

**An Evaluation of the Horizon Scholarship Program  
in the Edgewood Independent School District,  
San Antonio, Texas: The First Year**

By

Mathematica Policy Research  
600 Maryland Ave. SW  
Washington, D. C. 20024-2512  
and  
Program on Education Policy and Governance  
Harvard University

prepared by

Paul E. Peterson, Director, Harvard Program on Education Policy and Governance  
FAX: 617-496-4428  
Phone: 617-495-8312/495-7976  
Website: <http://data.FAS.Harvard.edu/PEPG/>

and

David Myers, Senior Fellow, Mathematica Policy Research  
FAX: 202-863-1763  
Phone: 202-484-4523

and

William G. Howell, Program Associate, Program on Education Policy and Governance

September 1999

The Program on Education Policy and Governance (PEPG) is located within the Taubman Center on State and Local Government, John F. Kennedy School of Government and within the Center for American Political Studies, Department of Government, Harvard University. Mailing address: Taubman 306, Kennedy School of Government, 79 J. F. Kennedy St., Harvard University, Cambridge, MA 02138  
Phone: 617-495-7976/495-8312; Fax: 617-496-4428; Website: [data.fas.harvard.edu/pepg/](http://data.fas.harvard.edu/pepg/)

Evaluation funded by The David and Lucile Packard Foundation.

## **An Evaluation of the Horizon Scholarship Program in the Edgewood Independent School District, San Antonio, Texas: The First Year**

In the past decade much more has become known about the impacts of school vouchers on low-income families and their children.<sup>1</sup> Ten years ago, the information available came primarily from an experimental public-school choice program attempted in Alum Rock, California during the 1960s.<sup>2</sup> But beginning in 1990 data were collected on voucher programs in many cities, including Milwaukee, Cleveland, Indianapolis, San Antonio, New York City, Washington, and Dayton, Ohio. Initially, many of these studies were limited by the quality of the data or the research procedures employed. Often, planning for the evaluation was begun after the experiment was already underway, making it impossible to gather baseline data or ensure the formation of an appropriate control group. As a result, the quality of the data collected was not as high as researchers would normally prefer.<sup>3</sup>

Despite the limitations of the early evaluations, the Milwaukee and Cleveland programs proved to be valuable initial research steps, providing scholars and program operators with opportunities to learn the pitfalls and problems accompanying the study of

---

<sup>1</sup> Many have helped make this evaluation possible. We are especially grateful to The David and Lucile Packard Foundation for making resources available in a timely manner. We are equally grateful to Children's Educational Opportunity Foundation, Inc. for co-operating with this evaluation in many ways, including making available the names of participating families. We also appreciate the insights and assistance of our co-principal investigators, Jay P. Greene and Rudolpho de la Garza of the Tomas Rivera Institute at the University of Texas at Austin, for their assistance in the design and data collection phases of the study. Cara Olsen and Kathy Sonnenfeld, members of Mathematica Policy Research, made major contributions at design, data collection and analysis stages of the research. We also wish to thank Martin West and Anja Soldan for exceptionally valuable research assistance, and Shelley Weiner, Lilia Halpern, and Micki Morris who provided staff assistance.

<sup>2</sup> R. J. Bridge and J. Blackman, *A Study of Alternatives in American Education: Vol. 4. Family Choice in Education* (Santa Monica, CA: Rand Corporation, 1978); Richard Elmore, "Choice as an Instrument of Public Policy: Evidence from Education and Health Care," In W. Clune & J. Witte, eds., *Choice and Control in American Education: Vol. 1. The Theory of Choice and Control in American Education* (New York: Falmer, 1990), pp. 285-318.

<sup>3</sup> Disparate findings have emerged from these studies. For example, one analysis of the Milwaukee choice experiment found test scores gains in reading and math, particularly after students had been enrolled for three or more years, while another study found gains only in math, and a third found gains in neither subject. Jay P. Greene, Paul E. Peterson, and Jiangtao Du, "School Choice in Milwaukee: A Randomized Experiment," in Paul E. Peterson and Bryan C. Hassel, eds., *Learning from School Choice* (Washington, D. C.: Brookings, 1998), pp.335-56; Cecilia Rouse, "Private School vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program," Department of Economics, Princeton University, 1997; John F. Witte, "Achievement Effects of the Milwaukee Voucher Program," paper presented at the 1997 annual meeting of the American Economics Association. On the Cleveland program, see Jay P. Greene, William G. Howell, and Paul E. Peterson, "Lessons from the Cleveland Scholarship Program," in Paul E. Peterson and Bryan C. Hassel, eds., *Learning from School Choice* (Washington, D. C.: Brookings, 1998), pp. 357-92; Kim K. Metcalf, William J. Boone, Frances K. Stage, Todd L. Chilton, Patty Muller, and Polly Tait, "A Comparative Evaluation of the Cleveland Scholarship and Tutoring Grant Program: Year One: 1996-97," School of Education, Smith Research Center, Indiana University, March 1998. Greene, Peterson, and Du, 1998 report results from analyses of experimental data; the other studies are based upon analyses of non-experimental data.

school vouchers. Learning from the limitations of these studies, a voucher program for students previously in New York City public schools, begun in 1996 by the School Choice Scholarships Foundation (SCSF), was designed in such a way as to allow for the collection of high-quality information about student test-score outcomes and parental assessments of public and private schools. Taking advantage of the fact that scholarships were awarded by lottery, the evaluation was designed as a randomized field trial. Prior to the conduct of the lottery, the evaluation team collected baseline data on test scores and family background characteristics. One year later, the evaluation team obtained test-score information and parental assessments of their child's school experiences. The team found positive impacts of vouchers on parental assessments of their child's educational experiences. It found no consistent effects of vouchers on test scores among students in grades two and three, but it did find that vouchers had a significant positive impact on the test scores of students in grades four and five.<sup>4</sup> The evaluation is continuing, and results from the second-year of the pilot program are to be reported in late 1999.

But even though the New York evaluation, designed as a randomized field trial, provides much higher quality information than that available to previous researchers, many interesting questions remain unanswered. Since the vouchers were only available to 1,300 students, they did not have more than a negligible impact on the New York public school system, which has approximately one million students. And since comparisons were made between two groups of families that had applied for a scholarship—one group receiving scholarships in the lottery, the other not—the evaluation did not compare voucher recipients with a cross-section of parents and students in the New York City public schools and therefore, this study cannot evaluate the ways in which the background characteristics of voucher students and families differ from those of public-school students in general. In particular, more needs to be learned about the systemic impact of voucher programs and the characteristics of students and families who make use of a voucher made available to most students within a school district. This report provides preliminary answers to these questions.

### **The Debate over Systemic Impacts of School Choice**

The systemic impact of vouchers has been a matter of intense public and academic debate. Voucher critics argue that school choice will segment and stratify the country's educational system, with the best and brightest students attending private schools, leaving public schools with a particularly unmotivated and disadvantaged population. Harvard education professors Richard Elmore and Bruce Fuller assert: "Increasing educational choice is likely to increase separation of students by race, social class, and cultural

---

<sup>4</sup>Paul E. Peterson, David E. Myers, William G. Howell, and Daniel P. Mayer, "The Effects of School Choice in New York City," in Susan B. Mayer and Paul E. Peterson, *Earning and Learning: How Schools Matter* (Washington, D. C.: Brookings, 1999), Ch. 12. Similar evaluations of voucher initiatives in Washington, D. C. and Dayton, Ohio are currently underway; an initial report of baseline data from these evaluations is available. See Paul E. Peterson, Jay P. Greene, William G. Howell, and William McCready, "Initial Findings from an Evaluation of School Choice Programs in Washington, D. C. and Dayton, Ohio," Paper presented before the Annual Meetings of the Association of Public Policy and Management, New York City, October, 1998. Paper available as a research paper from the Program on Education Policy and Governance, Kennedy School of Government, Harvard University, Cambridge, MA 02138 and on its website address: <http://data.fas.harvard.edu/pepg/>

background."<sup>5</sup> Similarly, Columbia Teachers College scholar Henry Levin claims, "Choosers will be more advantaged both educationally and economically than non-choosers... thereby relegating [the latter] to their assigned schools."<sup>6</sup> Much the same is implied by the American Federation of Teachers claim that "instead of being distracted by promises to 'save' a handful of students, policy-makers could be improving the achievement of all of our youngsters."<sup>7</sup>

In reply, choice supporters say a choice-based system will motivate the public schools to respond vigorously to new competitors, producing improvements for all students. In a study of inter-district choice in Massachusetts, researchers found that when school districts lost students to neighboring districts, they developed partially successful strategies to attract students, stemming future losses.<sup>8</sup> In Milwaukee, the public school board--elected in the summer of 1999--removed a superintendent antagonistic to the city's voucher program and began to develop more co-operative relationships with the city's private schools. In Arizona, public schools responded to charter schools with new programs and public relations campaigns.<sup>9</sup> And in Albany, the school board responded vigorously in 1997 to a privately funded scholarship program that offered scholarships to all students at a particular school.

These bits of information, however, are still fragmentary and incomplete. The Massachusetts data come from just a few school districts; it is unknown whether developments in Arizona are merely superficial or the beginning of more deep-seated changes; and the Milwaukee and Albany cases at this point are little more than anecdotes. Much more can be learned from an examination of the Horizon voucher program in the Edgewood Independent School District (EISD) in San Antonio.

This initial report from an evaluation of the Horizon program begins to answer questions about the systemic impact of vouchers that prior research has been unable to address. Specifically, it provides information on the following:

1. What kinds of families take advantage of vouchers when they are offered to all low-income families living within a school district? Do the best and the brightest leave the public schools to attend private schools? Or are parents

---

<sup>5</sup>Richard F. Elmore and Bruce Fuller, "Empirical Research on Educational Choice: What are the Implications for Policy-Makers?" in Bruce Fuller and Richard F. Elmore, *Who chooses? Who Loses? Culture, Institutions and the Unequal Effects of School Choice* (New York: Columbia Teachers College Press, 1996), p. 187.

<sup>6</sup>Henry M. Levin, "Educational Vouchers: Effectiveness, Choice, and Costs," *Journal of Policy Analysis and Management*, 17:3 (June 1998), p. 379.

<sup>7</sup>Dan Murphy, F. Howard Nelson and Bella Rosenberg, "The Cleveland Voucher Program: Who Chooses? Who Gets Chosen? Who Pays? A report by the American Federation of Teachers, Washington, D. C., p. iv.

<sup>8</sup>David L. Armour and Brett M. Peiser, "Interdistrict Choice in Massachusetts," in Paul E. Peterson and Bryan C. Hassel, eds., *Learning from School Choice* (Brookings, 1998), Ch. 7.

<sup>9</sup>Robert Meranto, Scott Milliman, Frederick Hess, and April Gresham, eds., *School Choice in the Real World: Lessons from Arizona Charter Schools* (Westview, forthcoming).

more likely to exit the public schools when their own child is not doing well in public school?

2. Do low-income parents find a school they prefer? What are the reasons they give for choosing a school? Are academic considerations paramount? Or do families leave for religious reasons? Or to become a member of an athletic team? Or because their child's friends have left?
3. How do the school experiences of voucher families and students compare with those of public-school families?
4. Do students from low-income families change schools more frequently than public-school students do? Are they more likely to be expelled or suspended from school?

A subsequent report will provide information on the political and institutional context for the Horizon program in Edgewood as well as of three comparison districts. This report will also present information that allows for comparisons between students and parents living in the Edgewood school district with students and parents living in three comparison districts. These data will serve as a baseline for a non-experimental evaluation to be conducted over the next several years.

The evaluation, relying upon non-experimental data, will also address additional questions: What impact do vouchers have on students remaining in public schools? Do most students in the district benefit from the program, whether or not they themselves directly participate? Are voucher parents more satisfied with their children's schools? Are students who remained in the public schools doing worse than before? Are their parents increasingly unhappy with their children's education? Do public schools respond to the competitive challenge vouchers represent? Or do they lose vitality as better students migrate to the private sector? Does the number of voucher students increase from year to year? What new educational opportunities arise? Do new schools open? Do existing private schools expand their offerings? Do private schools change in important ways in response to the voucher program?

### **The Horizon Scholarship Program**

The Horizon program, sponsored by the Children's Educational Opportunity (CEO) Foundation, is of national significance in that it is the first program to offer vouchers to all public-school students from low-income families residing within a particular school district. Announced in April 1998, the vouchers, which were effective for the 1998-99 school year, were offered to all students in grades K-12 from low-income families who lived in the Edgewood Independent School District in San Antonio. No first-come, first-serve, lottery, or other criteria were imposed upon participants. To be eligible, families needed only to qualify for the free or reduced-price federal lunch programs at the time of application; families do not need to requalify for the program each year they use the scholarship. Families receiving the voucher were told they would receive scholarship support as long as the family lived in Edgewood, remained of low income, and the child remained in a participating school. Vouchers could be used to pay tuition at private

schools, either religious or secular, or to obtain a seat at a public school outside the Edgewood school district. CEO imposed no restrictions on the criteria private schools use concerning the students they selected to attend their schools. Elementary students that attended private schools in Edgewood itself received scholarships worth \$3,600; high school students that went to private schools in Edgewood received scholarships worth \$4,000. If students chose a private school outside Edgewood, they received scholarships equivalent to the tuition at that school or the above amounts, whichever was less.<sup>10</sup> The average private-school tuition paid by students participating in the Horizon program was \$1,982.<sup>11</sup> As a result, the scholarship covered all the tuition costs of most participants; however, fees and supplies were not always covered, a matter discussed further below.

Horizon officials announced that in the first semester of the 1998-99 school year 837 students were making use of the scholarships. Almost all attended one of 57 private schools in Edgewood or other parts of the San Antonio metropolitan area. Two students used the voucher to attend a public school outside of the Edgewood school district.<sup>12</sup>

The program is projected to continue for ten years or until a publicly funded program is established. Students accepting scholarships are guaranteed scholarships throughout their elementary and high school years provided they continued to live in Edgewood and remained in a participating Horizon school.

### **The Edgewood Independent School District**

The Edgewood school district serves an economically disadvantaged, predominantly Latino population. Ninety percent of the 13,490 students attending Edgewood's public schools in 1997-98 were considered economically disadvantaged by the Texas Department of Education.<sup>13</sup> As is shown in Table 1.1, the number of students in each of the first ten grades of school, kindergarten through ninth grade, did not vary substantially from one grade to the next. But in high school, the number of students declined dramatically with each grade—from 1,305 students in ninth grade to 475 students in twelfth.

Total school expenditures in Edgewood were \$6,060 per pupil enrolled in 1997-98, an amount just above the state average of \$5,597. Because the district's own revenue

---

<sup>10</sup>If the vouchers exceeded tuition at an Edgewood private school, the school was allowed to keep the difference. A more complete description of the program may be found in Robert B. Aguirre, "A Report on the First Semester of the Horizon Voucher Program," (San Antonio, Texas: Children's Education Opportunity Foundation, January 1999).

<sup>11</sup>The average reported is based on the assumption that Horizon students paid the school's maximum tuition charges. Information was available for 710 Horizon students. Memorandum from CEO Foundation to evaluation team, July, 1999. The evaluation team does not have information on the amount of money Edgewood private schools receive from non-tuition sources.

<sup>12</sup> Aguirre, p. 10.

<sup>13</sup>Unless otherwise indicated, all EISD enrollment and demographic information included in this report is taken from State of Texas, Texas Education Agency, *Academic Excellence Indicator System, 1997-98, District Report for Edgewood Independent School District (District # 015905)*. The report is publicly available on the Texas Education Agency Website ([www.tea.state.tx.us](http://www.tea.state.tx.us)).

resources are modest, it is highly dependent upon state aid. As can be seen in Table 1.1, 83 percent of revenue came from state sources and another 7 percent from the federal government.

In addition to its general appropriation from the State of Texas, some of the revenue Edgewood receives from the state is specifically allocated for programming for students identified as being limited in their proficiency in the English language. During the 1998-99 school year Edgewood received \$2,807 of state aid for each student enrolled in the English as a Second Language program. The school district received an additional 10 percent (\$280.70) for each student also enrolled in the Bilingual Education program.

The amounts received from the state for special education vary according to the nature of the disability. A student may not be considered for financial purposes as both a special education and ESL student. If they are identified as eligible for both programs, they are usually listed as in special education, because the amount received per pupil is generally larger for this program.<sup>14</sup>

Edgewood also offers a variety of programs for students identified as gifted and talented. For example, Edgewood in 1998 replaced one of its neighborhood high schools with a new school, the Edgewood Communications and Fine Arts Academy. Admission is based on the student's talent, teacher recommendations, a student essay, and the student's school attendance and disciplinary record.

Basic state aid to school districts in Texas is based on a per pupil formula that takes into account the property value and tax effort of the school district. As long as this legislation remains in effect, a voucher program that attracts students away from Edgewood public schools results in a decline in total state aid to the district. However, state aid per pupil remains the same.

## **Evaluation Procedures**

In this report, we describe results that document similarities and differences between parents and students who chose to accept a voucher and thereby leave the Edgewood public schools and those who remained in the public schools. The first year data allow us to review a range of characteristics, some of which can be used to describe baseline characteristics of families before they opted to use a voucher or not, some very short term outcomes that result from changing schools, and some that fall someplace between these two categories of information. Examples of baseline characteristics include items that are very slow to change or would be expected to remain constant regardless of a family's voucher status, such as family income, mothers' education, number of parents present in the household, and student test scores. Items that fall within the category of short-term outcomes include parents' satisfaction with their child's school and reports of school safety. Items that fall somewhere between baseline characteristics and short-term outcomes include parents' educational expectations for their children and participation in religious activities. Besides reporting simple differences between the two groups, for

---

<sup>14</sup>Information supplied in phone conversation with evaluation team member by EISD's financial office, July 21, 1999.

some items (for example, parent's satisfaction, the quality of school facilities, school-parent communications, and the amount of time spent on homework), we have conducted statistical analyses that adjust for observed factors that might account for differences between Horizon and Edgewood public-school parents. The adjusted differences on these outcomes indicate the extent to which there are differences between students and families receiving vouchers and those in the public schools with similar observed background characteristics.

In the tables prepared for this report, differences between Horizon (voucher students) and public-school students are reported. In subsequent reports, the evaluation team will provide information on institutional and political changes in Edgewood and the comparison districts that have occurred subsequent to the inauguration of the Horizon program. The evaluation team also plans to estimate the impact of the Horizon program on the Edgewood school district by comparing outcomes in Edgewood to outcomes in three similar school districts not directly affected by the Horizon program or another other voucher program.

To estimate the effect of the Horizon program on the Edgewood school district, the evaluation team obtained information from three distinct groups of families with children between the ages of 8 and 17: 1) those students previously in public school who accepted a Horizon voucher;<sup>15</sup> 2) a sample of families residing in the Edgewood district; and 3) a sample of families in three comparison districts, whose demographic characteristics are similar to those of Edgewood. Samples of families in Edgewood and families in the comparison districts are representative samples selected by using area probability selection procedures; these procedures are described in the Appendix.<sup>16,17</sup>

To facilitate these statistical analyses, indices of key concepts were constructed by bringing together several items bearing on the same topic (parental satisfaction, school-parent communication, and so forth). Index construction procedures are reported in the Appendix; key findings from the regressions are mentioned in the text and presented in Table 2.1 - 2.10. The findings from these regression analyses are generally consistent

---

<sup>15</sup>A few Horizon scholarships were awarded to students already in private school; these students have been excluded from this analysis.

<sup>16</sup>A report that provides comparative information concerning EISD and the comparison districts is in preparation.

<sup>17</sup> The sample design used for this study includes multiple stages of sample selection. These multiple stages of selection introduce cluster effects and make the effective sample size somewhat smaller than the number of families and students in the sample. To better approximate the true precision of the variability in our sample estimates, we have taken this clustering into account when we compute the standard errors of the estimates. Besides sampling error, one must be cautious of other sources of error that can be introduced into the estimates. For example, differential nonresponse by some segments of the population can introduce bias into the estimates. As described in the appendix, we have adjusted for many sources of bias that may have been introduced; the assumptions for these adjustments are set forth in the appendix. As is always the case when analyzing survey data, it is important to consider not only levels of statistical significance for particular findings when interpreting the results but also patterns of findings across items.

with the simple percentage difference tables reported in the main text. Any substantial difference is discussed at the appropriate point in the text.

A household survey was used to identify samples of students in Edgewood and the comparison districts. At the doorstep, interviewers obtained basic demographic information on the household. When families with students between the ages of 8 and 17 were identified, the families were offered a sizeable financial incentive to participate in the study, which involved attending a Saturday morning session at a local private school. The CEO Foundation provided the names, addresses and phone numbers of Horizon students and their families.

Students completed a questionnaire on school experiences and took the Iowa Test of Basic Skills (ITBS) in reading and mathematics.<sup>18</sup> Tests were scored by the publisher of the ITBS. Students' test results are presented as percentiles. The percentiles indicate a student's relative rank in the achievement distribution. A percentile score of 50, for example, shows that a student's achievement was in the middle of the distribution.

Parents who accompanied their child to the testing sessions responded to a written questionnaire that inquired about the school experiences of the child in their family between the ages of 8 and 17 who had a birthday on or most closely after January 1. Information from the household survey was used to weight the responses of participants, thereby making it possible to generalize from the participating families to all families in Edgewood and the comparison districts.

The parent questionnaires were completed and the student tests were taken between November 21, 1998 and March 20, 1999. The median date was January 30, 1999. Consequently, we have information from Horizon and Edgewood public-school students and families approximately one-half way through the beginning of the 1998-99 school year. See the Appendix for a description of data collection and weighting procedures.

Since students required more time to complete their questionnaire and ITBS tests than parents needed to complete their questionnaire, time was available for senior staff to conduct recorded but anonymous focus groups sessions with some parents. Participants in the focus groups were selected randomly from those attending the testing session; however, some parents accompanied by small children could not easily participate and other parents chose not to participate. The parental comments and anecdotes included in this report are taken from transcripts of these focus-group sessions.<sup>19</sup>

### **Participation in the Voucher Program**

Few questions have been debated more intensely than the educational and demographic composition of those likely to take advantage of vouchers. Critics say that

---

<sup>18</sup>The assessment used in this study is Form M of the Iowa Tests of Basic Skills, Copyright c 1996 by The University of Iowa, published by The Riverside Publishing Company, 425 Spring Lake Drive, Itasca, Illinois 60143-2079. All rights reserved.

<sup>19</sup>Parental comments illustrate findings from the surveys but are not in and of themselves a random sample of parental opinion.

vouchers will skim the "cream" off the public schools, attracting the best and brightest students from the more educationally-motivated families. The skimming may take place in two ways: 1) the more motivated parents will make the effort to apply; and 2) private schools will open their doors mainly to the talented. Even if private schools wanted to respond to a broader class of students they may not have the special education and other facilities needed to serve the disadvantaged.

Defenders reply that vouchers are most attractive to the families of low-performing students, who may wish to find an alternative educational environment in which their child may perform better. They say that many private schools, most of whom have religious affiliations, open their doors to students with a wide range of academic abilities and from all social and economic backgrounds.

This issue quickly came to the forefront of public debates over the Horizon program. Shortly after the program was announced, an officer of the Texas Federation of Teachers predicted that the private schools would "cherry pick" desirable students so as to "shorten the honor roll" in public schools.<sup>20</sup> EISD school superintendent, Dolores Munoz, speaking on national television, said that "Right now, I don't have the profile of every child," but she was willing to "guarantee you that at least 80 percent will be the high-achieving students. They will be. The private schools are having the choice of the best students around, because they have a criteria, and not every child is taken into consideration, and their doors are ... not open for every child." In reply, Horizon managing director Robert Aguirre challenged Munoz's claim, observing that Horizon scholarship recipients "are not high-achieving students in an academic sense."<sup>21</sup> Similarly, the superintendent of San Antonio's Catholic schools said that, in order to meet the needs of the new students, his schools have had to add new weekend classes to help some voucher students with reading and math. "We don't bring in the brightest and smartest students," the superintendent said. "We wouldn't have these Saturday programs if that were true."<sup>22</sup>

By comparing voucher students and families with a representative sample of Edgewood public-school students and families, it is now possible to examine the creaming issue by estimating the extent to which the Horizon program, in its initial year, recruited the more advantaged students within the school district. The program thus provides, for the first time, an opportunity to examine the creaming issue in a school district where vouchers have been offered to all students within a school district that come from low-income families.

Conversations with parents in focus groups revealed that at least some saw the voucher program as an opportunity for their more capable children. One savvy parent, a resident of Edgewood, had previously found a way of placing her seventh-grade daughter in a neighboring school district. With the arrival of the voucher program, it was now

---

<sup>20</sup>Kelley Shannon, "Texas Kids to get School Vouchers," Associated Press news release, April 22, 1998.

<sup>21</sup>News Hour Online, A News Hour with Jim Lehrer, "School Vouchers," November 27, 1998.

<sup>22</sup>Laura M. Litvan, "A School Voucher Test Case?" *Investor's Business Daily*, January 21, 1999.

possible to place her in a private school closer to home. "She is an honor student.... she's real good, she's real smart. She talks about going to college, she already picked out a college. She wants to go to Notre Dame." However, this same mother decided to leave her son in an Edgewood public school, because he did not have the same capacities her daughter had. "I don't think that the private schools have a lot of programs—the Edgewood district has a lot more programs for kids that need extra help and after-school care. They have a lot of tutoring where you don't have to pay. [At the private school] you have to pay for tutoring."<sup>23</sup>

But another parent reported making the move not because they had a high-achiever but because her child had been doing poorly in public school:

The kids are gonna' be acting silly, jumping around in class. You know, teachers should be in charge, not the children. And those are children. And I had a problem with that because these kids did not learn. She didn't bring me no homework, I didn't see nothing. When I changed her back here [the private school]..., she was not used to the discipline.... [Now] I see a lot of changes in my daughter.... She's outspoken, she likes to read, she likes to talk...she's more caring. That's what I see in my daughter.<sup>24</sup>

And still another father, with children in both Edgewood public schools and private schools, found both public and private schools working well for her children. His seventh grader likes the private school:

He loves the discipline there, the camaraderie; it's an all-boys school. So it's like you don't have anything really to get in the way of your studies—you just hit it hard.... And as far as my youngest ones, they want to stay in their public school until at least after sixth grade, then we'll put them in a private school. [Their public school] is very good and they have gifted and talented programs there also which both of my kids are in so that just makes it a lot easier.... I wouldn't want to put any strain on my kids by moving them.<sup>25</sup>

Examined more systematically, it becomes clear that a wide variety of families took advantage of the voucher opportunity in Edgewood. The Horizon students and families resemble public-school students and families in some respects, but differ in others. As can be seen in Tables 1.2-1.4, the Horizon students tested somewhat better than Edgewood public-school students in reading but scored about the same in math. Income levels for the two groups of families were similar, as were ethnic compositions and the percentages of homes in which both mother and father were present. However, Horizon students were better off in certain respects. They tended to come from families in which mothers had a better education, were more likely to be employed, were less likely to be dependent on government assistance, and were more engaged in community affairs. But these differences were moderate, not large.

---

<sup>23</sup>Focus group, Horizon parents, San Antonio, March 17, 1999.

<sup>24</sup>Focus group, Horizon parents, San Antonio, March 17, 1999.

<sup>25</sup>Focus group, Horizon parents, San Antonio, March 11, 1999

## Test Scores

Test-score performances of the Horizon and Edgewood public-school students differed only modestly (Table 1.2). On the math segment of the Iowa Test of Basic Skills (ITBS), Horizon students, on average, scored at the 37<sup>th</sup> percentile, while Edgewood public-school students scored at the 34<sup>th</sup> percentile. The difference is not statistically significant. The reading scores of the Horizon students were seven percentile points higher than the Edgewood public school students (35<sup>th</sup> percentile as compared to the 28<sup>th</sup> percentile). This difference is statistically significant.<sup>26</sup>

When considered in the context of the debate over creaming, the test-score results are thus ambiguous. On the one side, the voucher students performed somewhat higher on the reading exam than did students remaining in public schools, suggesting that some selectivity is occurring in this area. On the other side, with respect to math scores, one finds no evidence of any "cherry picking" at all.

These results do not differ substantially from those obtained by researchers in the Edgewood school district, who examined the performances of all Edgewood public-school students in grades three through eight on the math and reading segments of the ITBS, as administered by the school district in the Fall of 1997. The researchers compared the scores of students who were to remain in public school with those who would accept a Horizon scholarship the following summer (of 1998). As mentioned above, the district-administered tests were given more than a year earlier than the tests conducted for this evaluation. Also, the testing conditions were different. The district-administered tests were conducted in the students' own classrooms, whereas the tests for this evaluation were given on a Saturday morning in a school other than the child's own.

But despite differences in time and context, results were much the same: Few statistically significant differences were identified between voucher students and those who remained behind in the public schools. An Edgewood school district memorandum summarizing research findings based on the district-administered tests reads as follows:

---

<sup>26</sup>While we present the test score results as national percentile ranks, we have conducted parallel analyses with the Normal Curve Equivalent scores (NCE's). NCE's range from 1 to 99, have a mean of 50, and take into account the nonlinearity in the relationship between learning and students' relative position in the test score distribution - NCE's take into account, for example, that a shift from the 10<sup>th</sup> to the 20<sup>th</sup> percentile represents a different amount of learning than a shift from the 30<sup>th</sup> to the 40<sup>th</sup> percentile. The results for the analyses with NCE's were quite similar to those obtained with percentiles. On the math test, voucher students had an NCE of 40 and public-school students had an average score of 38. For the reading test, voucher students had an average NCE of 39 and the public-school students had a mean of 35. Additional analyses of the test score data were also undertaken. Because some of the families invited to the sessions did not attend, we have attempted to improve upon our data by supplementing it with extant data, when available. For the test score data, we obtained a file from the CEO Foundation that included test scores for many, but not all of the Horizon children; these tests were administered at about the same time as our tests. We have used the CEO test scores to help fill in for missing test scores among our Horizon students who did not show up for testing. In about 89 percent of the cases where we had missing values, we were able to fill in a test score. In doing so, we found results quite similar to those obtained without the imputed test scores: for reading we found a difference of 3.5 points (NCE's) between voucher students and public-school students and a difference of less than one point for math achievement.

With respect to the ITBS, a norm-referenced test, few statistically significant differences are to be found between students identified by CEO as scholarship recipients and those not so identified. The sole exceptions are at the 3rd grade in Total Reading and Reading Comprehension, where CEO-identified [Horizon] students out-performed non-identified students, at the 6th grade in Total Mathematics, and at the 5th grade, where CEO-identified students outperformed their counterparts in each of the four areas of interest: Reading Comprehension, Total Reading, Total Language, and Total mathematics. All other tests, at all other grade levels showed no statistically significant differences favoring the CEO-identified students. Thus, seven of 32 subtests of interests (21.9%) showed differences attributable to CEO [Horizon] status.<sup>27</sup>

In sum, in twenty-five of thirty-two comparisons performed by researchers in Edgewood, no statistically significant differences were identified between the performances of students who would accept Horizon scholarships and other Edgewood public-school students.

### **Special Educational Programs**

Horizon students were also no more likely to have participated in programs Edgewood schools operated for gifted students than were the students who remained in Edgewood public schools. According to parental reports, only 23 percent of Horizon students had been in gifted programs, as compared to 29 percent of Edgewood public-school students (Table 1.2).

Although Horizon students were no more likely to have been in programs for gifted students, they were less likely to have participated in special education programs for students with learning disabilities. Eight percent of Horizon parents said their child had learning disabilities, as compared to 16 percent of public-school parents in Edgewood, a statistically significant difference.

Parents of Horizon students were more likely than public-school parents to expect their child to obtain a college, graduate-school, or professional degree—71 as compared to 50 percent, respectively. We do not know whether parents had these expectations for their child before the voucher program was announced or whether parental expectations had risen as a result of the fact that the student had obtained a voucher. One Horizon mother in fact reported just such a transformation in her child's expectations: "To begin with he didn't want to go to a private school, he didn't want to wear the geeky uniforms. He was not gonna be one of them, you know," she said. But then he was at the private school "two months and decided that he wanted to go to Holy Cross [a private Jr. High School in Edgewood]—he's going to be in seventh grade next year. And he wants to go to the University of Michigan [after that].... And I'm thinking to myself, he was not

---

<sup>27</sup>Edgewood Public School District, "Initial Screening of the CEO Data File. doc.," February 3, 1999, 8:37 A. M.

thinking this last year. Last year, it was like, you know, I have to play around, I have to be this person that I am not—so that the other kids won't pick on me.”<sup>28</sup>

### **Demographic characteristics**

Just as some critics expect the best and brightest students to be "creamed" from the public schools, they also think private schools will pick and choose among parents. According to a *Houston Chronicle* editorial, "a large student exodus could shift support of the most able parents away from neighborhood schools."<sup>29</sup> Such a concern is warranted if an anecdote told by Edgewood's school board president accurately portrays the way in which the Horizon program worked. The school board president claimed he had received a call from "a mother... for help because their application to the [Horizon program] had been denied.... I asked why she was denied. The mother said she was a single mom, had two jobs and was told she was unacceptable because she could not dedicate time for extracurricular requirements, like helping out with homework and fundraising."<sup>30</sup>

If these problems were widespread, then the demographic characteristics these two groups of families should differ markedly. As shown in Table 1.3, however, in many ways Horizon families and public-school families resemble one another. The average income levels for the two groups of families did not differ significantly. Horizon incomes averaged \$15,990, as compared to \$15,939 for public-school families. Nor were there any differences in family dependency on welfare or social security income. Both groups of families were almost equally likely to report that their children were living with both the mother and father—45 percent for the Horizon families, 43 percent for the public-school families.<sup>31</sup> The percentage of mothers living in the same residence for at least two years, moreover, was essentially the same for both groups. The two groups also reported similar rates of moving from one place to another in order that their "kids can attend a better school"—15 percent for the Horizon parents, 16 percent for the public-school parents.

When significant differences between the two groups were reported, Horizon parents were generally the more advantaged, though the differences were usually moderate in size. For example, mothers of Horizon students reported completing, on average, 12 years of education, while the education of the mother of the public-school students averaged only 11 years. Mothers of Horizon students were also more likely to hold a full-time job outside the home. Fifty percent of the Horizon mothers reported full-time work, while only 37 percent of the public-school mothers gave a similar report.

---

<sup>28</sup>Focus group session, Horizon parents, San Antonio, March 20, 1999.

<sup>29</sup>"Private Effort: No Public Funds in Private Voucher program, so Give it a Go," *Houston Chronicle*, April 27, 1998.

<sup>30</sup>Manuel Garza, "Vouchers Unfair to Children, Education," *San Antonio News-Express*, September 29, 1998.

<sup>31</sup>Questions about mothers and fathers also referred to male and female guardians, so we do not know whether the parent in question was the biological parent.

Similarly, Horizon parents were significantly less likely to report dependence on Medicaid, food stamps, and supplemental security income (Table 1.3).

These findings are generally consistent with those assembled by the Edgewood school district. According to the district's research department, 17 percent of Horizon students had limited English proficiency, as compared to 22 percent of all Edgewood students.<sup>32</sup> The difference in the percentage participating in bilingual or English as a Second Language program was only 6 percentage points (14 percent for Horizon, 20 percent for Edgewood students).<sup>33</sup> The percentage said to be economically disadvantaged was 77 percent for the Horizon students, as compared to 90 percent for the district as a whole, a 13 percentage point difference.<sup>34</sup>

In sum, both the data collected by this evaluation and Edgewood's own data indicate that Horizon students come from a wide variety of families. They resemble Edgewood public school students in a number of respects but in other respects were somewhat less disadvantaged than the families who remained in the Edgewood public schools. In this respect the Horizon program resembles such government programs as Upward Bound, Pell Grants, and the Earned Income Tax Credit program—all of which tend to serve the working poor more than the most disadvantaged.

### **Engagement in community life**

Differences between the two groups in the level of community engagement were substantial (see Table 1.4). Horizon parents were more likely to report that they felt part of their neighborhood and talked with others about community politics or local community affairs. About 75 percent of the Horizon parents said they “feel a part of the neighborhood, ...” and 65 percent of the Edgewood parents said the same. Over 70 percent of the Horizon parents reported such conversations about local affairs, as compared to less than 50 percent of the Edgewood public-school parents. Levels of engagement in the religious life of the community sharply differentiated Horizon families from public-school families. Two-thirds of voucher mothers attended religious services at least once a week, as compared to 40 percent of public-school mothers. The religious

---

<sup>32</sup>Edgewood Independent School District, "Initial Screening of the CEO Data File," February 3, 1999.

<sup>33</sup>Curiously, parents themselves report much lower levels involvement in bilingual programs. Parents were asked whether their child needed "special assistance in learning English because it is not his or her first language." Only one percent of Horizon parents and 7 percent of Edgewood public-school parents reported said their child needed this assistance. It is not clear whether parents under-report student participation rates in these programs or EISD over-reports them. In 1998-99 Edgewood received \$3,076 for every student enrolled in a bilingual program and \$2,807 for every student enrolled in an English-as-a-second-language program.

<sup>34</sup>The percent of economically disadvantaged students is calculated as the sum of the students coded as eligible for free or reduced-price lunches or eligible for other public assistance, divided by the total number of students. [Author's note: The percentage of Horizon students who were economically disadvantaged is at odds with the stated criteria for participation in the program since all students who receive a scholarship should qualify for the federal free or reduced price lunch program—we would expect that 100 percent of the Horizon students would be economically disadvantaged and not 77 percent as found by the EISD researchers.]

affiliation of Horizon families was less likely to be Catholic and more likely to be Pentecostal.

It is not known whether this difference in religious activity preceded participation in the voucher program or is a concomitant of program participation. Conceivably, interest and engagement could have been provoked by the Horizon program itself, even as early as a half year into its first year. Also, it is possible that religious schools encouraged parents and students to participate in church activities. Alternatively, Horizon parents may have previously been among the more engaged. After all, the Horizon program was announced in April, 1998; to sign up and enroll one's student by the following August would have required some connection to the community. And because many private schools in Edgewood have a religious affiliation, church-goers may have learned about the program sooner and taken advantage of it.

### Selecting a School

Another element of the school-choice debate concerns the importance of educational considerations in the selection of the school. Critics argue that low-income families are more concerned about location, sports programs, or religious instruction than about academic quality per se. Al Kaufman of the Mexican American Legal Defense Fund claimed that the Horizon program was established to show that "hundreds of kids would leave a public school . . . [to] go get a good religious education at state expense."<sup>35</sup> Similarly, an American Federation of Teachers' report on the Cleveland voucher program suggests that parents sought scholarships, not because of "failing public schools," but "for religious reasons or because they already had a sibling attending the same school."<sup>36</sup> Public intellectual Nicholas Lemann makes the point most provocatively: When a major impediment to the future success of poor children is "their parents' impoverishment, poor education, lax discipline, and scant interest in education," he asks, isn't it absurd to think that these same parents will become "tough, savvy demanding education consumers" once they have the right to choose?<sup>37</sup> Even if low-income parents have good educational reasons for their choice of school, many may not be able to get access to the school of their choice, because private schools may pick and choose among the applicants.

Disputing these contentions, supporters of school choice claim that low-income parents, like other parents, place the highest priority on the educational quality of the school and that private schools, most of which have religious affiliations, are open to all students.

Factors associated with educational quality were the most often expressed type of reason given by Horizon parents for their choice of school. As can be seen in Table 1.5,

---

<sup>35</sup>News Hour Online, A News Hour with Jim Lehrer, "School Vouchers," November 27, 1998.

<sup>36</sup>Dan Murphy, F. Howard Nelson and Bella Rosenberg, "The Cleveland Voucher Program: Who Chooses? Who Gets Chosen? Who Pays?" (New York: American Federation of Teachers, 1997), p. 10.

<sup>37</sup>Nicholas Lemann, "A False Panacea," *Atlantic* (January 1991), p. 104, as quoted in Abigail Thernstrom, *School Choice in Massachusetts* (Boston: Pioneer Institute for Public Policy Research, 1991), p. 40.

approximately four-fifths said that academic quality, teacher quality, discipline, and what was taught in class were all "very important" reasons "your child is attending this school." Although public-school parents were less likely to give one of these as reasons, they also mentioned these reasons more frequently than any others. However, two-fifths of the public-school parents also said that "very important" reasons their "child is attending this school" were that "this school was the only choice available" and that it was the "neighborhood public school."

Safety also loomed large in parental thinking. Approximately 80 percent of the Horizon parents, and 60 percent of the public-school parents, said this was an important reason for a choice of school. Convenience of location was also a consideration, mentioned as very important by about half of both groups of parents.

Not surprisingly, the religious affiliation of the school was a much more important consideration for Horizon parents than for public-school parents. About two-thirds of the Horizon parents said it was very important, as compared to about an eighth of the public-school parents.<sup>38</sup> Whether or not the child's friends attended the school was identified as a very important factor by over one-fifth of public-school parents, but by less than 10 percent of Horizon parents. The quality of the school's sports facilities was mentioned as very important by less than 15 percent of both groups.

After giving the parents an opportunity to identify the importance of all these and other reasons, parents were then asked to single out from this same list the single most important reason for choosing the child's school. As is also shown in Table 1.5, almost two thirds of the public-school parents either said it was the only choice available or that it was the neighborhood public school. Only 6 percent of Horizon parents gave one or the other of these responses. Instead, Horizon parents emphasized academic quality, what is taught in class, or teacher quality: approximately 60 percent of Horizon parents mentioned one or another of these three factors as the single most important consideration—as compared to 27 percent of the public-school parents. The only other factor mentioned as most important by a substantial percentage of either group of parents was religious affiliation, mentioned by 15 of the Horizon parents (but none of the public-school parents).

Some scholars have asked: Do parents have a real choice of school under a voucher program, or are they left with what they can find?<sup>39</sup> The question is well worth posing, especially since some experiences in Edgewood suggest that vouchers do not guarantee

---

<sup>38</sup>These survey findings are buttressed by the actual choices parents made about where to send their children to school. Ninety percent of Catholic parents sent their children to Catholic schools; 54 percent of Baptist parents sent their children to Baptist schools; and 78 percent of other Protestants sent their children to Lutheran or Presbyterian schools. Religious affiliation, it seems, was an important sorting mechanism in the Edgewood Independent School District.

<sup>39</sup>Helen F. Ladd and Ted Fiske, "Experience with Self-Governing Schools, Parental Choice, and Market Competition in New Zealand" Paper presented before conference on Midwest Perspectives on School Governance and Funding: Choice and Competition, Federal Reserve Bank of Chicago, April 26-27, 1999.

that all parents will get a school of choice. One Horizon father reported a less than satisfactory outcome to his search for an appropriate school:

*Horizon Father:* I found out about the program a little too late. By the time I was trying to enroll them into private school, a lot of the schools were filled.

*Group leader:* I see. So this wasn't your first choice.

*Father:* It wasn't my first choice.

*Group leader:* Do you think you might switch them to a different private school next year?

*Father:* I probably will, I'm starting to look right now....

*Group leader:* Are you still happier with your kid there than in the public school?

*Father:* Not really.<sup>40</sup>

Another parent turned down the scholarship after she found out it did not cover significant costs:

*Mother:* I had approximately two weeks before the first day of school and I needed to come up with \$125 for each child for registration. I asked them if it was going to be covered through the program and it wasn't. So I couldn't afford to—I'm a single parent and I couldn't afford to make that \$250 payment and get the uniforms and get everything situated within two weeks....

*Group leader:* Well, would you think of doing it next year by any chance?

*Mother:* Yes, we're already going to start looking for a school for them.<sup>41</sup>

Although these accounts suggest some parents were dissatisfied, they were atypical of most Horizon parents. When parents were asked whether their child was at a school the family preferred, 92 percent of the Horizon parents said it was, as compared to 75 percent of the Edgewood public-school parents (Table 1.6). When asked why the child was not attending a preferred school, parents were given a chance to mark as many reasons listed as they felt applied. (As a result, the percentages for reasons given presented in Table 1.6 should be examined separately and not be added together). The response most frequently mentioned by public-school parents was that they did not live in the neighborhood—17 percent of Edgewood parents gave this response, as compared to 2 percent of the Horizon parents. The second most frequently cited reason given by Edgewood parents—noted by 8 percent of them—was cost. Presumably these parents wished to attend a private school, but they either did not realize that the Horizon scholarship would cover most costs or else they felt they still could not afford the remaining costs. The only other factor mentioned by as much as 3 percent of the Edgewood parents was transportation. The reasons given by Horizon parents were quite scattered—they did not live in the appropriate neighborhood, space was not available, they could not pay the cost, and so forth—but not any of these factors was mentioned by as much as 3 percent of this group of parents. All in all, we found little evidence that voucher families were having difficulty finding a school they thought was suitable for their children.

---

<sup>40</sup>Focus group session, Horizon parents, March 20, 1999.

<sup>41</sup>Focus group session, Horizon parents not using voucher, San Antonio, February 20, 1999.

## School Facilities

The image of private education held by some is of an expensive day school catering to well-to-do families or an exclusive boarding school attended by college-bound "preppies." The reality is quite different. Most private schools have a religious affiliation, modest tuition, and limited facilities. Nationwide, the average private school expenditures per pupil in 1993-94 were estimated at \$3,116, considerably less than public school expenditure per pupil, which was \$6,653.<sup>42</sup>

In the low-income neighborhoods of large central cities, private schools are particularly lean. As mentioned previously, the average private-school tuition paid by students participating in the Horizon program was \$1,982; expenditures are probably somewhat larger than this, the difference coming from student fees and charitable contributions. But the tuition itself is less than a third of the per pupil expenditure of Edgewood public schools, which in 1997-98 amounted to \$6,060. As the Edgewood Independent School District Board President put it, "public schools have better teachers, facilities, and better support systems."<sup>43</sup>

Although Edgewood seems to have more financial resources, this does not appear to result in smaller classes in the public schools. As can be seen in Table 1.7, parents report the average class size was approximately the same for the two groups—21 for Horizon students, 20 for Edgewood students. These class sizes are slightly less than those reported for the nation as a whole for 1993-94; according to a Department of Education survey, private-school class sizes nationwide averaged 23 students, as compared to 25 for public schools.<sup>44</sup>

Horizon and public-school parents do report considerable differences in the size of the school their child attends. Edgewood parents report, on average, that their child attends a school with 434 other children; Horizon parents report about a third fewer classmates--only 285.

Given the difference in expenditures by public and private schools, it is to be expected that Horizon parents would report less elaborate facilities and fewer special programs and services than Edgewood parents. And, as can be seen in Table 1.7, Edgewood public-school parents were in fact more likely to report that their child attended a school that had a computer lab, a library, a gym, and a nurse's office. They were much more likely to report availability of special programs for non-English speakers—two-thirds of the public-school parents said they were available, as compared to about a fifth of the Horizon parents. Public school parents were also more likely to say

---

<sup>42</sup>Andrew J. Coulson, *Market Education: The Unknown History* (New Brunswick: Social Philosophy and Policy Center and Transaction Publishers, 1999), p. 277.

<sup>43</sup>Manuel Garza, "Vouchers Unfair to Children, Education," *San Antonio News-Express*, September 29, 1998.

<sup>44</sup>Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics, *Schools and Staffing in the United States: a Statistical Profile* (Washington, D. C. GPO, 1996), pp. 78-79.

that programs were available for students with learning problems as well as for advanced learners. According to parents, public-school students were more likely to have art and music programs, more likely to have access to counselors and individual tutors. The only ways in which the schools resembled one another, according to parents, were in the presence of a cafeteria and the availability of an after-school program.

Looking at the facilities and programming available to public-school students, as compared to Horizon students, in the aggregate and after adjustments for family background characteristics, it appears that 83 percent of the public-school parents reported more extensive facilities and programming than the average Horizon parent; the effect size is 0.96 standard deviations (Table 2.1).

### **Race and Ethnic Relationships**

Racial segregation and inter-racial conflict remain one of the country's most serious social problems. Nearly a half century after the Supreme Court declared segregated schools unconstitutional, many minority students are still attending predominantly minority schools. Nationwide, few gains, if any, have been achieved since the early 1970s. In 1972-73, for example, 64 percent of African Americans were attending predominantly minority schools; in 1996-97 the percentage had increased to 69 percent. For Latinos, the increase was much steeper—from 57 to 75 percent.<sup>45</sup>

Critics of school vouchers have expressed concern that vouchers and other school-choice programs will only aggravate the degree of segregation that currently exists. Says commentator Michael Kelly, "Public money is shared money, and it is to be used for the furtherance of shared values, in the interests of e pluribus unum. Charter schools and their like . . . take from the pluribus to destroy the unum."<sup>46</sup> Princeton theorist Amy Gutmann puts it this way: "public, not private, schooling is . . . the primary means by which citizens can morally educate [sic] future citizens."<sup>47</sup>

Edgewood does not provide a clear test of these propositions, because the school district itself is over 90 percent Latino. Nonetheless, there is little evidence that the voucher program is having a significant impact, either negative or positive, on race relationships. As can be seen in Table 1.8, participants in the voucher program had roughly the same ethnic composition as did the Edgewood public schools. Also, parents in the two types of schools had similar views as to whether racial conflict was a "very serious" problem at the school. The percentage of students who claimed to eat lunch together with students of another ethnic background was also similar, as was the percentage of students who said they did not have friends of a different ethnicity. Horizon parents were more likely to say they were "very satisfied" with the ethnic composition of their school.

---

<sup>45</sup>A predominantly minority school is any school with 50 percent or more minority students. Gary Orfield and John T. Yun, "Resegregation in American Schools," The Civil Rights Project, School of Education, Harvard University, Cambridge MA, June 1999.

<sup>46</sup> Michael Kelly, "Dangerous Minds," *New Republic*, December 30, 1996.

<sup>47</sup> Amy Gutmann, Democratic Education (Princeton: Princeton University Press, 1987), p. 70.

## School Climate

The shootings in Littleton, Colorado in the spring of 1999 focused public attention on the potential impact of violence on a student's educational experiences. According to a Metropolitan Life Survey, the percentages of teachers reporting being a victim of a violent act in or near a school increased from 11 percent to 16 percent between 1993 and 1998.<sup>48</sup> During the 1996-97 school year, the number of physical attacks that took place in schools numbered close to 200,000. Over 100,000 theft and larceny incidents happened, over 10,000 attacks involving a weapon took place, and over 4,000 rapes or incidents of sexual battery occurred.

A survey undertaken by Educational Testing Service found that eighth-grade students encounter more such problems in public than in private schools. Fourteen percent of public-school students, but only 2 to 3 percent of private-school students, say physical conflicts are a serious or moderate problem. Four percent of public-school students report racial or cultural conflicts are a serious or moderate problem and 5 percent say drug use is, while less than one percent of private school students indicate they are. Nine percent of public-school students say they feel unsafe in school, but only 4 percent of private-school students give the same response.<sup>49</sup>

Littleton was a middle-class suburb. What about inner-city schools that serve ethnic minorities? Do the overall differences in school climate observed nationally obtain within urban areas as well? According to parents in Edgewood, they do. Both Horizon and Edgewood public-school parents were asked whether or not the following problems were serious at their child's school: "Kids destroying property? Kids being late for school? Kids missing classes? Fighting? Cheating? Racial conflict? Guns or other dangerous weapons?" In every instance but two, the Horizon parents reported fewer such problems.

As Table 1.9 shows, half the Edgewood public-school parents reported "fighting" as a "very serious" problem at their child's school; only a little over a quarter of the Horizon parents said it was. Nearly two-fifths of the Edgewood parents said "guns or other dangerous weapons" were a "very serious" problem; just a quarter of the Horizon parents gave the same report. Over one-third of the Edgewood parents reported that "kids missing classes" was a "very serious problem;" only about a quarter of the Horizon parents said so. The pattern was similar for "kids being late for school."

Differences in the overall level of disruption at school reported by Horizon and Edgewood public-school parents were observed even after family background characteristics were taken into account. When parents with similar characteristics are

---

<sup>48</sup>Adrienne D. Coles, "More Teachers and Students Say Violence in Schools is Declining," *Education Week*, June 2, 1999, p. 8.

<sup>49</sup>Information in the preceding two paragraphs contained in Paul E. Barton, Richard J. Coley and Harold Wenglinsky, *Order in the Classroom: Violence, Discipline and Student Achievement*, Policy Information Center, Research Division, Educational Testing Service, Princeton, New Jersey, 1998, pp.21, 23, 25, 27, and 29.

compared, 68 percent of Edgewood parents reported higher levels of disruption than the average Horizon parent; this constitutes an effect size of 0.48 standard deviations (Table 2.2).

Focus group reports were consistent with these findings. One public-school parent was concerned that his child was not doing well in third grade because he was too young for his grade. "A student was picking on him.... He's like a bully in the school... I don't know if that's the problem, or maybe the teacher—but now he's getting the attitude that he doesn't want to go to school."<sup>50</sup> Another compared schools now to the time when she was in school: "The pressures are so different now than they were then. Then the pressure was to smoke pot. Now the pressure is to do other stuff, carry guns or whatever." Another mother agreed: "Well, basically, now nine-year-olds are doing drugs lately, a lot at school. That's what my little girls told me. They would take her to [the] side and tell her that."<sup>51</sup>

Not all Edgewood parents saw safety as a extremely serious problem, however. As one parent explained, "these cops that ride the bikes around the school, they keep everything more under control.... They can speak through these little things--walkie-talkies. Before a fight starts they're there, you know. They have everything under control. I'm not afraid for that anymore, you know, like years back."<sup>52</sup>

Several Horizon parents said that safety was, in fact, an important reason for choosing to attend a private school. As one parent explained: "Safety is another factor for me and when I'd go there I would pray for my daughter that everything would go well. Here I don't have to worry about that." Asked by the focus group leader what she meant by safety, she replied, "Safety means like fighting, drugs, maybe skipping school, that kind of stuff that I see."<sup>53</sup>

Student responses were consistent with parental reports of disruption. When asked if they agreed with the statement, "other students often disrupt class," three-fourths of the Edgewood students responded affirmatively, as opposed to just 61 percent of the Horizon students (Table 1.10). When asked whether "students who misbehave often get away with it," over half the Edgewood students agreed, versus only about a quarter of the Horizon students. Nearly two thirds of Edgewood students, as compared to only about a quarter of Horizon students, claimed that "fights often occur between students." Thirty percent of the Edgewood students said there was a lot of cheating at their school, but less than 20 percent of the Horizon students made the same observation.

Differences in levels of school disruption reported by Horizon and Edgewood public-school students remain apparent after adjustments are made for the student's background characteristics. Taking into account these characteristics, 76 percent of Horizon students

---

<sup>50</sup>Focus group session, public-school parents, San Antonio, March 20, 1999.

<sup>51</sup>Focus group session, public-school parents, San Antonio, March 20, 1999.

<sup>52</sup>Focus group session, Horizon parents, San Antonio, March 17, 1999.

<sup>53</sup>Focus group session, Horizon parents, San Antonio, March 17, 1999.

reported lower levels of disruption than their counterparts in Edgewood's public schools; this translates into an effect size of 0.72 standard deviations (Table 2.3).

## School Rules

Horizon and Edgewood public-school students used somewhat different tools to maintain order. Public schools are more likely to require hall passes—for 78 percent of the public school students said they were necessary, as compared to 58 percent of the Horizon students. But Horizon and Edgewood public-school parents were equally likely to report that visitors had to sign in at the main office when arriving at the school.

If public-school students more often must get a hall pass, Horizon students more often must wear a uniform. This difference between the sectors was larger than for any other single factor observed in the study—95 percent of Horizon parents reported uniform wearing; only 19 percent of the public-school parents did (see Table 1.11).

As one might expect, school uniforms are a topic about which parents had clear opinions. In focus group sessions, many Horizon parents expressed enthusiasm for the requirement that students wear uniforms. As one Horizon mother said, "Since they are all in uniform, a child cannot criticize the other. What do you say? You're wearing the same thing I'm wearing."<sup>54</sup> Said another: "As far as having pressure that you're wearing clothes from such-and-such store—one's wearing clothes from K-Mart, the other is wearing clothes from JC Penney—that's the pressure they were getting [in public school].... Over here [at the private school] they don't get that. Everybody wears the same dress code."<sup>55</sup> Another Horizon mother said her children resented the uniform less once they heard the public schools were going to be doing the same thing: "At first the kids were like, oh, wow, a uniform... but then they found out that the school that they [had been] going to [was] turn[ing] to uniforms anyway, and now I think they all like it, they're all used to it."<sup>56</sup> Reacting to this possible change in EISD policy, one public-school parent said that "my little boy has a problem with [that], because he doesn't want to wear uniforms. So now I think it's up to us if we make him or not, if we wanted to use uniforms."<sup>57</sup>

---

<sup>54</sup>Focus group session, Horizon parents, March 20, 1999.

<sup>55</sup>Focus group session, Horizon parents, San Antonio, March 20, 1999,

<sup>56</sup>Focus group session, Horizon parents, San Antonio, March 11, 1999.

<sup>57</sup>Focus group session, public-school parents, San Antonio, March 20, 1999.

## Students, School Life, and Teachers

Horizon and public-school students reacted in similar ways to questions about many aspects of their school, but in some key respects they reported important differences. Apart from the potential for disruption discussed above, relationships among peers are quite similar in the two types of schools. However, some of the relationships with teachers differ.

The two groups of students seemed to "like" their school about equally well (see Table 1.12). Students gave their school a similar grade—approximately three-fourths of both groups give their school an "A" or a "B." About the same percentages of both groups said that most students in their school were proud to attend it. Students from the two types of schools were more or less equally likely to say they like school "a lot" or at least "OK." The two groups of students did not differ significantly in their perceptions of the strictness of school rules nor school safety.

Reports about teachers were more mixed (Table 1.12). To some questions, the two groups of students said equally positive things about their teachers. They were about as likely to say that teachers listened to "what I have to say," that teachers were fair, and that teachers were interested in students. But to other questions, Horizon students gave more positive responses. For example, when asked if students got along well with teachers, over two-thirds of the Horizon students said they did, but just 52 percent of the Edgewood students agreed this was the case. Nineteen percent of the Edgewood students felt "put down" by their teachers, as compared to 11 percent of the Horizon students. Sixteen percent of the Edgewood students did not think the teaching was good, as compared to 8 percent of the Horizon students.

In focus-group sessions, some Edgewood public-school parents underlined the concerns expressed by public-school students: "I think they need to weed out those teachers that are there just because it is a nice paycheck," said one. Added another, "that's true, too. That's what I said. They don't care."<sup>58</sup>

## Homework

Previous studies have found that students who receive vouchers spend more time on homework, at least according to parental reports.<sup>59</sup> Reports from Edgewood are consistent with these earlier findings. Table 1.13 shows that half the Horizon parents claim that their child is studying "about one to two hours" or more a day, as compared to roughly 15 percent of the public school parents. Focus group reports reinforce and elaborate this finding. One parent explained her decision to apply for a voucher this way: "No homework, no homework. There [at public school], it was always like, she would do

---

<sup>58</sup>Focus group session, public school parents, San Antonio, March 20, 1999.

<sup>59</sup>Peterson, Myers, Howell, and Mayer, 1998; Peterson, Greene, Howell and McCready, 1998; Greene, Howell, and Peterson, 1998.

the same work every time, every week it was the same work.... [Now, after changing to the new private school] our thing is that as soon as we get home from school, everybody is to sit around a table and do the homework. There's no watching TV, there's nothing until the homework is done." Another Horizon parent gave much the same report: "Maybe once or twice a week at the most—that's when they would actually have homework in the public schools. When they got to the private school, within a week after they started.... they had homework just about every day."<sup>60</sup>

Horizon parents also report spending more of their own time helping their child with homework. Nearly two-fifths of the public-school parents in Edgewood said they had not helped their child with homework during the past week, as compared to less than a fifth of the Horizon parents. Half the public-school parents said they had not helped their child with reading or math that was not homework, as compared to around a third of the Horizon parents.

Differences between Horizon and public-school parents remained even after family background characteristics were taken into account. Controlling for various demographics, Horizon students still completed 24 more minutes of homework per school night than Edgewood public-school students; the effect size is 0.41 standard deviations (Table 2.4).

Student reports are consistent with those given by parents. Over two-thirds of the Horizon students claimed they "do all of my homework," as compared to only about 55 percent of the public-school students (Table 1.13).

### **Parental Involvement and Parent-School Communications**

Many people think that effective learning requires close communication between home and school. Supporters of school choice claim that when parents select a school, the family becomes more engaged in their child's education. Working together, schools and parents create a more effective educational environment for their children.<sup>61</sup> But choice critics argue that any observed differences in parental engagement with private schools are due to the type of family who chooses private schools in the first place.

According to parent reports, vouchers in New York City enhanced communications between home and school.<sup>62</sup> Patterns in Edgewood are less clear. In some ways, Horizon parents are more engaged; in other ways, no clear differences are evident, once background characteristics are taken into account. In this section, we report first the simple differences in parental involvement between Horizon and Edgewood public-school families, and then the results when three indices of parental involvement are regressed on voucher status and a variety of background characteristics.

---

<sup>60</sup>Focus group, Horizon parents, San Antonio, March 11, 1999.

<sup>61</sup>John Brandl, *Money and Good Intentions Are Not Enough* (Washington, D. C.: Brookings, 1998).

<sup>62</sup>Peterson, et al., 1998.

As is shown in Table 1.14, Horizon parents were much more likely than Edgewood public-school parents to say they had attended school activities during the past month—60 percent to 38 percent for the two groups respectively. Horizon parents were also much more likely than public-school parents to say they had attended a parent-teacher conference at some point during the school year. While more than a third of the public-school parents said they had not attended such a conference, less than a fifth of the Horizon parents gave this report. In the words of a Horizon parent: "They [school officials] contact the parents quick. If you don't do the homework, they call; they call over there."<sup>63</sup>

Horizon parents were also more likely to say they had volunteered in the child's school. Ninety percent of the public-school parents had not volunteered in the past month; only 61 percent of the Horizon parents gave this response. Parents were also asked if, during the past week, they had talked with someone in their child's school about raising money for the school or volunteering to work in the school. Horizon parents reported higher participation rates for both activities. They also were more likely to have discussed their child's accomplishments with someone from the school. On the other hand, Horizon parents were less likely than the Edgewood public-school parents to report talking with someone at the school about their child's behavior or attendance.

In some respects, the two groups did not differ. Similar percentages of both groups of parents reported being a member of the PTA. About half of both groups said they had not in the past week spoken to someone at the school about their child's schoolwork.

Roughly the same patterns emerge when examining parents' involvement with their child's education (Table 1.15). Horizon parents were more likely to help their child with homework and other reading/math lessons. They were also more likely to attend school activities, work on school projects and attend religious services with their child than were Edgewood parents. Roughly equal percentages of both groups claimed to attend family social gatherings and visit the library with their child.

The greater involvement of Horizon families in school affairs could well be due to the more advantaged background of these families. A focus-group conversation indicates how communications between home and school can be a two-way matter, a difficulty that can stem as much from the parent as the school side. An Edgewood public-school mother, discussing a problem her child was having, admitted that she had not shown much initiative herself:

*EISD Mother:* Right now, she's a little behind in her grades....

*Group leader:* And then they let you know, do they have a conference with you?

*Mother:* No they don't. The only way I know is that when I get her progress report or her report card....

*Group leader:* So have you contacted the teacher or the school?

*Mother:* No, I haven't.... That's one thing I haven't done.

*Group leader:* But they had told you that there is a problem?

---

<sup>63</sup>Focus group session, San Antonio, March 17, 1999.

*Mother:* They haven't told anything, no.<sup>64</sup>

To see the extent to which school-parent communications were a function of observable family background characteristics, three indices of parental involvement were constructed: 1) an index of the frequency of contacts between schools and parents; 2) an index of volunteering and attendance at school events; and 3) an index of parental involvement in their child's education. On the first of these indices, which provides information on the frequency of contacts between school officials and parents, no significant difference between Horizon and Edgewood public-school parents is evident (Table 2.5). On the index of volunteering and attendance at school events, Horizon school parents reported higher levels of involvement. After adjustments are made for background characteristics, 64 percent of the Horizon parents were more involved than the average Edgewood parent, which constitutes an effect size of 0.35 standard deviations (Table 2.6). The findings for the index of parental involvement in the child's education are quite similar. When background characteristics are taken into account, 66 percent of the Horizon parents are more involved than the average EISD public-school parent; the effect size is 0.42 standard deviations (Table 2.7).

It is uncertain whether the higher levels of involvement of Horizon parents in volunteering, attendance at school events, and involvement in their children's education are due to their attendance at Horizon schools. Even though many background characteristics have been taken into account statistically, it is possible that Horizon parents were already predisposed to be actively engaged in school-related matters. This may account for their taking advantage of the voucher opportunity. Alternatively, Horizon schools may expect parents to attend school events and participate in volunteering.

### **Parental Satisfaction**

Evaluations of voucher programs in New York City and Cleveland, Ohio both found considerably higher levels of parental satisfaction among parents who had received a voucher, as compared to public-school parents who had applied for a voucher but had not received one.<sup>65</sup> Some interpreted these findings as showing only that those who had applied for but not received a scholarship were particularly unhappy with their school, not that private-school families were more satisfied with their school than the typical public-school family. Those not receiving the voucher or scholarship might simply be called a bunch of "sour grapes" uncharacteristic of public school parents in general.

A more recent study of the Cleveland voucher program, which compared voucher parents with a random sample of public-school parents, found little support for the sour-grapes hypothesis. The study found that voucher parents were substantially more satisfied with many aspects of their children's school than a cross-section of all public

---

<sup>64</sup>Focus group session, public school parents, March 20, 1999.

<sup>65</sup>Peterson, et al., 1998; Greene, Howell and Peterson, 1998.

parents.<sup>66</sup> However, it is possible that the results in Cleveland might be peculiar to that school system, which at the time had been the target of such severe criticism that a court in 1995 instructed the State of Ohio to assume control of the system. (In 1999 the State gave authority to the Mayor of Cleveland).

The Edgewood evaluation provides an additional opportunity to compare voucher parents with a cross-section of all public-school parents in Edgewood, not a group of "sour grapes." The findings are quite consistent with the results from the Cleveland research. The percentage of Horizon parents who reported they were "very satisfied" with specific dimensions of their child's school was considerably higher than the percentage of public-school parents. For example, as can be seen in Table 1.16, over three-fifths of Horizon parents were "very satisfied" with the school's academic quality, but only a little over a third of the public-school parents said they were. Similarly, nearly two-thirds of the Horizon parents were very satisfied with the teaching at their child's school, versus less than one-half of the Edgewood parents.

In focus-group conversations, the general satisfaction of Horizon parents with their school comes out in a variety of ways. Said one father:

My son, ... he's in the fifth grade right now. In the public school he... didn't want to go to school, he didn't like school and stuff like that. And I'd tell him you got too many more years to go, you know. Now, ... I'll just ask [my two children]...how do you like your school now—do you like this one better or the other one better? And they don't hesitate, they tell me this one that they're going to right now.<sup>67</sup>

Another Horizon father expressed his enthusiasm for his children's new school in this way:

[At the public school], the student asks the teacher, what can I do or I don't understand this. Okay, [says the teacher], just go to your book, just read your book. I don't think that's appropriate.... My son was going to [a public middle school] and my daughter to [a public elementary school]. They didn't learn anything while they were there. Every time when they came home, they would have questions on their homework.... Now that they're going to [a private school], they do their homework; when they get stuck, they'll call me over, and say, listen, can you help, but [in the public school] they couldn't even get started on their homework. They didn't teach you how to get started or at least how to go about it.<sup>68</sup>

A Horizon mother made much the same point in more colorful terms:

---

<sup>66</sup>Paul E. Peterson, William G. Howell, and Jay P. Greene, "An Evaluation of the Cleveland Voucher Program after Two Years," Program on Education Policy and Governance, John F. Kennedy School of Government, Harvard University, June 1999. Available at <http://data.fas.harvard.edu/pepg/>

<sup>67</sup>Focus group session, Horizon parents, San Antonio, March 11, 1999.

<sup>68</sup>Focus group session, Horizon parents, San Antonio, March 20, 1999.

Let's say I have a dog. I take it to the trainer. This trainer will bring back the dog and the dog comes back like an idiot, doesn't do nothing. Now I take that same dog to another trainer. And the dog comes back and does all these tricks that I want him to do. Who are you going to blame?... Use your common sense. Who are you going to blame, the dog or the trainer?<sup>69</sup>

But not all Horizon parents were satisfied with the quality of their new school. One father indicated that while his oldest child loves his new school, his two younger children were less content, as "they didn't like the way the teachers were treating them." After discovering that the pair had returned to public school, the group leader asked if they were happy back at their old school. "Yeah, because they'd been there since kindergarten..." the father responded. "Both my kids are in the gifted and talented program."<sup>70</sup>

This reaction was exceptional, however. For the most part, Horizon parents were substantially more satisfied with their school than their counterparts in Edgewood public schools. Nearly two-thirds of the Horizon parents were "very satisfied" with the discipline and safety at their child's school, as compared to about 40 percent of the public-school parents (Table 1.16). Horizon parents were also more satisfied with the class size, school facilities, the teaching of moral values, information from teachers on student progress, student respect for teachers and "what is taught in school." Overall, 39 percent of Horizon parents gave their child's school an "A"; only 28 percent of the Edgewood public-school parents gave their child's school the same grade. Higher parental satisfaction with Horizon schools remains apparent even after family background characteristics have been taken into account. After controlling for family backgrounds, it is estimated that 73 percent of the Edgewood parents are less satisfied with their school than the average Horizon parent; this constitutes an effect size of 0.58 standard deviations (Table 2.8).

### **Student Adjustment, Self-Esteem, Friendship Patterns, and Non-school Activities**

Some scholars think that public schools do a better job than private schools of safeguarding a student's self-esteem. Even voucher advocates may well expect that voucher students will find it difficult to adjust to a new school, especially if they are leaving the public for the private sector. Is there evidence of adverse effects of a Horizon voucher on a student's self-esteem a half year into the voucher program?

Anecdotal evidence cuts both ways. When asked about adjustment problems, one mother reported little difficulty:

*Mother:* He didn't want to leave that [public] school because all of his friends were there, and I told [my son], if we don't take advantage of it [the voucher] now, we're not going to get it ever.

*Group leader:* So how does he feel now?

---

<sup>69</sup>Focus group session, Horizon parents, March 20, 1999.

<sup>70</sup>Focus group session, Horizon parents, March 11, 1999.

*Mother:* Oh, now he loves his buddies at school.

*Group leader:* So he fit in even though he came in at sixth grade? Sometimes I think that it's really hard...

*Mother:* This was a new school, so everyone who came in was new...

*Group leader:* The school had just started this year?

*Mother:* Yeah, they just started.

*Group leader:* Often times new schools are disasters.

*Mother:* Well, they're getting there, though.<sup>71</sup>

However, another mother reported such severe problems she withdrew her child from the private school after just nine weeks:

[My son] was sent in those nine weeks [he attended a private school] six times or more to the Dean for detention. I mean, I don't mind if he did something wrong and they punished him by [having him] mopping the floor—that's what they did to him. If I have him in that school and that's how they deal with it, that's fine—if it was his fault. But he got different detentions for different things. Some was his fault, some they weren't. The last one he got it was because he wore black pants. They could wear black, blue, or khaki, so my son had all of them. But he had some black pants that are jeans. They were black jeans, but they didn't have any labels or nothing—just black jeans. I used to see a lot of boys using that and using not a khaki color but an ivory color that wasn't the proper color. I told [my son], use the black pants for today because I hadn't washed the khaki ones nor the blue ones. I'm pretty sure you can use them, because I've seen a lot of the kids using them. So he used them, and he got in trouble for them—he got detention.<sup>72</sup>

Even though the private-school environment proved too much for this particular family, overall the Horizon students, according to their own reports, adjusted to their new schools remarkably well. The Horizon students report similar numbers of close friends at their school. Similarly, the two groups' self-images and perceived relationships with others do not differ significantly (Table 1.17). For example, the two groups of students are about as likely to agree that they feel good about themselves, that they do not feel useless, that hard work is more important than good luck, that they can do as well as most people, and other similar items. On all questions attempting to estimate a child's self-esteem, the two groups had scores that did not differ by a statistically significant amount, despite the fact that the Horizon students were much more likely to be attending a new—and possibly quite different—school. Similar results were obtained when an index of self-esteem was regressed on the type of school the student attended as well as a large number of background characteristics (Table 2.9).

The friendships formed by Horizon and Edgewood public-school students differ in a number of respects. According to student reports, Horizon friends are just about equally likely to enjoy school, but are much less likely to smoke, slightly less likely to consume alcohol, less likely to be a member of a gang, and less likely to use drugs. As can be seen

---

<sup>71</sup>Focus group session, Horizon parents, March 11, 1998.

<sup>72</sup>Focus group session, Horizon parents not using voucher, San Antonio, February 20, 1999.

in Table 1.17 the reported incidence of participation in delinquent behavior by friends was higher among Edgewood public-school students than Horizon students.

The higher number of friends engaged in illegal or inappropriate activities was not simply due to observable differences in the background of Horizon and public-school families. Sixty-nine percent of the Horizon students scored lower on an index of friend delinquency than did public-school students with similar family background characteristics; the effect size was 0.48 standard deviations (Table 2.10).

Horizon and Edgewood students participated in different kinds of outside activities (Table 1.17). Edgewood students were more likely to join a scout troop as well as to be enrolled in art, music, dance, and computer lessons outside school. Horizon students were more likely to attend, religious services, to take religious instruction, and to participate in church youth groups, community team sports, and outside sports activities.

It is not clear whether these differences preceded the voucher program. Since Horizon students are more likely to come from families engaged in religious activities, the higher incidence of religious activity among Horizon students may be due to their family background. On the other hand, attendance at a school with a religious affiliation may have an incremental impact. Also, it is possible that the higher participation in community sporting activities by Horizon students is due to the fact that private schools have less extensive sports facilities than public schools, requiring the Horizon students to join sports programs outside school. Alternatively, Horizon families, more engaged in the community, may encourage their children to join sports programs.

### **Suspensions, Expulsions and Changes in School**

Most educators think that, all things being equal, it is better that students stay in the same school, especially during a given school year; students usually learn more when not subjected to the disruption that comes from changing schools. In this regard, many have expressed concern about vouchers and other school-choice programs. One evaluation of the Milwaukee choice program claimed that "attrition" from the program was its "most troubling aspect."<sup>73</sup> But these assertions have not gone undisputed. Daniel McGroarty, for example, has argued that mobility rates among participants in Milwaukee's school choice program were lower than the mobility rates among the city's public school students.<sup>74</sup>

The threat of expulsion from a private school is a real one, according to some of the parents participating in focus-group sessions. Two Horizon mothers discussed the topic this way:

---

<sup>73</sup>John F. Witte, "Who Benefits from the Milwaukee Choice Program?" in Bruce Fuller et al., eds., *Who Chooses? Who Loses? Culture, Institutions and the Unequal Effects of School Choice* (New York: Teachers College Press, 1996), p. 133; see also Carol Ascher, Norm Fruchter, and Robert Berne, *Hard Lessons: Public Schools and Privatization* (New York: The Twentieth Century Fund Press, 1996), p. 71.

<sup>74</sup>Daniel McGroarty, "School Choice Slandered," *Public Interest*, Fall, 1994, pp. 94-111.

*Mother #1:* "Like we said, their [public school officials] hands are tied because they can't send them back to where they came from.

*Mother #2:* And here [in the private school] they can. Here they can.

*Group leader:* Do they? I mean, have you heard of kids being sent back?

*Mother #2:* I haven't heard of it yet, but the principal has made that [potential expulsion] very clear.<sup>75</sup>

But if the threat of suspension or expulsion is real, actual practice is another matter. Most evaluations of voucher programs have found little difference in the suspension rates of voucher and public-school students.<sup>76</sup> The information supplied by Edgewood parents is consistent with these earlier findings. Asked if their child had been suspended during the past year for disciplinary reasons, 5 percent of both Horizon parents and public-school parents responded affirmatively (see Table 1.18). The two groups of parents also reported very similar absenteeism and tardiness rates for their children.

Though few public-school and Horizon parents reported suspensions, the experience can be very upsetting for those involved. A conversation in the focus group with an EISD mother who did not speak English well went as follows:

*Group leader:* So your daughter is missing a lot of school?

*Interpreter:* Yes.... Her daughter was having some problems in school and had run away for about three weeks. She went to school to try to talk to the principal and see about somebody helping her, because her daughter didn't want to go back to that school.

*Group leader:* And were they [school officials] helpful?

*Interpreter:* No, I think that she said that they abused her daughter.

*Group leader* [confused and concerned that the allegation is of abuse by an official]: At the school?

*Interpreter:* No, she [her daughter] said that apparently she was sexually abused [apparently somewhere else but it had become known at school]. So that's why she didn't want to go back to that school.

*Group leader:* Sexually abused at the school by—

*Interpreter:* No. By somebody that she knew when she ran away. So then when she went back to the school the other students were making fun of her. So she asked for a private counselor to help her out. And she [the mother] said that they didn't want to understand her problem.... She says [her daughter] did go back to school and then there's been a lot of fights. She's been getting into a lot of fights because people have been making fun of her.... They're putting a counselor on her...because she's a troublemaker.

*Another parent* [referring to the placement of students who have been suspended]: Alternative school...

*Interpreter:* She says she told the principal all they're going to do by send her there [to alternative school] is making her worse. By sending her there.... If you do

---

<sup>75</sup>Focus group session, Horizon parents, San Antonio, March 20, 1999,

<sup>76</sup>Peterson et al., "An Evaluation of the New York City School Choice Scholarships Program," 1998; Greene, Howell and Peterson, "Lessons from the Cleveland Scholarship Program," 1998.

something wrong in school, they send you to a place, it's called alternative school. Which is nothing but bad kids.

Since it is possible that parents may under-report suspension and expulsion rates, parents were also asked if their child had changed schools during the school year. Ninety-three percent of the Horizon parents said their child had attended the same school since the beginning of the year, but only 84 percent of the public-school parents reported no change in school (Table 1.19).

If the child had changed schools, parents were asked to mark any of several possible reasons that applied in their case. (As a result, the percentages in Table 1.19 should be examined separately and not added together). The most frequently mentioned reason given by Edgewood public school parents for changing schools was that the child had moved, a response given by 12 percent of these parents. No other factor was mentioned by more than 2 percent of the Edgewood parents. The most frequently reason given by Horizon parents for changing schools was the cost of the school, a factor mentioned by one percent of the parents. No other factor was mentioned by as much as two percent of the parents.

Horizon parents were also more likely to say that they expect their child to stay in the same school next year than public-school parents (Table 1.19). Ninety percent of the Horizon parents said their child was going to attend the same school next year, whereas 79 percent of the public-school parents gave the same indication. But since a higher percentage of public-school parents gave graduation to a higher level school as a reason for the school change, the difference may not be substantively meaningful.

When parents were given an opportunity to list multiple reasons for their decision to leave, Horizon parents most frequently indicated that it was the quality of the school they were attending. (Again, percentages in Table 1.19 should not be added together, because parents could give multiple reasons for their decision.) Six percent of the Horizon parents felt the school was not of sufficiently high quality, as compared to 4 percent of the Edgewood parents. The next most frequently mentioned reason was the expense of the private school—4 percent gave this reason. Since Horizon scholarships covered tuition but not fees, books or uniform costs, some parents seemed to feel they could not afford to participate. Four percent of Horizon parents mentioned transportation costs, and 3 percent left because their child did not feel welcome at the school.

One Horizon mother, in a focus-group session, explained why she was considering changing schools. She had not placed her children in her school of choice initially because,

The way the scholarships came out it was kind of late in the summer where all the schools were already taken, so you had to go to a school that was going to take your kids. And because I had two of them, it was hard to split them up and send them to two different private schools when I could send them to one. So I sent

them both to that one, but they weren't happy with the way the teachers were treating them so I said I can't do that [leave them in this school].<sup>77</sup>

Another mother echoed these comments:

We originally pulled them out from public school because the school they were in was really, really bad. Both my children got beat up three different times, and the faculty and the principal did nothing about it.... [But the teachers in the private school her children are now in are not satisfactory.] The teacher [at the private school] that my fourth grader has now, I'm not satisfied with her at all. She doesn't seem to want to teach them or bring them up to speed.... And my second grader, his... teacher, she yells an awful lot, and I feel like there's a better way for her to get their attention instead of yelling.... I'm kind of looking into pulling them out of this school and putting them into another school this coming year. [Group leader: So keeping them in private school?] Oh, yes, definitely, because I like the discipline and I know that they do teach them a lot more than they would in public school.<sup>78</sup>

Financial matters did not loom large in conversations with Horizon parents, perhaps because the Horizon voucher typically covered all tuition costs, though it did not cover fees and the cost of uniforms.

*Group leader:* How difficult is it to cover those additional costs?

*Horizon parent:* It's extra costs, but when you're being helped out by them paying the tuition, it doesn't make it as hard....

*Group leader:* If you think each of your children, less than \$200 a year or is it \$200-\$400 a year...?

*Horizon parent:* Oh, its more than that.

*Another parent:* Definitely more than that!

*First parent:* I would say at least \$1,000.

*Group leader:* Above tuition?

*First Parent:* Yes.

*Another parent:* Yes.

*Another parent:* Yes.

*Group leader:* So, that's a big piece that's added on top per kid, isn't it?

*First Parent:* In a way, you deal with it... You have a sound mind knowing that they're safer...

*Another parent:* They're safer. They're getting a better education. It's really a small price to pay.<sup>79</sup>

Apart from graduating from a school, the most frequently mentioned reasons for planning to leave a school given by public-school parents was the fact that the family wanted all their children in the same school or that the family was moving. School

---

<sup>77</sup>Focus group session, Horizon parents, March 11, 1999.

<sup>78</sup>Focus group session, Horizon parents, March 11, 1999.

<sup>79</sup>Focus group session, Horizon parents, San Antonio, March 11, 1999.

quality, expense, feeling unwelcome at school, and transportation problems were seldom mentioned by these parents.

## **Conclusions**

This report compares Horizon to public-school students in the Edgewood school district in San Antonio. Future research will compare developments in Edgewood with three comparison districts not directly affected by a school voucher program. In conclusion, we report key findings and plans for future research.

## **Key Findings**

To the four questions posed early in this report, the following preliminary answers have emerged:

- 1. What kinds of families take advantage of vouchers when they are offered to all low-income families living within a school district? Do the best and the brightest leave the public schools and attend private schools? Or are parents more likely to exit the public schools when their own child is not doing well in public school?**

Participation in the Horizon program in Edgewood has not conformed exactly to the claims of either the most vigorous critics of school vouchers nor to those of its most ardent defenders. The program has hardly skimmed the cream of the Edgewood public schools, but, on the other hand, neither are the initial participants the poorest of the poor. Instead, participants in the Horizon program in Edgewood might be roughly classified as the children of the working poor. Student test scores differ only modestly from those of other children in the district (not significantly in math, somewhat in reading). The households in which the child lives have low incomes and are of similar ethnicity. The percentages of families with two parents in the home are also similar. However, the mothers are somewhat better educated, more likely to have a full-time job, less likely to depend on some government programs, and more likely to attend church and be engaged in the community. Horizon families have somewhat higher educational expectations for their child; it is unclear whether these expectations existed prior to the initiation of the Horizon program or they were an outcome of intervention.

- 2. Do low-income parents find a school they prefer? What are the reasons they give for choosing a school? Are academic considerations paramount? or do families leave for religious reasons? or to become a member of an athletic team? or because their child's friends have left?**

More Horizon than Edgewood public-school parents say their child is attending a school the family prefers. Most Horizon parents give educational considerations—academic quality, teacher quality, etc.—as the most important reason for their choice of school. Religious considerations were mentioned by a significant percentage. Sports and childhood friendships were unimportant factors to all but a few. Public-school parents were more likely to say their child attended a school because 1) the school was the only school available; and 2) this was the neighborhood school.

### **3. How do the school experiences of voucher families and students compare with those of public-school families?**

Horizon parents report much lower levels of fighting and other forms of misbehavior than do Edgewood public-school parents. The differences in these reports by parents increase the further along in school a student is. They report that their children study their homework for a longer period of time and they report more extended communications with the school. Students report better relationships between teachers and students and they are less likely to have school friends that engage in delinquent behavior.

### **4. Do students from low-income families change schools more frequently than public-school students? Are they expelled or suspended from school more frequently?**

No. Horizon students were less likely to move from school to school during the school year. They were no more likely to be planning to change schools in the coming year. Suspension and expulsion rates were not higher for Horizon students than for public-school students. Families had a variety of reasons for changing schools. For public-school students, a move away from the school was a primary factor. For Horizon students, perceived quality of the school and school costs were most frequently mentioned.

### **Future Research**

This initial report has compared the background, test scores, experiences, and opinions of Horizon students and parents with those of Edgewood public-school students and parents. A subsequent report will provide information on the political and institutional context for the Horizon program in Edgewood as well as of three comparison districts. This report will also present information that allows for comparisons between students and parents living in the Edgewood school district with students and parents living in three comparison districts. These data will serve as a baseline for a non-experimental evaluation to be conducted over the next several years.

**Table 1.1 – Edgewood Independent School District:  
Enrollment and Revenue, 1997-98 <sup>1</sup>**

<b>Enrollment Statistics</b>	
<b>Grade</b>	<b>Number of Students</b>
Kindergarten	1,192
Grade 1	1,262
Grade 2	1,199
Grade 3	1,094
Grade 4	1,081
Grade 5	1,128
Grade 6	1,112
Grade 7	1,093
Grade 8	1,050
Grade 9	1,305
Grade 10	836
Grade 11	663
Grade 12	475
Enrollment (K-12)	13,490
Early Childhood Education	12
Pre-Kindergarten	640
<b>Total Enrollment</b>	<b>14,142</b>

<b>Revenue Statistics</b>		
<b>EISD revenue by source:</b>		
State	\$68,051,063	(82.7%)
Federal	\$5,566,134	(6.8%)
Local taxes	\$6,974,743	(8.4%)
Other local and intermediate	\$1,810,540	(2.2%)
<b>Total</b>	<b>\$82,302,480</b>	<b>(100.0%)</b>
<b>EISD revenue per student (average)</b>	<b>\$5,820</b>	
<b>Texas revenue per student (average)</b>	<b>\$5,520</b>	
<b>EISD expenditures per student (average)</b>	<b>\$6,060</b>	
<b>Texas expenditures per student (average)</b>	<b>\$5,597</b>	

<sup>1</sup> Source: State of Texas, Texas Education Agency, *Academic Excellence Indicator System, 1997-98, District Report for Edgewood Independent School District, Bexar County (District#105905)*. The report is publicly available on the Texas Education Agency Website ([www.tea.state.tx.us](http://www.tea.state.tx.us)).

**Table 1.2 – Profile of Horizon and Edgewood Public School Students**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Test Scores</b>				
Average math score	36.6	282	34.8	106
Average reading score	35.0***	282	28.3	106
<b>Student Characteristics</b>				
Percent with learning disabilities	8.1%*	211	16.0%	107
Percent need assistance learning English	0.9***	211	7.0	107
Child enrolled in classes for gifted	23.3	209	28.6	108
Percent with physical handicaps	1.5*	210	4.5	108
<b>How far in school expect child to go<sup>a</sup></b>				
High School diploma or less	15.5%		29.0%	
Some college	13.7		21.2	
Graduate from 4-year college	32.7		30.8	
More than a 4-year college	38.2		19.1	
Total	100.0%***	211	100.0%	106

Figures may not sum due to rounding. \* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$ . The test of significance is calculated for a discrete item or for an overall distribution, depending on which was deemed more appropriate. If t-tests were conducted for a discrete item, the asterisk(s) indicating level of significance come immediately after the item; if chi-square tests were conducted for the entire distribution, the asterisk(s) are placed after the total for the distribution. Some chi-square tests were based on small sample sizes and should be interpreted with caution.

<sup>a</sup>Parents of Horizon students were more likely than public-school parents to expect their child to obtain a college or graduate school or professional degree. This difference is significant at the .01 level.

**Table 1.3 – Family Background Characteristics**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Percent of children born in U.S.</b>	96.0	211	95.0	108
<b>Grandparents' Origins:</b>				
Mother's mother born in the U.S.	75.9%*	211	65.0%	108
Mother's father born in the U.S.	70.5	211	61.1	108
Father's mother born in the U.S.	61.7***	210	46.0	108
Father's father born in the U.S.	58.6*	210	47.8	108
<b>Average Family Income</b>	\$15,990	206	\$15,939	104
<b>Member of household receives following forms of government assistance:</b>				
Welfare	4.0%	210	4.8%	108
Social Security	17.5	210	20.5	108
Supplemental Security Income	7.8***	211	17.9	108
Food Stamps	21.6*	211	32.6	108
Medicaid	26.2*	211	38.5	108
<b>Percent of families with both mother and father living in household</b>	44.8%	211	42.7%	108
<b>Percent of mothers who lived at current residence longer than 2 years</b>	78.1%	206	71.9%	105
<b>Mother's education</b>				
Eighth grade or less	7.4%		24.7%	
Beyond eighth grade; less than HS grad	13.3		23.0	
GED	10.0		11.0	
High school graduate	26.5		19.1	
Less than 2 years vocational school	7.4		4.2	
2 years or more of vocational school	6.6		1.5	
Less than 2 years college	19.0		11.1	
2 years or more college	6.4		3.0	
Finish college (4 or 5 year degree)	1.8		0.7	
Masters degree or above	0.8		0.0	
Don't know	0.9		2.8	
Total	100.0%***	209	100.0%	107
<b>Ave. number of years of ed. completed</b>	12.0***	208	10.8	104
<b>Average age of mother</b>	38.0	209	39.7	108
<b>Percentage of mothers employed full-time</b>	50.3%*	207	36.8%	106
<b>Percentage of mothers who have moved to a new home so that child could attend a better school</b>	14.9%	207	16.0%	105

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.4 – Parents’ Engagement with Community**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Feel a part of neighborhood or community</b>	74.8%*	210	65.2%	106
<b>At least ‘somewhat’ or ‘very’ interested in local politics</b>	54.9%	209	46.2%	107
<b>Discuss community affairs with others</b>	70.2%***	209	48.6%	107
<b>Parent’s rating of neighborhood safety</b>				
Very safe	26.9%		33.9%	
Somewhat safe	55.0		41.2	
Somewhat unsafe	14.6		16.6	
Very Unsafe	3.5		8.3	
Total	100.0%	210	100.0%	107
<b>Mother’s religious affiliation<sup>a</sup></b>				
Catholic	61.3%**		77.6%	
Baptist	5.1		14.1	
Pentecostal	15.9***		5.3	
Other Protestant	1.7		0.6	
Other Religion	13.2		1.6	
No Religion	2.7		0.7	
Total	100.0%	210	100.0%	106
<b>Frequency mother attends religious services<sup>b</sup></b>				
Never	2.5%		14.5%	
Only on major holidays	9.6		21.9	
Once a month	21.0		23.0	
Once a week	34.7		29.1	
More than once a week	32.2		11.6	
Total	100.0%***	209	100.0%	105

Figures may not sum due to rounding.

\*= differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

<sup>a</sup>Mothers of Horizon students were more likely than public-school students to report their religious affiliation as Catholic or Pentecostal.

<sup>b</sup>Mothers of Horizon students were more likely than public-school mothers to attend religious services at least one a week. This difference is significant at the .01 level.

**Table 1.5 – Criteria Parents Used to Select a School**

	Horizon Schools	N	Edgewood Public Schools	N
<b>“Very important” reason for selecting child’s school:</b>				
What is taught in class	88.5% ***	206	76.5%	105
Teacher quality	81.8	206	74.0	103
Discipline	81.3***	206	65.6	104
Safety	79.3***	208	59.4	104
Academic quality	77.3***	203	51.2	102
Religious affiliation	67.6***	202	13.4	102
Class size	62.1***	205	44.5	105
Cultural Environment	60.1**	207	44.7	104
Convenience of location	44.2	203	51.3	101
School Facilities	40.8	205	40.4	104
The school was the only choice available	20.1***	200	40.5	101
Sports program	14.9	200	14.4	102
This is a neighborhood public school	10.6***	191	41.1	106
Child’s friends attend the school	9.3***	203	20.9	103
<b>Single “most important” reason:<sup>a</sup></b>				
Academic quality	39.1%		11.9%	
Religious affiliation	14.9		0.0	
What is taught in class	12.2		7.9	
Teacher quality	6.6		6.8	
The school was the only choice available	4.6		21.4	
This is a neighborhood public school	1.0		41.7	
Other	21.6		10.3	
Total	100.0% ***	210	100.0%	108

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

<sup>a</sup>Public school parents were more likely to say that the most important reason for choosing the child’s school is that it was the only choice available or that it was the neighborhood public school. Parents of Horizon students were more likely to choose one of the following factors: academic quality, teacher quality, or what is taught in class, as the most important reason, or to choose religious affiliation. These differences are significant at the .01 level.

**Table 1.6 – Whether Child Attended School Preferred by Family, Reasons Given**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Percentage of parents who sent their child to a preferred school:</b>	92.0%***	211	75.2%	106
<b>Reasons why parents not able to send their child to their preferred school:</b>				
No more space available in school	2.3		0.0	
Live outside the school's boundary	1.9***		17.4	
Could not pay for the cost of school	1.5**		7.5	
Transportation problems	1.4		5.6	
School was in an inconvenient location	0.5		1.5	
Child was not given space at school	0.5		0.3	
Child did not pass admissions test	0.5		0.3	
Applied too late	0.5		0.0	
Not member of affiliated church	0.0**		3.4	
Communication problems	0.0		1.9	
Moved away from school	0.0		0.7	
Other reasons	0.5	210	1.9	103

Percentages of the total number of Horizon parents and Edgewood public-school parents reported.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.7 – Availability of School Facilities**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Number of students in child's class</b>				
1-10 students	8.0%		1.4%	
11-15 students	14.1		8.6	
16-20 students	22.7		32.6	
21-25 students	28.5		36.4	
26-30 students	19.1		3.3	
31-35 students	3.4		1.3	
36-40 students	1.8		0.0	
Don't know	2.5		16.4	
Total	100.0%***	211	100.0%	107
<b>Average class size</b>	20.5	206	20.1	91
<b>Size of school</b>				
1-150 students	16.3%		0.0%	
151-300 students	31.5		9.5	
301-450 students	13.5		15.5	
451-600 students	11.2		7.5	
More than 600 students	4.4		13.3	
Don't know	23.1		54.3	
Total	100.0%***	207	100.0%	107
<b>Average school size</b>	284.6***	160	434.4	52
<b>Special Programs Available at School:</b>				
Music Program	73.1%**	209	83.2%	107
After-school program	70.6	209	72.5	107
Arts Program	59.7***	210	78.8	107
Programs for advanced learners	35.1***	200	75.0	105
Programs for learning problems	32.3***	209	73.8	107
Programs for non-English speakers	18.2***	203	64.7	105
<b>Facilities Available at School:</b>				
Cafeteria	86.0%	205	92.2%	105
Library	73.8***	209	97.9	108
Child Counselors	60.3***	202	89.1	108
Computer Lab	63.0***	206	86.9	107
Nurse's Office	60.9***	207	93.4	108
Gym	52.7*	209	65.9	107
Individual Tutors	42.1**	205	56.8	104

Figures may not sum due to rounding. \* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.8 – Ethnic Relations in Public and Private Schools**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Child of Latino or Hispanic Background</b>	96.1%	211	93.1%	107
<b>Percentage of parents who believe racial conflict is a ‘very serious’ problem at child’s school</b>	24.0%	207	26.9%	103
<b>Percentage of students who claim that people of different ethnic backgrounds eat lunch together at their school</b>	62.2%	290	62.3%	91
<b>Percentage of parents ‘very satisfied’ with the ethnic composition of their child’s school</b>	47.1%***	209	30.2%	102
<b>Percentage of students who do not have any friends of a different ethnicity than their own</b>	51.7%	285	52.3%	91

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.9 – Seriousness of School Disruptions as Reported by Parents**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Percent of parents who believe following problems are 'very serious' at their child's school:</b>				
Fighting	28.4%***	210	52.3%	105
Guns or other weapons	27.9*	210	38.8	105
Kids destroying property	26.5	210	35.5	105
Cheating	24.7	208	33.9	102
Kids missing classes	26.4**	210	39.7	105
Kids being late for school	19.8***	209	33.2	105

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.10 – Levels of School Disruption as Reported by Students**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Percent of students who agree that:</b>				
Students get along well with teachers	67.8%*	295	51.6%	92
In class, often feel “made fun of” by students	24.0	293	23.9	91
Other students often disrupt class	60.8*	297	74.3	92
Students who misbehave often get away with it	27.5***	290	52.5	90
Fights often occur between students	27.9***	296	64.5	91
There is a lot of cheating in this school	17.4**	289	29.6	89
People of different races eat lunch together	62.2	290	62.3	88

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.11 – School Rules**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Percentage of parents reporting that:</b>				
Students required to wear a uniform	95.3%***	211	18.6%	108
Hall passes required to leave class	57.6***	210	77.8	108
Visitors required to sign in at main office	80.5	211	72.9	107
Certain forms of dress are forbidden	95.2***	211	80.5	106

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.12 – School Life and Teacher Qualities**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Percentage of students who agree with the following statements about their peers:</b>				
Students get along well with teachers	67.8%*	295	51.6%	92
In class, often feel “made fun of” by students	24.0	293	23.9	91
People of different races eat lunch together	62.2	290	62.3	88
<b>Feelings about going to school everyday</b>				
I like it a lot	24.6%		23.2%	
Like it OK	51.0		55.7	
Don’t care/don’t want to go	24.4		21.2	
Total	100.0%	297	100.0%	96
<b>Overall grade students give school</b>				
A...Excellent	36.4%		39.5%	
B...Good	44.8		35.5	
C...Fair	15.1		23.9	
D...Unsatisfactory	2.2		0.0	
F...Failing	1.5		1.2	
Total	100.0%	299	100.0%	96
<b>Average grade students give school</b>	B+	299	B+	96
<b>Percentage of students who agree with the following statements about their teachers:</b>				
In class, I often feel “put down” by teachers	11.4	290	19.2	91
The teaching is good	92.0*	292	83.7	92
Teachers sometimes ignore cheating	13.8	289	21.9	88
Most teachers really listen to what I have to say	80.0	292	83.1	89
My teachers are fair	83.0	297	78.0	89
The teachers are interested in students	82.8	292	85.5	92
I would do much better if I had more help	53.2	286	66.2	94

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.13 – Homework**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Parent reports on amount of daily homework assigned</b>				
None	3.3%		14.1%	
About ½ hour	10.0		33.1	
About an hour	36.5		36.8	
About one to two hours	37.1		13.9	
Over two hours	13.2		2.1	
Total	100.0%***	208	100.0%	105
<b>Parent reports on level of difficulty of homework</b>				
Appropriate	80.1%		68.2%	
Too easy	5.1		9.6	
Too difficult	7.2		9.2	
Don't know	7.6		13.0	
Total	100.0%	210	100.0%	106
<b>Student reports of homework habits</b>				
I don't do any or only a little of my homework	6.3%		15.4%	
I do most of my homework	25.6		29.0	
I do all of my homework	68.2		55.6	
Total	100.0%*	298	100.0%	85
<b>Percentage of parents who participated in the following activities with child at least once in past week:</b>				
Helped with homework	84.0%***	208	61.8%	106
Helped with reading/math lessons that were not part of child's homework	66.3**	208	51.1	107
Talked about experiences in school	97.6	210	97.3	107

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.14 – Volunteering and Parent-School Communications**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Percentage of parents who participated in the following activities at least once in the past month/year:</b>				
Attended school activity (month)	59.5%***	204	37.9%	107
Attended parent-teacher conference (year)	80.5**	210	65.4	107
Volunteered at child’s school (month)	39.3***	211	9.8	106
<b>Percentage of parents who talked with someone at child’s school at least once in the past week about following:</b>				
Raising money for the school	36.8%***	210	16.7%	106
Volunteering to work in the school	27.1*	209	16.2	106
This child’s schoolwork	55.2	206	48.9	106
This child’s accomplishments	52.0*	208	40.7	104
Problems with this child’s behavior	23.4*	207	33.6	105
This child’s attendance	14.4**	206	23.4	102
Placing this child in special classes or programs (outside of arts and sports)	11.9	203	19.5	106
<b>Following practices exist in the child’s school:</b>				
Parents informed about student’s grades half-way through grading period	90.1%	211	90.4%	106
Parents notified when student sent to office	79.0**	208	83.7	109
Parents speak to classes about their jobs	14.4	209	14.9	107
Parents participate in instruction	45.0	207	34.5	104
Open house or back-to-school night held at school	91.9**	206	79.3	101
Regular parent-teacher conferences held	83.7	205	75.6	94
Parents receive notes about child from teachers	80.4	211	80.9	105
Parents receive newsletter from teacher	76.0**	210	59.1	105
Parents receive materials in Spanish and English	51.1***	211	76.1	105
<b>Member of PTA or similar organization</b>	14.4%	210	19.6%	106
<b>According to students, percent of parents who usually attend parent-teacher meetings</b>	63.7%**	292	52.1%	93

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.15 – Parental Involvement with Child**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Percentage of parents who participated in the following activities with child at least once in past week:</b>				
Helped with homework	84.0%***	208	61.8%	106
Helped with reading/math lessons that were not part of child's homework	66.3**	208	51.1	107
Talked about experiences in school	97.6	210	97.3	107
<b>Percentage of parents who participated in the following activities with child at least once in past month:</b>				
Attended school activities	59.5***	204	34.5	107
Worked on homework or school projects	84.2***	208	62.1	106
Attended religious services	78.1***	206	48.2	103
Attended family social gatherings	78.0	207	78.0	107
Went to a library	64.8	211	57.4	105

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.16 – Parental Satisfaction**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Percent of parents “very satisfied” with:</b>				
Freedom to observe religious traditions	63.2%***	206	19.3%	101
Teaching moral values	62.1***	207	37.9	103
Academic quality	61.3***	208	34.9	104
Student respect for teachers	59.6***	209	38.9	102
Discipline	62.0***	210	38.8	102
School safety	60.4***	211	37.8	105
Class sizes	43.2***	208	19.0	104
Parental support for the school	49.8***	209	30.1	103
What is taught in school	60.3***	210	43.8	104
Teaching	63.0***	211	46.6	102
Parent-teacher communications	57.5*	210	45.7	103
Clarity of school goals	53.1**	208	40.3	102
How much school involves parents	42.7**	209	30.9	103
School facilities	39.4**	209	27.5	105
Location of school	53.1	205	44.6	105
Sports program	25.3	208	21.7	102
<b>Overall grade parents give school</b>				
A...Excellent	39.1%		27.8%	
B...Good	47.2		45.4	
C...Fair	9.8		21.7	
D...Unsatisfactory	3.3		3.2	
F...Failing	0.5		1.9	
Total	100.0%**	210	100.0%	107
<b>Average grade parents give school</b>	B+**	210	B-	107

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.17 – Students’ Adjustment to School, Self-Esteem and Friendship Patterns**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Percentage of students who agree with following:</b>				
I often feel “made fun of” by other students	24.0%	287	23.9%	91
I feel I do not have much to be proud of	22.3	288	24.6	88
Most people would try to take advantage of me or cheat me if they got a chance	23.8	287	17.5	91
To succeed in school, luck is more important than hard work	29.5	289	35.0	88
I certainly feel useless at times	33.0	282	32.4	86
At times I think I am no good at all	28.3	282	27.2	87
Every time I try to get ahead, something or somebody stops me	29.6	289	25.8	86
When I make plans, I am almost certain I can make them work	78.9	285	77.6	89
I am able to do things as well as most other people	82.7	288	76.7	89
I am satisfied with myself	84.4	284	87.4	89
Most of the time people try to be helpful rather than just looking out for themselves	74.4	287	79.7	91
I feel good about myself	94.3	292	94.1	91
If I work really hard, I will do well in school	95.2	291	98.0	90
<b>Number of close friends at school</b>				
None	4.5%		6.4%	
One	6.5		2.6	
Two	9.4		4.5	
Three	12.2		8.5	
Four or more	67.4		78.1	
Total	100.0%	299	100.0%	94
<b>Number of these friends known by child’s parents</b>				
None	20.5%		9.4%	
One	16.8		18.4	
Two	16.9		21.1	
Three	13.5		8.0	
Four or more	32.3		43.0	
Total	100.0%	298	100.0%	93

**Table 1.17 Continued**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Percentage of students who have none of the following types of friends:</b>				
Friends who enjoy school	20.3%	297	25.5%	92
Who get good grades	3.8	295	3.8	93
Who get into trouble with teachers	45.3	296	33.2	92
Who smoke cigarettes	93.4**	298	82.5	90
Who drink alcohol	92.5*	296	84.7	93
Who use drugs	96.6***	296	88.2	93
Who are members of a gang	94.0***	277	80.9	92
<b>Percentage of students who engage in the following kinds of activities:</b>				
Scouting (Cub Scouts, Brownies, Camp Fire Girls)	4.1%**	287	12.2%	92
Church youth groups	45.0***	287	18.7	92
Community team sports (e.g. Little League)	42.5**	288	29.7	89
Religious services	60.8***	285	28.3	91
Art, music or dance lessons outside of school	11.5***	288	29.7	93
Language classes outside of school	7.8	286	11.5	92
Religious instruction outside of school	25.0***	286	6.2	92
Computer classes outside of school	9.6*	285	17.8	93
Sports, exercise or gymnastics outside of class	63.1***	298	34.1	91

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.18 – Student Suspensions, Absences, and Tardiness**

	<b>Horizon Schools</b>	<b>N</b>	<b>Edgewood Public Schools</b>	<b>N</b>
<b>Percentage of children suspended for disciplinary reasons</b>	4.8%	209	5.1%	106
<b>Days child was absent from school in the last month</b>				
None	53.2%		51.9%	
1 to 2 days	38.6		38.9	
3 or more days	8.2		9.2	
Total	100.0%	209	100.0%	108
<b>Days child was more than half an hour late for school in the last month</b>				
None	88.6%		90.7%	
1 to 2 days	8.2		3.7	
3 or more days	3.2		5.6	
Total	100.0%	209	100.0%	108

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 1.19 – Changes in School Enrollment**

	Horizon Schools	N	Edgewood Public Schools	N
<b>Percentage of children attending same school since the beginning of the year</b>	92.9%**	209	84.4%	107
<b>Reasons children changed schools:</b>				
Quality of school was unacceptable	0.9		0.6	
Child moved away from the school	0.0***		12.0	
The school was too expensive	1.4		0.0	
Transportation was a problem	1.0		2.0	
Child offered admission to preferred private school	1.1		0.7	
Child offered admission to preferred public school	0.4		0.0	
The child was suspended or expelled	0.0		0.0	
The child felt unwelcome	0.5		1.8	
Other	1.9	208	0.7	106
<b>Percentage of children planning to attend the same school next year</b>	89.5%**	171	79.2%	99
<b>Reasons child not attend same school next year:</b>				
The child graduating from school	3.5***		16.7	
Quality of school is unacceptable	6.3		3.6	
We plan on moving away from the school	2.6**		9.0	
The school is too expensive	4.5**		0.0	
Transportation is a problem	3.8**		0.0	
Child offered admission to preferred private school	1.9		0.0	
Child offered admission to preferred public school	0.0		0.0	
Want all children to be in same school	1.6		1.8	
The child was asked not to return	0.5		0.0	
The child feels unwelcome	2.8		1.8	
Other	5.7**	207	1.4	106

Figures may not sum due to rounding.

\* = differences significant at  $p < .10$ ; \*\* = significant at  $p < .05$ ; \*\*\* = significant at  $p < .01$

**Table 2.1 –School Resources (Parental Reports)**

	<b>School Resources Index</b>
<b>Horizon School</b>	-0.96*** <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	0.02
Mother has a full-time job	0.05
Income	0.06
Household dependence of government assistance	0.04
Child lives with father and mother	0.11
Respondent’s marital status	-0.22
Age of mother	0.01
Number of children in family	-0.02
Grandparents born in U.S.	0.06*
Residential mobility	0.04
Catholic	-0.02
Protestant	-0.45
Other religion	-0.34
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	-0.05
Child has physical disability	-0.31
Child has learning disability	-0.07
Grade level	0.03
<b>Constant</b>	-0.02
<b>Adjusted R<sup>2</sup></b>	.28
<b>N</b>	287

The dependent variable consists of an index of all the school resource items listed in Table 7 under “special programs available at school” and “facilities available at school”. Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

---

<sup>1</sup> The model predicts that 83% of EISD parents report more school resources than the typical Horizon parent. Expressed in another way, the effect of attending a Horizon school is to decrease the availability of school resources by 0.96 standard deviations.

**Table 2.2 –School Disruptions (Parental Reports)**

	<b>School Disruption Index</b>
<b>Horizon School</b>	-0.48*** <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	-0.02
Mother has a full-time job	0.06
Income	-0.25***
Household dependence of government assistance	0.04
Child lives with father and mother	0.28*
Respondent’s marital status	0.12
Age of mother	-0.01
Number of children in family	-0.07
Grandparents born in U.S.	-0.04
Residential mobility	-0.02
Catholic	0.73***
Protestant	0.82***
Other religion	0.44**
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	0.11
Child has physical disability	0.11
Child has learning disability	-0.14
Grade level	0.02
<b>Constant</b>	0.49
<b>Adjusted R<sup>2</sup></b>	.12
<b>N</b>	287

The dependent variable consists of an index of all the items listed in Table 9. Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

---

<sup>1</sup> The model predicts that 68% of EISD parents report more school disruptions than the typical Horizon parent. Expressed in another way, the effect of attending a Horizon school is to decrease the incidence of school problems by 0.48 standard deviations.

**Table 2.3 –Assessment of Student Behavior in School (Student Reports)**

	<b>Quality of Student Body at School</b>
<b>Horizon School</b>	0.72*** <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	-0.03
Mother has a full-time job	0.12
Income	0.04
Household dependence of government assistance	0.01
Child lives with father and mother	-0.02
Respondent's marital status	0.16
Age of mother	-0.01
Number of children in family	-0.05
Grandparents born in U.S.	0.02
Residential mobility	-0.16
Catholic	0.34
Protestant	0.47
Other religion	0.31
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	-0.47
Child has physical disability	-0.63*
Child has learning disability	0.45
Grade level	-0.06**
<b>Constant</b>	1.52**
<b>Adjusted R<sup>2</sup></b>	.08
<b>N</b>	253

The dependent variable is simply an index of the first five items listed in Table 10. Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

---

<sup>1</sup> The model predicts that only 24% of EISD students report higher assessments of student behavior in their school than does the typical Horizon student. Expressed in another way, the effect of attending a Horizon school is to improve this assessment by 0.72 standard deviations.

**Table 2.4 –Homework Assignments (Parental Reports)**

	Amount of Homework School Assigns
<b>Horizon School</b>	0.41*** <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	0.02
Mother has a full-time job	0.09
Income	0.00
Household dependence of government assistance	-0.07
Child lives with father and mother	0.06
Respondent's marital status	-0.07
Age of mother	0.01
Number of children in family	0.04
Grandparents born in U.S.	0.01
Residential mobility	0.12
Catholic	0.15
Protestant	0.13
Other religion	0.15
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	0.12***
Child has physical disability	-0.11
Child has learning disability	-0.11
Grade level	-0.01
<b>Constant</b>	-0.29*
<b>Adjusted R<sup>2</sup></b>	.21
<b>N</b>	283

The dependent variable is simply the amount of homework assigned to the child, which is the first item listed in Table 14. Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

---

<sup>1</sup> The model predicts that on average, controlling for background characteristics, Horizon students did 24 minutes more homework per night than EISD students. Expressed in another way, the effect of attending a Horizon school is to increase the amount of a child's homework by 0.79 standard deviations.

**Table 2.5 –Parent-School Communications (Parental Reports)**

	<b>Frequency of Talks between School and Parent</b>
<b>Horizon School</b>	0.22 <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	-0.07*
Mother has a full-time job	-0.13
Income	-0.05
Household dependence of government assistance	0.05
Child lives with father and mother	0.15
Respondent’s marital status	-0.03
Age of mother	-0.00
Number of children in family	0.09
Grandparents born in U.S.	-0.12***
Residential mobility	0.02
Catholic	0.30
Protestant	0.17
Other religion	0.02
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	0.26
Child has physical disability	-0.09
Child has learning disability	0.58***
Grade level	-0.03
<b>Constant</b>	0.62
<b>Adjusted R<sup>2</sup></b>	0.06
<b>N</b>	286

The dependent variable is an index of the last five items listed in Table 14 under “percentage of parents who talked with someone at child’s school at least once in the past week about the following:.” Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

---

<sup>1</sup> The model predicts that 59% of EISD parents report lower levels of communication than the typical Horizon parent. Expressed in another way, the effect of attending a Horizon school is to increase the amount of parent-school communications by 0.22 standard deviations.

**Table 2.6 –Involvement with School (Parental Reports)**

	<b>Frequency of Various Forms of Volunteering</b>
<b>Horizon School</b>	0.35** <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	0.10***
Mother has a full-time job	-0.01
Income	-0.03
Household dependence of government assistance	0.05
Child lives with father and mother	0.03
Respondent’s marital status	0.12
Age of mother	0.01
Number of children in family	0.10
Grandparents born in U.S.	-0.00
Residential mobility	0.14
Catholic	0.22
Protestant	-0.09
Other religion	-0.16
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	0.04
Child has physical disability	-0.06
Child has learning disability	0.29
Grade level	-0.05*
<b>Constant</b>	-1.94**
<b>Adjusted R<sup>2</sup></b>	0.05
<b>N</b>	287

The dependent variable is an index of the first two items listed in Table 14 under “percentage of parents who talked with someone at child’s school at least once in the past week about the following” plus all the items listed under “percentage of parents who participated in the following activities at least once in the past month/year.” Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

---

<sup>1</sup> The model predicts that 64% of EISD parents are less involved with their child’s education than the typical Horizon parent. Expressed in another way, the effect of attending a Horizon school is to increase the frequency of parents’ engagement with their children by 0.35 standard deviations.

**Table 2.7 – Involvement with Child (Parental Reports)**

	<b>Frequency of Participation in Activities with Child</b>
<b>Horizon School</b>	0.42*** <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	0.06*
Mother has a full-time job	0.02
Income	-0.08
Household dependence of government assistance	-0.06
Child lives with father and mother	0.24
Respondent's marital status	-0.09
Age of mother	-0.00
Number of children in family	0.03
Grandparents born in U.S.	0.11***
Residential mobility	-0.08
Catholic	0.34
Protestant	0.31
Other religion	0.40
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	0.37**
Child has physical disability	0.51
Child has learning disability	0.09
Grade level	-0.11***
<b>Constant</b>	-1.03
<b>Adjusted R<sup>2</sup></b>	0.17
<b>N</b>	287

The dependent variable is an index of all the parent-participation items listed in Table 15. Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

<sup>1</sup>The model predicts that 66% of EISD parents are less involved with their child's education than the typical Horizon parent. Expressed in another way, the effect of attending a Horizon school is to increase the frequency of parents' engagement with their children by 0.42 standard deviations.

**Table 2.8 – Satisfaction (Parental Reports)**

	Parental Satisfaction Index
<b>Horizon School</b>	0.58*** <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	0.00
Mother has a full-time job	-0.03
Income	-0.12
Household dependence of government assistance	-0.04
Child lives with father and mother	0.17
Respondent's marital status	-0.27*
Age of mother	0.02***
Number of children in family	0.12
Grandparents born in U.S.	-0.08*
Residential mobility	-0.07
Catholic	-0.02
Protestant	-0.07
Other religion	0.16
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	-0.45*
Child has physical disability	-0.57
Child has learning disability	-0.18
Grade level	-0.06***
<b>Constant</b>	0.01
<b>Adjusted R<sup>2</sup></b>	.09
<b>N</b>	286

The dependent variable consists of an index of all the parental satisfaction items listed in Table 16, excluding the item which asks parents to give an overall grade for their child's school. Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

<sup>1</sup>The model predicts that 73% of EISD parents are less involved with their child's education than the typical Horizon parent. Expressed in another way, the effect of attending a Horizon school is to increase the frequency of parents' engagement with their children by 0.58 standard deviations.

**Table 2.9 – Levels of Self-Esteem (Student Reports)**

	<b>Index of Self-Esteem</b>
<b>Horizon School</b>	-0.10 <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	0.08*
Mother has a full-time job	-0.19
Income	0.04
Household dependence of government assistance	-0.02
Child lives with father and mother	-0.19
Respondent’s marital status	0.07
Age of mother	-0.01
Number of children in family	-0.01
Grandparents born in U.S.	0.06
Residential mobility	0.19
Catholic	-0.08
Protestant	0.20
Other religion	-0.16
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	0.28
Child has physical disability	1.07**
Child has learning disability	-0.22
Grade level	0.14***
<b>Constant</b>	-1.98*
<b>Adjusted R<sup>2</sup></b>	.11
<b>N</b>	248

The dependent variable consists of an index of the student self-esteem items listed in Table 17 under “percentage of students who agree with the following:.” Ordinary least squares regression conducted. \* significant at the .1 level, two-tailed test conducted; \*\* significant at .05; \*\*\* significant at .01.

<sup>1</sup> While the model predicts that attending a Horizon school decreases a student’s self-esteem by 0.1 standard deviations, this effect is not statistically significant.

**Table 2.10 –Frequency of Delinquency among Friends (Student Reports)**

	<b>Index of Delinquency among Friends</b>
<b>Horizon School</b>	-0.51*** <sup>1</sup>
<b>Household demographic controls:</b>	
Mother education	0.05*
Mother has a full-time job	0.03
Income	-0.06
Household dependence of government assistance	-0.17**
Child lives with father and mother	0.16
Respondent’s marital status	0.11
Age of mother	-0.00
Number of children in family	0.02
Grandparents born in U.S.	-0.05
Residential mobility	0.16
Catholic	-0.03
Protestant	-0.51
Other religion	-0.17
<b>Child-specific demographic controls:</b>	
Child of Latino or Hispanic background	-0.03
Child has physical disability	-0.58
Child has learning disability	-0.68
Grade level	0.02
<b>Constant</b>	0.56
<b>Adjusted R<sup>2</sup></b>	.13
<b>N</b>	257

The dependent variable consists of an index of the delinquency items listed in Table 17 under “percentage of students who have none of the following types of friends:.” Ordinary least squares regression conducted. \* significant at the .1 level; \*\* significant at the .05 level; \*\*\* significant at the .01 level.

---

<sup>1</sup>The model predicts that 69% of EISD students have more delinquent friends than the typical Horizon student. Expressed in another way, the effect of attending a Horizon school is to reduce student reports of peer delinquency by 0.48 standard deviations.