

# **Student Satisfaction in Charter Schools: The Relationship Between School Characteristics and Student Opinion**

Amy M. Pieper

Texas Center for Educational Research

[www.tcer.org](http://www.tcer.org)

Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA, April 13, 2004

## **Student Satisfaction in Charter Schools: The Relationship Between School Characteristics and Student Opinion**

In 1995, the 74th Texas Legislature passed statutes establishing state charter schools. This legislation allowed for the creation of 20 open-enrollment charter schools. Texas charter schools may be sponsored by an institution of higher education (public or private), a non-profit organization (501(c)(3)) as set out in the Internal Revenue Code, or a governmental entity. Two years after the initial charter school legislation, the Texas Legislature provided for the creation of an additional 100 open-enrollment charter schools. Furthermore, this legislation allowed for an unlimited number of charter schools serving primarily students at risk of failure or dropping out of school. To be classified as this type of school, enrollment must include 75% or more at-risk students. The number of these 75% Rule charter schools grew over the next several years and in 2000-01, they accounted for 51 of the state's 160 charter schools. In 2001, the Texas Legislature eliminated the 75% Rule charter school designation and limited the number of charters that the State Board of Education may grant to 215. In 2002-03, 185 open-enrollment charter schools operated in Texas, serving over 46,000 students.

Charters schools in Texas and nationally represent one facet of the growing school choice movement. Based on a free-market economy concept, charter schools provide families with an alternative to the traditional neighborhood public school. As the charter school movement has grown, it has become of greater interest to understand why families choose charter schools for their children and their level of satisfaction with charter schools. While research has addressed the factors that influence parents' choice of a charter school and their satisfaction with charter schools, few large-scale studies have addressed *students'* opinions on these issues. One study found that three-fifths of students say their charter school teachers are better than their previous school teachers (Vanourek, Manno, Finn, and Bierlein, 1997). Results from the five-year evaluation of Texas charter schools show similarly high levels of satisfaction among charter school students. Over 80 percent of Texas charter school students surveyed reported being *satisfied* or *very satisfied* with their school in the 2001-02 school year (Barrett, 2002).

This research is part of the overall state evaluation of Texas open-enrollment charter schools conducted annually by the Texas Center for Educational Research. The purpose of this study is to examine factors influencing school choice and student satisfaction with charter schools and to determine how these factors vary depending on the proportion of at-risk students served by the school or the performance rating of the school.

### **METHODOLOGY**

#### **Survey Procedures**

Researchers randomly selected a sample of 61 charter schools (34% of Texas charter schools) and 78 associated campuses to participate in statewide student surveys. The survey of charter school students gathers information on student characteristics, schools previously attended, reasons for choosing charter schools, grades earned, satisfaction with charter schools, views on charter schools, and future plans. In March 2003, the administrator of each campus at the randomly selected charter schools received a packet including student surveys. Administrators

were asked to distribute the surveys to all teachers in their building who teach students in grades 6 to 12. The packet included one survey for every student in these grade levels, with student counts based on campus enrollments reported in the Texas' Academic Excellence Information System (AEIS) report for 2001-02. If additional surveys were needed, administrators could copy the survey or request additional surveys. Instructions for each teacher asked that they administer the surveys during the first period (or at the beginning of the school day) and ensure that each student respond to the survey only once. After administering the survey, teachers collected the surveys and returned them to the campus administrator. Administrators then mailed all student surveys in postage-paid envelopes or boxes to the Texas Center for Educational Research. Of the 10,377 student surveys distributed, 5,159 surveys were returned, for an overall response rate of 50%. The 5,159 student survey respondents in the sample represent about 10% of charter school students statewide.

## **Comparison Groups**

For this study, some analyses consider charter schools as a group, but in many cases an aggregate fails to capture the wide variation among schools. In particular, analyses examine student survey results by the proportion of at-risk students enrolled and by the school's Texas accountability system rating.

***Analysis by at-risk classification.*** Charter schools that serve a predominately at-risk student population are often quite different from those serving less at-risk students. For this reason, researchers have grouped charter schools to distinguish between those serving more advantaged students and those serving a preponderance of students who are at-risk of failure or dropping out of school. Because schools serving different populations often have different missions, curriculum, and pedagogy, student survey data presented in this paper are frequently divided into two groups for the purpose of analysis: (a) data from charter schools serving primarily at-risk students (70% or more) and (b) charter schools serving less than 70% at-risk students. Researchers used students' economically disadvantaged status as a surrogate for at-risk classification. The 70% cut-point, in contrast to the 75% instituted by the charter school legislation, was selected to ensure that charter schools serving Juvenile Justice Alternative Education Programs (JJAEPs)—which unquestionably serve a highly at-risk student population—were included in the comparison group with predominately at-risk students.

***Analysis by accountability rating.*** Districts and campuses in Texas are rated based a number of indicators outlined in the accountability system, including student performance on state assessments, dropout rates, and attendance. Additionally, alternative education campuses may apply to be rated under the alternative education system instead of the standard accountability system. Rating standards under the alternative education system are somewhat different than those used to evaluate campuses under the standard system. Table 1 outlines the ratings assigned to campuses under standard and alternative systems. Data from charter schools rated under both accountability systems are included in this paper. To create comparison groups based on accountability ratings, campuses were organized into three groups—those receiving high-performing ratings of Exemplary or Recognized (standard system) or Commended (alternative education system); those receiving Acceptable ratings in either the standard or alternative education system; and those receiving ratings of Low-Performing (standard system) or Needs Peer Review (alternative education system).

Table 1  
Texas Accountability System Ratings and Comparison Group Categories

Standard Accountability	Alternative Education	Comparison Group Category
Exemplary	Commended	High-Performing
Recognized	--	High-Performing
Acceptable	Acceptable	Acceptable
Low-Performing	Needs Peer Review	Low-Performing

Table 2 shows the distribution of student survey respondents. Although the overall response rate was 50%, students in schools serving less at-risk students responded at a markedly higher rate (60%) than those from schools serving primarily at-risk students (38%). However, the distribution of 38% of respondents from schools serving primarily at-risk students and 60% of respondents from schools serving less at-risk students closely approximates the statewide student population in charter schools which is 38% from schools serving primarily at-risk students and 62% from schools serving less at-risk students. The accountability ratings for responding schools generally correspond to the statewide distribution of charter school accountability ratings.

Table 2  
Distribution of Student Survey Respondents, by School Type

School Type	Number of Campuses Surveyed	Number of Campuses Responding	Number of Students Surveyed	Number of Respondents	Percent of Students Responding
CS ≥ 70% At-Risk	28	15	4,830	1,818	37.6
CS < 70% At-Risk	36	32	5,547	3,341	60.2
High-Performing	6	6	893	678	75.9
Acceptable	25	19	3,791	2,081	54.9
Low-Performing	23	18	4,912	2,030	41.3
Not Rated	10	4	781	370	47.4
Total	64	47	10,377	5,159	49.7

*Note.* CS=charter school.

### Characteristics of Survey Respondents

Table 3 displays the demographic characteristics of student survey respondents. The majority of students (70%) are between 13 and 17 years of age. This is expected considering only students in grades 6 through 12 were surveyed. Overall, survey respondents, similar to students statewide, are concentrated in the upper grade levels, with between 16% and 18% of respondents in each of the high school grade levels (9-12). Ninth graders are under-represented, whereas eleventh and twelfth graders are over-represented in the sample. The grade-level distribution of respondents varies only slightly between schools serving different proportions of at-risk students. Generally, males and females are equally represented among survey respondents, similar to the state as a whole. The racial/ethnic distribution of the sample respondents also differs from the statewide distribution, with African American students under-represented in the sample.

Table 3  
 Characteristics of Student Survey Respondents (Percent)

Characteristic	All Respondents <i>N</i> =5,159	Charter Schools Statewide <i>N</i> =46,304
Age		
12 and under	12.6	--
13 to 17	69.6	--
18 and over	17.8	--
Grade Level		
6	11.5	10.1
7	11.2	10.9
8	9.1	9.7
9	15.8	25.4
10	18.0	19.8
11	18.4	13.8
12	16.0	10.2
Gender		
Male	51.0	51.8
Female	49.0	48.2
Race/Ethnicity		
Hispanic	42.2	37.9
African American	26.6	40.1
White	23.7	20.4
Other	7.5	1.6

### Development of Analytic Weights

Weighting of survey data is used to correct imbalances between the population of inference (i.e., Texas charter school students) and actual survey respondents. Analytic weights can be developed so that, when applied to the survey data, the survey responses are balanced to reflect known population distributions, thus appearing “representative.” The use of analytic weights, however, increases the likelihood of sampling errors. Thus, if weighted survey data do not differ substantially from raw survey data, then analytical weights may not be necessary. For this survey, researchers explored the use of analytic weights because the student survey sample respondents differed substantially from the overall student population of Texas charter schools (Table 3). African American students are under-represented in the survey sample respondents (27% compared to 40% statewide), whereas Hispanic and White students are slightly over-represented (42% compared to 38% statewide, and 24% compared to 20% statewide). The grade-level distribution of the survey sample is comparable to charter schools statewide, with the exception of ninth grade, which is under-represented and eleventh and twelfth grades, which are over-represented.

Researchers determined that the race/ethnicity variable was the most salient and, thus, calculated weights based on this variable. Data analyses were completed for both the raw survey data and the weighted survey data. After comparing these analyses, it was determined that the weighted results did not differ substantially from the unweighted results. Therefore, weighted results are not utilized in this paper.

## RESULTS

Surveys administered to students focused on two primary areas of interest—factors influencing students’ choice of charter school (11 items) and students’ opinion and satisfaction with their current charter school (14 items). For each set of items, a one-way multivariate analysis of variance (MANOVA) was conducted to evaluate mean differences in student responses based on type of school (those serving primarily at-risk or those serving fewer at-risk students) and accountability rating of the school (high-performing, acceptable, low-performing). On each of these MANOVA analyses, overall significant differences were found between the comparison groups (Table 4). However, tests of equality of covariance matrices indicated that covariance matrices were unequal across groups, therefore, analysis of variance (ANOVA) tests were conducted on each dependent variable to further test mean differences. Results and discussion of this ANOVA analysis are the focus of the sections below.

Table 4  
Multivariate Analysis of Variance Results for Comparison Groups  
on Reason for Choice and Satisfaction Variables

	Wilk’s $\Delta$	F-value	p	Effect Size (partial $\eta^2$ )
<b>Reason for choice</b>				
At-risk classification	.959	16.89	.000	.041
Accountability rating	.900	19.96	.000	.051
<b>Satisfaction</b>				
At-risk classification	.911	30.11	.000	.089
Accountability rating	.815	30.61	.000	.097

### Factors Influencing School Choice

The vast majority of Texas charter school students report they previously attended a traditional public school (84%), with only small proportions of students moving from private schools (6%) or home schooling (3%). To identify reasons why they and their families chose a charter school, students rated several items on a 4-point scale as *not important* (1), *somewhat important* (2), *important* (3) or *very important* (4) in their choice of a charter school. Figure 1 displays students’ responses, with each bar on the chart representing those respondents indicating a factor had at least some level of importance.

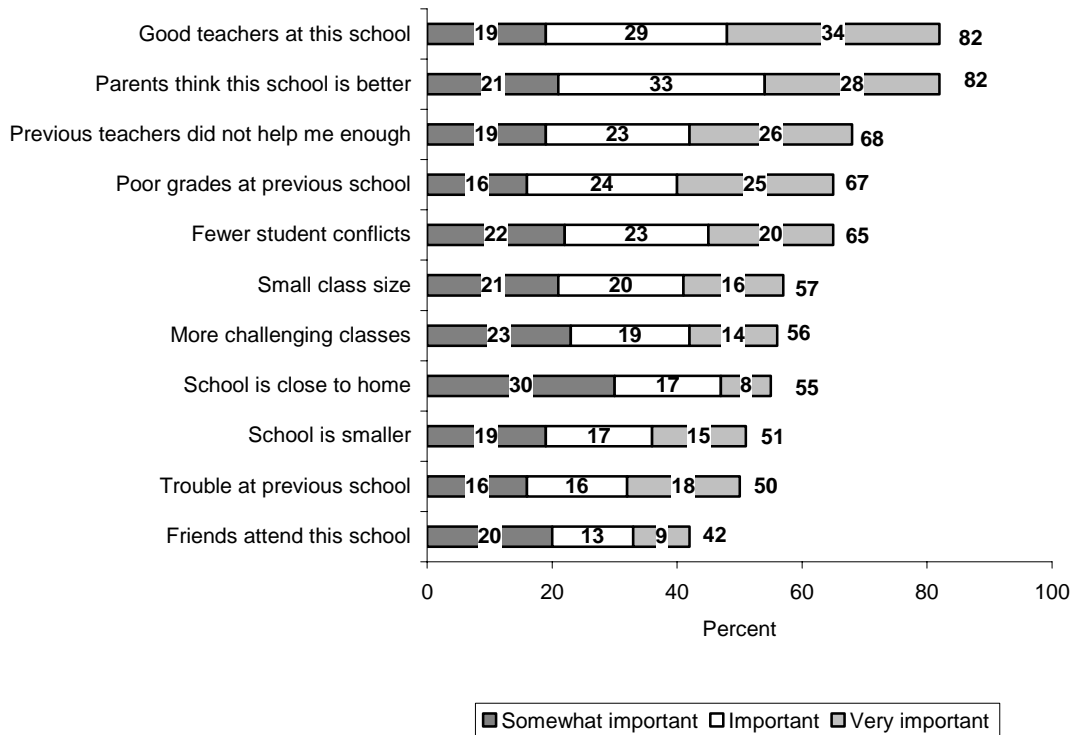


Figure 1. Percent of students reporting factors as *somewhat important*, *important*, or *very important* in their decision to attend the charter school.

Overall, students indicate that teacher quality (82%) and their parents’ opinions of the school (82%) are the most important factors influencing their decision to attend the charter school. Other influential factors include previous teachers not helping enough (68%), poor grades at a previous school (67%), and fewer student conflicts (65%). Factors considered the least important in students’ choice of the charter school include its proximity to their home (55%), experiencing trouble at their previous school (51%), and the presence of friends at the school (42%).

**Comparisons by at-risk classification.** An analysis of variance was conducted to evaluate the relationship between students’ reasons for choosing a charter school and the at-risk classification of the school. Table 5 presents these results for the two groups of students on each of the 11 *reason for choice* variables. Since group sample sizes differed and variances were unequal, the Brown-Forsythe test of equality of means was utilized, which does not assume equality of variances. For 8 of the 11 *reason for choice* variables, statistically significant differences in means are seen between students attending schools serving primarily at-risk students and those attending schools with lower percentages of at-risk students. On all but one of the significant comparisons, students in schools serving less at-risk students rated each *reason for choice* variable higher than did students attending schools serving primarily at-risk students. “I got into trouble at my previous school” was the only variable rated significantly more important by students attending schools serving primarily at-risk students than by students attending schools serving fewer at-risk students. However, effect sizes (partial  $\eta^2$ ) are quite small (.00-.02), indicating a weak relationship between at-risk classification and reasons for choosing a charter school.

Table 5  
Analysis of Variance Means, Standard Deviations, and *F*-Values for Reasons for  
Choosing a Charter School by At-Risk Classification

Reason for choice variable	CS ≥ 70%	CS < 70%	<i>F</i> -value	<i>p</i>	Effect size
	At-Risk	At-Risk			
	Mean ( <i>SD</i> ) <i>n</i> =1,818	Mean ( <i>SD</i> ) <i>n</i> =3,341			
Good teachers at this school	2.65 (1.14)	2.86 (1.08)	39.16***	.000	.01
Parents think this school is better	2.48 (1.09)	2.83 (1.04)	121.91***	.000	.02
Poor grades at previous school	2.42 (1.18)	2.39 (1.22)	.88	.347	.00
Previous teachers did not help me enough	2.33 (1.19)	2.47 (1.18)	15.81***	.000	.00
Fewer student conflicts	2.15 (1.13)	2.35 (1.14)	35.12***	.000	.01
Small class size	2.01 (1.14)	2.13 (1.12)	13.07***	.000	.00
Trouble at previous school	2.11 (1.20)	1.97 (1.16)	16.74***	.000	.00
More challenging classes	2.01 (1.12)	2.06 (1.08)	2.43	.119	.00
School is smaller	1.97 (1.16)	1.98 (1.10)	.18	.672	.00
School is close to home	1.84 (0.98)	1.92 (0.96)	9.28**	.002	.00
Friends attend this school	1.69 (0.99)	1.78 (1.01)	8.85**	.003	.00

*Note.* Charter schools serving 70% or more at-risk students, *N*= 15; charter schools serving less than 70% at-risk students, *N*=32. \*\**p*<.01. \*\*\**p*<.001.

**Comparisons by accountability ratings.** An analysis of variance was conducted to evaluate the relationship between students' reasons for choosing a charter school and the accountability rating of the school. Table 6 presents these results for the three groups of students on each of the 11 *reason for choice* variables. The Brown-Forsythe test of equality of means was utilized, which does not assume equality of variances. For all of the *reason for choice* variables, statistically significant differences in means are seen between students attending schools receiving different accountability ratings. Pairwise comparisons were conducted to find which group mean differences were significant. Since variances for the dependent variables differ, post hoc comparisons were conducted using the Dunnett's *C* test, which does not assume equality of variances.

On most items, significant differences in means were evident between high-performing and acceptable schools and between high-performing and low-performing schools. For example, students in all three categories rated teacher quality and parental opinion factors as the most influential reasons for their choice of school. Students in more highly rated schools, however, assigned significantly higher levels of importance to teacher quality and parental opinion than

did students in less highly rated schools. Notable exceptions to this pattern are for two items: “I was not getting good grades at my previous school” and “I got into trouble at my previous school.” On these items, students in acceptable or low-performing schools rate these reasons significantly more important than students in high-performing schools. Overall, however, effect sizes (partial  $\eta^2$ ) are quite small (.00-.03), indicating a weak relationship between accountability rating and reasons for choosing a charter school.

Table 6  
Analysis of Variance Means, Standard Deviations, and *F*-Values for Reasons for Choosing a Charter School by Accountability Rating

Reason for choice variable	High-Performing	Acceptable	Low-Performing	<i>F</i> -value	<i>p</i>	Effect size
	Mean ( <i>SD</i> ) <i>n</i> =678	Mean ( <i>SD</i> ) <i>n</i> =2,081	Mean ( <i>SD</i> ) <i>n</i> =2,030			
Good teachers at this school	3.14 <sub>ab</sub> (1.03)	2.83 <sub>ac</sub> (1.08)	2.69 <sub>bc</sub> (1.10)	42.57***	.000	.02
Parents think this school is better	3.12 <sub>ab</sub> (0.99)	2.73 <sub>a</sub> (1.05)	2.63 <sub>b</sub> (1.05)	53.64***	.000	.02
Previous teachers did not help me enough	2.48 (1.17)	2.49 (1.19)	2.38 (1.18)	4.84	.008	.00
Poor grades at previous school	1.96 <sub>ab</sub> (1.15)	2.50 <sub>a</sub> (1.21)	2.49 <sub>b</sub> (1.18)	55.87***	.000	.02
Fewer student conflicts	2.49 <sub>a</sub> (1.16)	2.33 <sub>b</sub> (1.14)	2.21 <sub>ab</sub> (1.11)	17.03***	.000	.01
Small class size	2.12 (1.13)	2.19 <sub>a</sub> (1.14)	1.96 <sub>a</sub> (1.09)	20.92***	.000	.01
More challenging classes	2.43 <sub>ab</sub> (1.13)	2.06 <sub>ac</sub> (1.09)	1.86 <sub>bc</sub> (1.02)	72.90***	.000	.03
Trouble at previous school	1.77 <sub>ab</sub> (1.12)	2.08 <sub>a</sub> (1.19)	2.02 <sub>b</sub> (1.17)	16.50***	.000	.01
School is smaller	1.94 (1.08)	2.02 <sub>a</sub> (1.12)	1.91 <sub>a</sub> (1.10)	5.42**	.004	.00
School is close to home	1.81 <sub>a</sub> (0.96)	1.89 (0.93)	1.95 <sub>a</sub> (0.99)	5.53**	.004	.00
Friends attend this school	2.01 <sub>ab</sub> (1.11)	1.70 <sub>a</sub> (0.97)	1.71 <sub>b</sub> (0.98)	26.32***	.000	.01

*Note.* High-performing campuses, N=6; Acceptable campuses, N=19; Low-performing campuses, N=18. Schools not rated are not included in analysis. \*\**p*<.01. \*\*\**p*<.001. Means with the same subscripts differ significantly, Dunnett’s *C*, *p*<.01.

### Satisfaction with Charter Schools

Researchers also sought to gauge students’ satisfaction with and beliefs about their current charter school. Students rated a variety of statements (e.g., “I feel safe at this school”) on a 4-point scale as *strongly disagree* (1), *disagree* (2), *agree* (3), or *strongly agree* (4). Figure 2

displays students' responses in order of their level of agreement. The vast majority of students (89%) agree or strongly agree that they work hard to earn the grades they get at the charter school. Large percentages of students also indicate that their teachers know them by name (81%), help them understand concepts (80%), and encourage them to think about their future (80%). Approximately three out of four students feel that the charter school is a good choice for them (77%), feel safe at school (73%), and learn more at this school (71%). However, only half (52%) of the students believe that other students help them learn and students are interested in learning (56%). In addition, only 39% agree that the school has enough extracurricular activities, and only 30% agree that they have more homework at their current school than at their previous school.

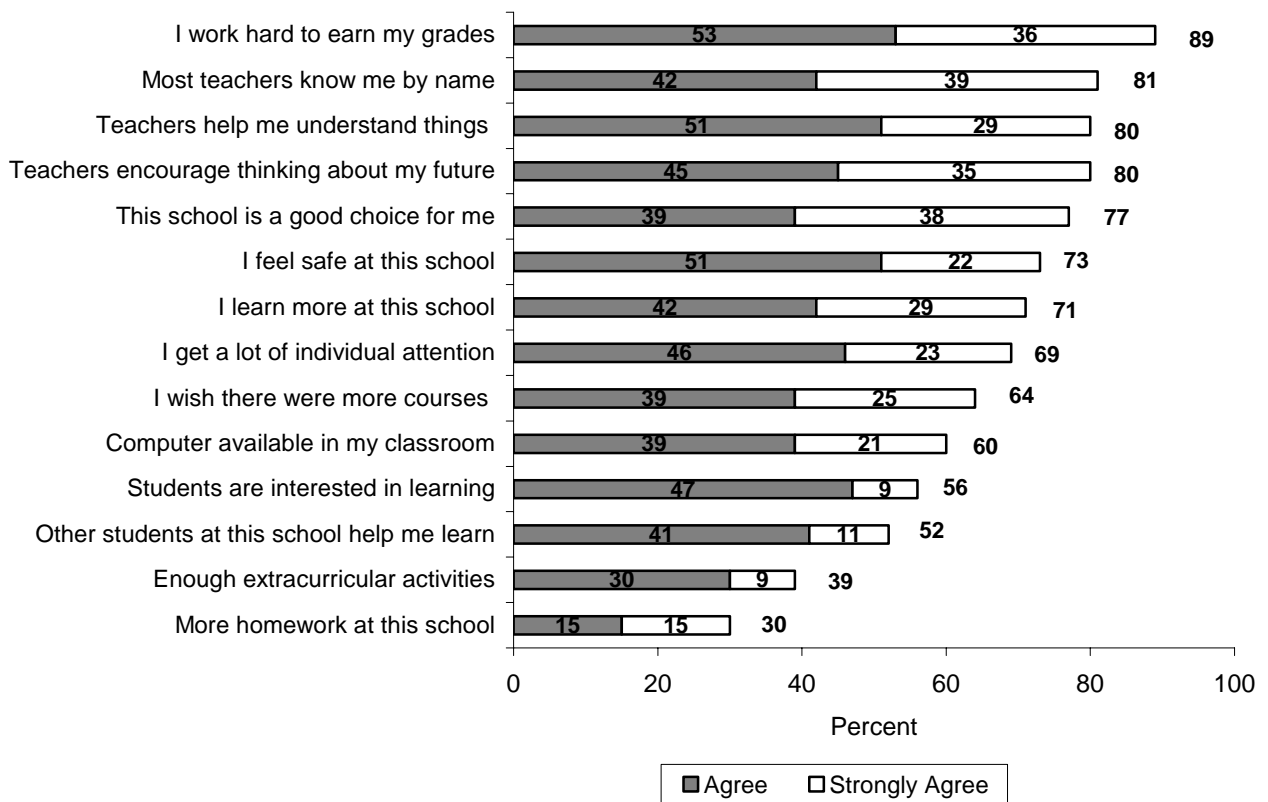


Figure 2. Students' opinions about their charter school.

**Comparisons by at-risk classification.** An analysis of variance was conducted to evaluate the relationship between students' opinions regarding their charter school and the at-risk classification of the school. Table 7 presents these results for the two groups of students on each of the 14 *satisfaction* variables. The Brown-Forsythe test of equality of means was utilized, which does not assume equality of variances. For 13 of the 14 *satisfaction* variables, statistically significant differences in means are seen between students attending schools serving primarily at-risk students and those attending schools with lower percentages of at-risk students. On all of the significant comparisons, students in schools serving less at-risk students rated each satisfaction variable more favorably than did students attending schools serving primarily at-risk students. Most striking is the difference in ratings between the two groups of students for the statement, "this school is a good choice for me." This item received significantly lower ratings

from students at schools serving primarily at-risk students. The effect size (partial  $\eta^2$ ) for this comparison was also noticeably higher than other comparisons (.05); however, it is still small.

Table 7  
Analysis of Variance Means, Standard Deviations, and *F*-Values for Satisfaction with Charter School by At-Risk Classification

Satisfaction variable	CS $\geq$ 70% At-Risk	CS < 70% At-Risk	<i>F</i> -value	<i>p</i>	Effect size
	Mean ( <i>SD</i> ) <i>n</i> =1,818	Mean ( <i>SD</i> ) <i>n</i> =3,341			
Most teachers know me by name	2.96 (0.92)	3.26 (0.79)	149.21***	.000	.03
Teachers encourage thinking about my future	2.98 (0.90)	3.13 (0.84)	32.84***	.000	.01
Teachers help me understand things	2.93 (0.87)	3.06 (0.82)	25.98***	.000	.01
Students are interested in learning	2.32 (0.92)	2.58 (0.84)	103.18***	.000	.02
Other students help me learn	2.23 (0.94)	2.57 (0.89)	160.55***	.000	.03
I learn more at this school	2.67 (1.00)	3.00 (0.91)	138.68***	.000	.03
I feel safe at this school	2.61 (0.96)	2.96 (0.85)	175.25***	.000	.03
I get a lot of individual attention	2.72 (0.93)	2.89 (0.87)	42.44***	.000	.01
This school is good choice for me	2.73 (1.09)	3.17 (0.91)	237.21***	.000	.05
I wish there were more courses	2.78 (0.98)	2.79 (0.92)	.04	.847	.00
Computer available in my classroom	2.45 (1.05)	2.72 (0.97)	83.25***	.000	.02
Enough extracurricular activities	2.06 (0.95)	2.27 (0.96)	53.76***	.000	.01
More homework at this school	2.00 (0.99)	2.11 (1.09)	11.53**	.001	.00
I work hard to earn my grades	3.16 (0.79)	3.24 (0.69)	14.53***	.000	.00

*Note.* Charter schools serving 70% or more at-risk students, N= 15; charter schools serving less than 70% at-risk students, N=32. \*\**p*<.01. \*\*\**p*<.001.

**Comparisons by accountability ratings.** An analysis of variance was also conducted to evaluate the relationship between students' opinions regarding their charter school and the accountability rating of the school. Table 8 presents these results for the three groups of students on each of the 14 *satisfaction* variables. The Brown-Forsythe test of equality of means was utilized, which does not assume equality of variances.

Table 8  
Analysis of Variance Means, Standard Deviations, and *F*-Values for Satisfaction  
with Charter School by Accountability Rating

Satisfaction variable	High- Performing	Acceptable	Low- Performing	<i>F</i> -value	<i>p</i>	Effect size
	Mean ( <i>SD</i> ) <i>n</i> =678	Mean ( <i>SD</i> ) <i>n</i> =2,081	Mean ( <i>SD</i> ) <i>n</i> =2,030			
Most teachers know me by name	3.37 <sub>ab</sub> (0.78)	3.15 <sub>a</sub> (0.85)	3.11 <sub>b</sub> (0.83)	23.61***	.000	.01
Teachers encourage thinking about my future	3.37 <sub>ab</sub> (0.81)	3.08 <sub>a</sub> (0.85)	3.03 <sub>b</sub> (0.85)	40.01***	.000	.02
Teachers help me understand things	3.34 <sub>ab</sub> (0.73)	3.06 <sub>ac</sub> (0.82)	2.90 <sub>bc</sub> (0.84)	71.48***	.000	.03
Students are interested in learning	2.78 <sub>ab</sub> (0.86)	2.50 <sub>a</sub> (0.86)	2.46 <sub>b</sub> (0.85)	33.46***	.000	.01
Other students help me learn	2.85 <sub>ab</sub> (0.88)	2.41 <sub>a</sub> (0.90)	2.42 <sub>b</sub> (0.90)	63.64***	.000	.03
I learn more at this school	3.26 <sub>ab</sub> (0.89)	2.90 <sub>a</sub> (0.96)	2.83 <sub>b</sub> (0.91)	51.93***	.000	.02
I feel safe at this school	3.15 <sub>ab</sub> (0.86)	2.90 <sub>ac</sub> (0.88)	2.79 <sub>bc</sub> (0.85)	41.18***	.000	.02
I get a lot of individual attention	3.07 <sub>ab</sub> (0.83)	2.87 <sub>a</sub> (0.88)	2.78 <sub>b</sub> (0.87)	26.48***	.000	.01
This school is good choice for me	3.13 (0.95)	3.08 (0.98)	3.10 (0.92)	0.77	.464	.00
I wish there were more courses	2.97 <sub>ab</sub> (0.91)	2.81 <sub>ac</sub> (0.92)	2.70 <sub>bc</sub> (0.93)	21.35***	.000	.01
Computer available in my classroom	2.57 <sub>a</sub> (0.99)	2.68 (0.99)	2.74 <sub>a</sub> (0.97)	6.81**	.001	.00
Enough extracurricular activities	2.65 <sub>ab</sub> (1.10)	2.21 <sub>ac</sub> (0.92)	2.07 <sub>bc</sub> (0.90)	92.63***	.000	.04
More homework at this school	2.96 <sub>ab</sub> (1.49)	1.91 <sub>a</sub> (0.99)	1.88 <sub>b</sub> (0.91)	326.67***	.000	.12
I work hard to earn my grades	3.21 (0.68)	3.24 (0.71)	3.22 (0.73)	0.79	.456	.00

*Note.* High-performing campuses, N=6; Acceptable campuses, N=19; Low-performing campuses, N=18. Schools not rated are not included in analysis. \*\**p*<.01. \*\*\**p*<.001. Means with the same subscripts differ significantly, Dunnett's C, *p*<.01.

For 12 of the 14 *satisfaction* variables, statistically significant differences in means are seen between students attending schools receiving different accountability ratings. Pairwise comparisons were conducted to find which group mean differences were significant. Since variances for the dependent variables differ, post hoc comparisons were conducting using the

Dunnett's C test, which does not assume equality of variances. On most items, significant differences in means were evident between high-performing and acceptable schools and between high-performing and low-performing schools. The most notable difference of this type was the variable "I have more homework at this school than my previous school" for which an effect size (partial  $\eta^2$ ) of .12 was calculated, much larger than the other comparisons. Students attending high-performing charter schools are far more likely than other students to report that they have more homework at their current school. These students also indicated more positive satisfaction ratings on a number of items related to teacher quality and the learning environment, such as: "most teachers know me by name," "teachers encourage me to think about my future," "other students at this school help me learn," and "I get a lot of individual attention from my teachers."

Only four items showed significantly different mean ratings from students in acceptable schools versus students in low-performing schools: "my teachers help me understand things we are learning in class," "I feel safe at this school," "I wish there were more courses to choose from," and "this school has enough extracurricular activities." For the majority of significant items, students in higher performing schools rated items more favorably than students in lower performing schools. The one exception to this pattern concerns the availability of computers in the classroom. Students in schools rated low-performing were significantly more likely to say that classroom computers are available, compared to students in high-performing schools.

## **SUMMARY AND OBSERVATIONS**

### *Factors Influencing School Choice*

Charter school students overall indicate that teacher quality and the opinions of their parents are the most important factors influencing their decision to attend a charter school. When comparing students' reasons for attending a charter by the at-risk classification and accountability rating of the school, however, a few notable differences emerged. Students attending schools serving primarily at-risk students are more likely to cite conditions in their previous school (typically a traditional public school) as a factor in their decision. These students more often reported making poor grades at their previous school (although not statistically significant) and getting into trouble at their previous school as more important in their decision than did students attending schools serving less at-risk students. This finding is not surprising, as it further illustrates the differences in these types of charter schools. Other findings from the sixth-year statewide evaluation of charter schools provide further context to these results. In a survey of traditional public school administrators, 62% indicated that at-risk students in their districts were informed about alternative learning programs in charter schools. Open-ended responses reflected these findings, with administrators making comments such as, "charter schools are alternatives for dropouts and an option for problem, atypical students" (Sherron, 2003). Thus, students attending charter schools serving primarily at-risk students may choose these schools for different reasons than other students, but they also may be more likely to receive information about charter schools serving at-risk populations.

Somewhat more surprising is that students in schools rated acceptable or low-performing also rated these items of greater importance than students in high-performing schools. This finding may result from the fact that typically few charter schools serving primarily at-risk students receive high-performing ratings (Sheehan and Shapley, 2003). Therefore, students attending schools serving primarily at-risk students are more likely to be included in the school groups

rated acceptable or low-performing. This may also help account for the fact that students in schools serving primarily at-risk students and those in schools receiving lower accountability ratings generally assign lower ratings to many of the *reason for choice* variables. While the similarity of these two groups may help explain their similar responses, it does not shed light on *why* these students assign lower ratings to the *reason for choice* variables. Another factor that may play a role in this finding is the level of input students have in the decision to attend a charter school. Some of the schools included in both the at-risk and lower performing comparison groups serve students who do not attend the school by choice. Schools in this group include Juvenile Justice Alternative Education Programs (JJAEP), residential treatment facilities, or similar institutions to which students are assigned by the legal system. Because of this, these students potentially had very little input in the decision to attend the school, and therefore, their ratings on the *reason for choice* variables are generally lower.

### *Satisfaction With Charter Schools*

Many of the same patterns of student responses seen in relation to factors influencing school choice are also evident in satisfaction with charter schools. Students in schools serving primarily at-risk students and those in less highly rated schools appraised their schools significantly less favorably on the majority of satisfaction indicators. As previously noted, the similarly low ratings among these two groups may be due to the inclusion of some of the same students in both comparison groups and the lower levels of input into the decision of the school. One would not be surprised to find that students having little input into the choice of their school would also assign low satisfaction ratings to the school.

Perhaps more importantly, however, are the satisfaction items that distinguish schools receiving different accountability ratings. Students in higher performing schools differ most significantly in their satisfaction with the teaching and learning environment of the school. For example, these students are more likely to feel they are learning more at their school, that they receive individual attention, and that other students in the school are interested in learning. This finding is also supported by a case study analysis conducted to examine differences in the characteristics of higher performing and lower performing charter schools in Texas (Shapley, 2003). In this analysis, similar characteristics, such as teacher quality, supportive organizational structures, and enriched curriculum and instruction, were associated with higher performing charter schools. Both these findings, therefore, provide support for the notion that differences in the instructional and organizational characteristics of the school, not only differences in students, distinguish higher performing and lower performing charter schools.

While the relationship between charter school type and student opinion is complex, findings from this research strengthen the idea that these differences not only reflect the diversity of students served by these schools, but may also reflect differences in the instructional and organizational qualities of the schools. Future research should explore more in-depth the dimensions of choice and satisfaction that distinguish different groups of schools.

## References

- Barrett, E. (2002). Chapter V: Student satisfaction. In *Texas open enrollment charter schools: Fifth year evaluation* (pp. 47-60). Austin, TX: Texas Center for Educational Research.
- Shapley, K. (2003). Chapter XI: Commentary and policy implications. In *Texas open enrollment charter schools: Sixth year evaluation* (pp.149-162). Austin, TX: Texas Center for Educational Research.
- Sheehan, D. and Shapley, K. (2003). Chapter VIII: Student performance. In *Texas open enrollment charter schools: Sixth year evaluation* (pp. 93-114). Austin, TX: Texas Center for Educational Research.
- Sherron, T. (2003). Chapter IX: Effects of charter schools on traditional school districts. In *Texas open enrollment charter schools: Sixth year evaluation* (pp. 115-128). Austin, TX: Texas Center for Educational Research.
- Vanourek, G., Manno, B., Finn, C., & Bierlan, L. (1997). Charter schools as seen by those who know them best: Students, teachers, and parents. Hudson Institute. Charter Schools in Action Project. [www.edexcellence.net/chart/chart1.htm](http://www.edexcellence.net/chart/chart1.htm). (retrieved 6/12/03).