Household Preferences," *Journal of Policy Analysis and Management*, 21:1 (2002): 79-92.

Wirt, J. S., Choy, P. Rooney, S. Provasnik, A. Sen and R. Tobin. *The Condition of Education 2005* (No. NCES 2005-094). Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2005.

Witte, John, David Weimer, Arnold Shober, and Paul Schlomer. "The Performance of Charter Schools in Wisconsin," *Journal of Policy Analysis and Management*, 26: 3 (2007): 557-573.

Ziebarth, Todd, Mary Beth Celio, Robin J. Lake, and Lydia Rainey. "The Charter Schools Landscape in 2005," in Robin J. Lake and Paul T. Hill (eds.) *Hopes, Fears and Reality: A Balanced Look at American Charter Schools in 2005*. (University of Washington: National Charter School Research Project, 2005).

Zimmer, Ron and Richard Buddin. "Charter School Performance in Two Large Urban Districts," *Journal of Urban Economics*, 60 (2006): 307-326.

Zimmer, Ron, Suzanne Blanc, Brian Gill, and Jolley Christman. "Evaluating the Performance of Philadelphia's Charter Schools," (Rand Education Working Paper, March 2008).