

ALLIANCE FOR CHOICE IN EDUCATION

Annual Evaluation Report - Colorado

2016-17 Evaluation Report

Quantitative Research Evaluation & Measurement

February 2, 2018

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Executive Summary

The 2016-17 ACE Colorado Report highlights the impacts of sending a child to a school of the parents' choice. In addition to measuring school attitudes and satisfaction, this report examines academic proficiency as measured by standardized tests, attendance, and per-pupil costs of attending a private school.

The most significant benefits to ACE students include:

- **Higher proficiency rates** – ACE students across all grade levels and levels of family income post test scores that are at or above proficiency in both reading and mathematics. Proficiency rates are higher than students in Denver and Colorado.
- **Notably higher four-year graduation rates by ACE scholars than their low-income peers** – Nearly 91% of all ACE scholars between 2013 and 2017 graduated from high school. This is 26 points higher than students graduating from DPS schools and more than 13 points higher than the four-year rolling average of all Colorado students graduating during this period.
- **Students are in school longer** – Higher proficiency rates and ACT scores are the result of ACE students spending more time on their studies. Private school students stay in school an average of one hour more each day, which translates into their attending school 28.2 days more than their public-school peers in Colorado.
- **Students are proficient after two years participating in the program** – It takes approximately two years for new ACE students to become proficient in mathematics and reading.

Key findings on parents and families include:

- **Families indicate higher stability** – As a whole, families spent more time at the school of their choice than they did at their previous or current address.
- **Parents and youth are satisfied with their school** – Both parents and students are satisfied with attending a private school, as both groups feel that these schools are safer and provide a high-quality education. Both feel that students have a high level of engagement as well.
- **Families make strong contributions to their child's education** – As a whole, parents contribute 23.7% of the average tuition, which is equivalent to 11.2% of the per capita of a family with two adults and two children or 16.9% of the per capita of a single-parent household with three children.

Key findings for school buildings include:

- **Per-pupil costs are much lower than public schools** – The per-pupil cost in private schools is \$1,549 less than the cost to educate a child in the Denver Public School (DPS) system and \$753 less than the cost of educating a child at a Colorado public school. Coupled with the stronger academic results, this demonstrates that private schools offer greater value than public schools.
- **Empty seats at ACE schools** – Approximately 20% of the seats at ACE's partner schools are empty.

Methodology

School and student data were collected through ACE as authorized by the scholarship agreement. Data related to attendance, test scores, and graduation come from school administrators, and all data are from the 2016-17 academic year. Individual identifiers were masked, no master lists are maintained, and only aggregate data are being reported. Parent and student perception and opinion data were collected directly by ACE or through the schools' assistance. All comparative data were derived from open-access data sets from the National Center of Education Statistics, the United States Census, the Bureau of Labor Statistics, and the Colorado Department of Education. All student data collected for this report remain the property of ACE and were analyzed according to the ethics and standards outlined and promoted by the American Evaluation Association.

Public-access data were acquired for purposes of comparing them to ACE data. School data center on school district boundaries, and national data—such as census information or median incomes—use county boundaries and metropolitan statistical boundaries. Public schools make distinctions between elementary and middle school or are combined and labeled K-8.

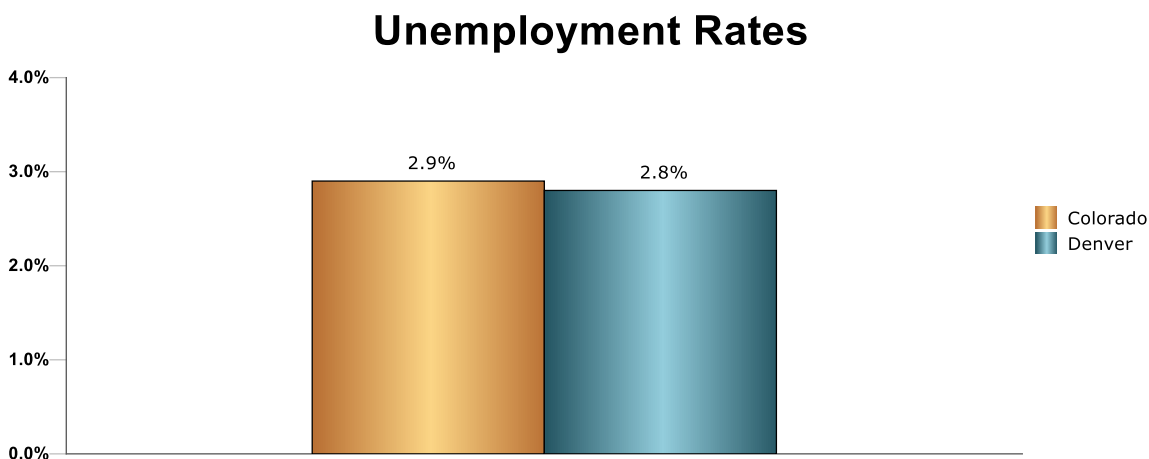
Analytical techniques include basic descriptive analyses for demographic information, means testing for group progress such as grade level or gender using ANOVA, ANCOVA, and MANCOVA, correlational and linear regression, and structural equation models. Data were analyzed using Excel and SPSS V.21 and AMOS statistical software. Key variables include: gender, ethnicity, age, grade level, household size and composition, and annual income. Additionally, parent, teacher, and student surveys contain critical elements of school satisfaction, volunteerism, voting habits, educational level, trust, and expectations of education. Social science research allows for comparisons across categorical lines (gender, ethnicity, etc.) with a minimum sample size of 30 (Hair et al., 1998).

Missing data at the individual and group level were dealt with using approximation and matched interpolation. Since missing data were both random (at the individual level) and non-random (group level), two separate methodologies were applied. First, for random missing data, listwise deletion was applied to separate calculations (Hair and Tatham, 2001). Second, for non-random missing data, dummy variables were created for between-group comparisons (group with responses and group without responses). Analyses were then performed between the two groups to account for response bias, which were then incorporated into the final analyses (Cohen and Cohen, 1983).

All findings, unless stipulated, are from the most recent (2016-17) academic year for both comparison data and findings from ACE students and parents.

Research & Background

Colorado is one of the fastest-growing states in the US, adding more than 400,000 people between 2010 and 2015 (Murphy, 2016). The economy is also booming, with both Colorado and Denver reporting less than 3% unemployment. However, despite the signs of a strong economy, it is limited by the comparatively small number of available workers to fill jobs (Svaldi, 2017; Bureau of Labor Statistics, 2018).



Colorado's population is also growing disproportionately in large cities¹, putting a strain on municipal services and creating what is commonly called the "Colorado Paradox." This refers to the reality that while Denver is attracting a large population of highly educated young adults from across the country, the native Colorado population does not have the same level of education, and the state's education system is struggling to adapt to the demographic shifts. Not only are there a growing number of children who require education, but the quality of education offered must rise to meet the standards demanded by Colorado's highly educated transplants.

Colorado's schools have been ranked as mediocre to poor based on several reports. *Education Week's* "Quality Counts" report grades Colorado schools as a C (73.9 out of 100) and ranks them 25th out of the 50 states and Washington DC. Meanwhile, Denver and Colorado Springs rank 16th and 5th respectively in a list of the 160 most educated metropolitan areas (Denver Business Journal, 2015). This creates significant pressure, as Colorado will either need to improve its education system or continue to attract highly educated workers from other states to keep up with the demand for workers. According to an article in *The Atlantic*:

¹ Forecasts show that Denver, Boulder, and Pueblo will grow, but at slower rates than cities in Northern Colorado and the Western Slope. However, in total number of people, Denver, Fort Collins, and Colorado Springs are expected to add over 1 million new residents (births and transplants) (Svaldi, 2017).

“Right now, half of the adults from out-of-town in Denver, the state’s largest city, have a college degree. But less than a third of the city’s adults born in Colorado can say the same, and that statistic is even worse for people of color. According to state data, four years after they started college in 2011, 32 percent of white students had at least one credential, compared to just 14.5 percent of black students and 21 percent of Latino students. And children of color make up a growing portion of the state’s K-12 students, as they do nationwide. Educators and state officials need to figure out how to help these students graduate from high school and succeed in college, or fewer of the young people born in Colorado will find jobs there as adults.” (Deruy, 2016).

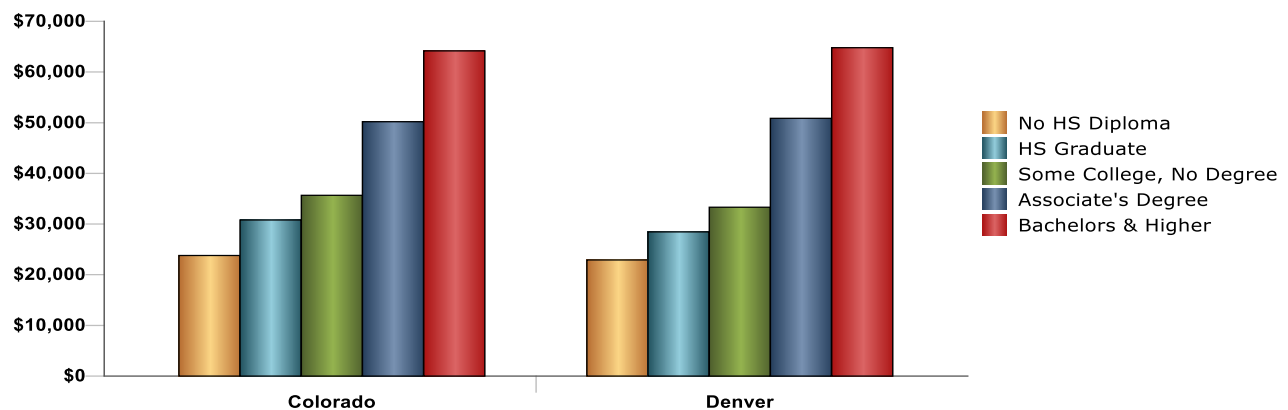
Colorado’s schools also face wide achievement gaps for children from lower socio-economic backgrounds (Garcia, 2017). These achievement gaps begin early in life. Researchers point to problems poor children face as far back as neonatal care where wealthier mothers can provide more nutrition to stimulate their baby’s brain development (Porter, 2015). Poor students come to Kindergarten one year behind their wealthier peers in terms of reading and math understanding. These problems compound when poor children attend schools with novice teachers and fewer resources to help them bridge the achievement gap (Porter, 2015). However, problems related to low-SES can be fixed. College for America found that when low-income students attend schools with structured social and academic support systems (e.g. private schools rather than lower-quality public schools in poor neighborhoods), their chances for academic success and college completion increase (CFA, 2017). These non-monetary sources of support ameliorate the problems that poor students face.

Colorado schools need to deal with problems related to gentrification in city centers as well. As Colorado’s urban areas develop, low-income families face disruptions as they are forced to move between neighborhoods and schools, both of which can contribute to lower educational achievement (Swanson and Schnieder, 1999). Furthermore, low-income neighborhoods lag behind wealthier neighborhoods in Denver despite overall improvements (Robles, 2018). While Denver’s open-enrollment system and network of charter schools has improved outcomes for some students, school choice can lead to racial and ethnic sorting when it is not implemented carefully (Altrichter et al., 2011; Karsten et al., 2003; Glazerman, 1998), intensifying the problems of gentrification².

² The research on school choice shows that racial sorting through school choice can happen but exists on a curve. In areas that are already highly racially segregated, school choice leads to greater inclusion (Danielson et al., 2015; DeLuca and Dayton, 2009). However, when an area has high racial diversity, school choice can lead to racial sorting (Altrichter et al., 2011; Karsten et al., 2003; Glazerman, 1998).

These factors, among many others, make earning a college degree much more difficult. This is problematic, as earning a college degree comes with a myriad of benefits that put degree holders at an advantage compared to those without degrees. The most notable factor associated with possessing a college degree is higher wages (chart below). According to the American Community Survey, the median salary of an individual in Colorado or Denver with at least a bachelor's degree is more than \$64,000 per year, which is more than double the median salary of a Colorado resident with only a high school diploma and almost 80% higher than someone who went to college but did not earn a degree.³ Research also shows a strong correlation between the level of education attained by parents (particularly mothers) and that of their children, so education is a boon that persists through multiple generations (Chevalier et al., 2013).⁴

Salary by Educational Level



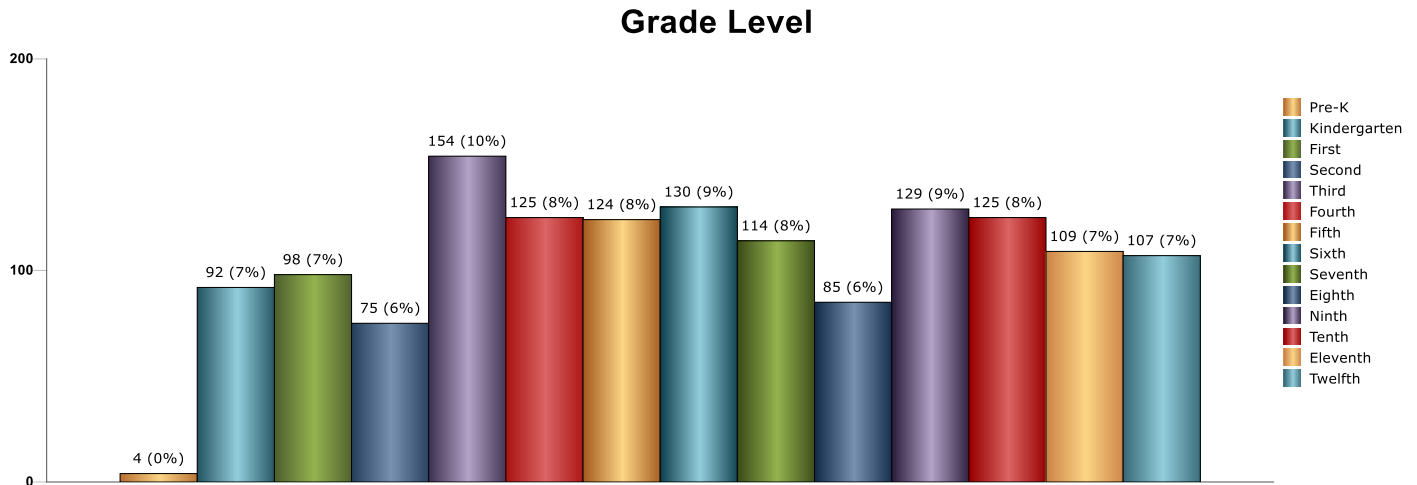
	Colorado	Denver
No HS Diploma	\$23,811	\$22,930
HS Graduate	\$30,823	\$28,445
Some College, No Degree	\$35,654	\$33,318
Associate's Degree	\$50,171	\$50,857
Bachelors & Higher	\$64,148	\$64,813

³ These figures are based on individuals who are 25 years and older.

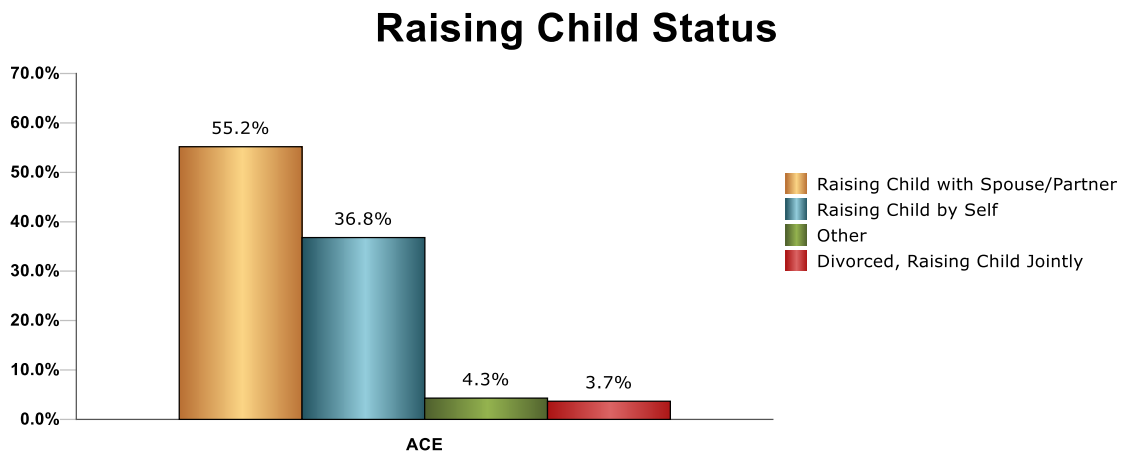
⁴ Research shows that fathers' education plays an integral role as well, especially with the amount of time spent in education, but mothers are typically the caretakers and have a stronger effect (Chevalier et al., 2013; Fahey, 2008; Lareau, 2003).

ACE Student Demographics

The ACE scholarship is available to qualified students in all grade levels. The distribution of students receiving the scholarship by grade level can be seen in the chart below⁵.



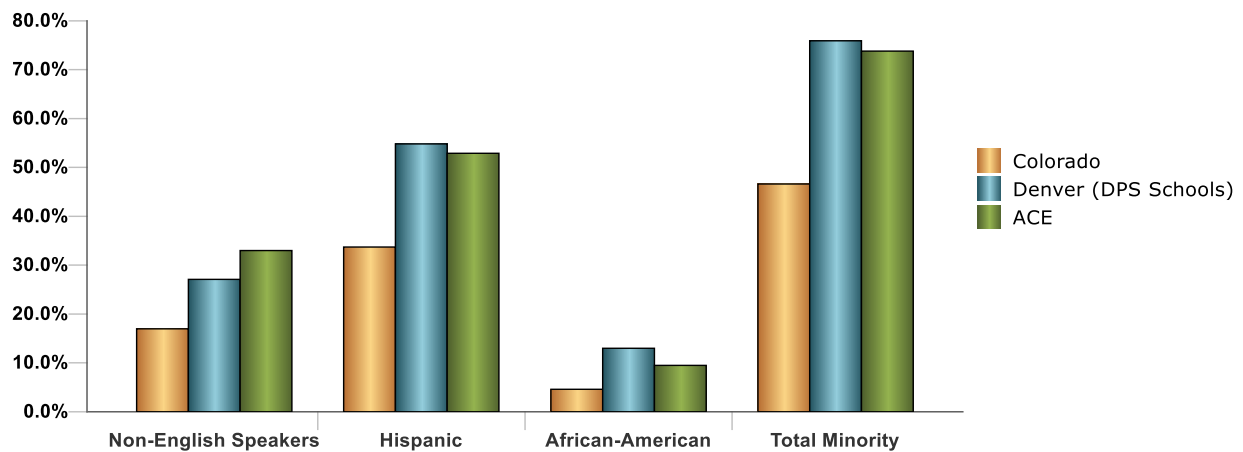
During the 2016-17 school year, a total of 1,471 children received ACE scholarships in Colorado. Most scholarship recipients were in grades K-8 (67%), and more than 55% were girls.



Approximately 37% of ACE students are being raised in single-parent households, but the majority (55.2%) of ACE parents are raising their child with a spouse or partner. More than 4% of children are raised in households that fall into the “other” category, which includes families with parents who are separated but not divorced, parents who are deployed, or children being raised by an adult who is not their parent.

⁵ Numbers are rounded to the next largest whole percentage point.

Ethnicity & Language



	Colorado	Denver (DPS Schools)	ACE
Non-English Speakers	17.0%	27.1%	33.0%
Hispanic	33.7%	54.8%	52.9%
African-American	4.6%	13.0%	9.5%
Total Minority	46.6%	75.9%	73.8%

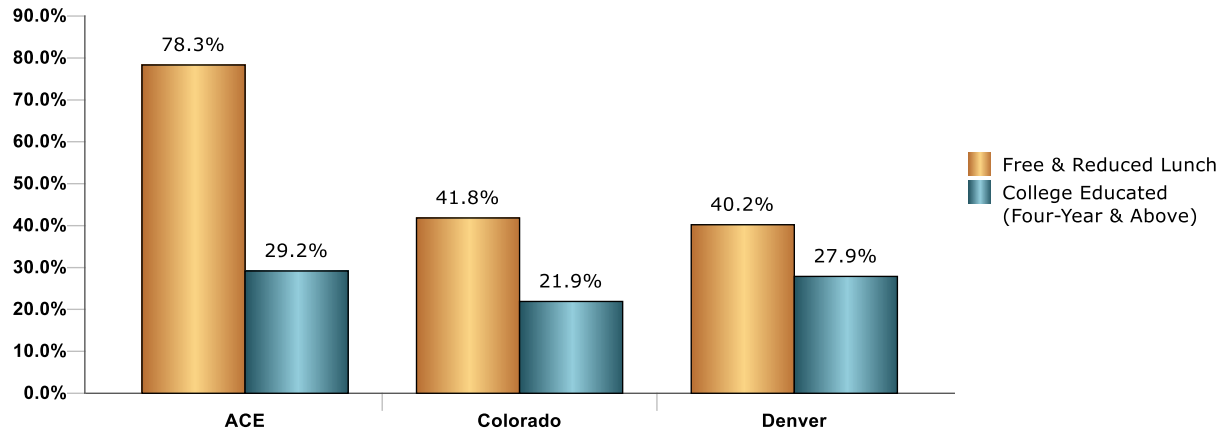
ACE serves a diverse population. Nearly a third of this group speaks a language that is not English—higher than the proportion of similar households within Colorado and Denver—and nearly 74% of its population are considered part of a minority group (Colorado Department of Education, 2018; US Census Bureau, 2018).⁶

Like traditional and charter public schools, ACE private schools have a mix of students from different economic backgrounds. Attending a school with students from higher income households has “a significant and substantive” impact on student achievement (Caldas and Bankston, 1997). This is an important benefit for low-income students in ACE schools, as most would otherwise attend public schools that are lower in quality compared to those in high-income neighborhoods.

One of the defining features of the ACE scholarship program is how it specifically targets children from low-income families (those that would qualify for the Federal Free and Reduced Lunch [FRL] program). Researchers and educators generally agree that this group of students is at the highest risk of dropping out of school (National Center for Education Statistics, 2015).

⁶ Children who come from homes where a language other than English is spoken often underperform compared to their peers (Hoff, 2013).

Economic Factors



More than 78% of students receiving ACE scholarships qualify for the FRL program⁷ – which serves as a proxy for low-income status in education. This is higher than the rate of students in Colorado and Denver who qualify for this program. In addition, only a slightly higher rate of ACE families possess at least a four-year degree compared to their peers in Denver and Colorado (Current Population Survey, 2017; Colorado Department of Education, 2018).

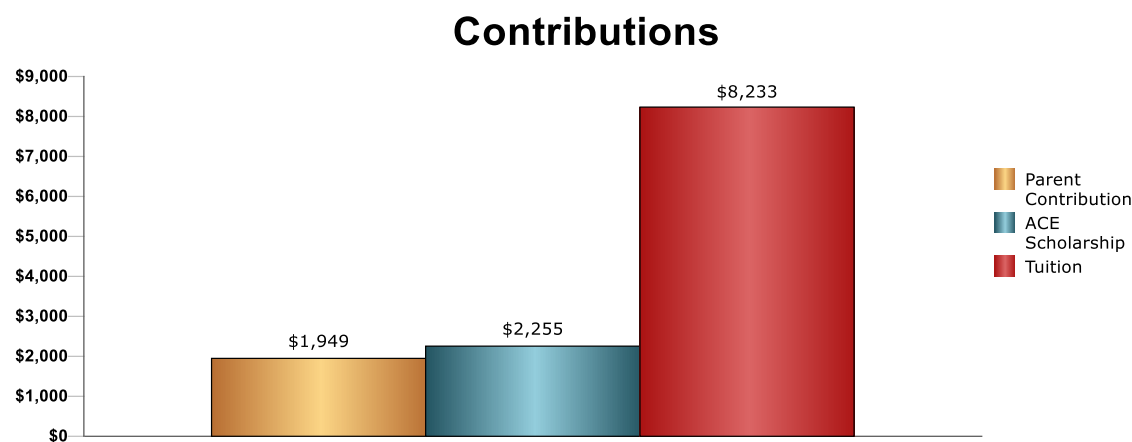
Research has shown that low household income has a negative effect on student achievement. Children raised in homes with lower incomes tend to perform worse on standardized tests, have higher rates of non-attendance, and graduate at lower rates (Morrissey, Hutchinson, and Winsler, 2013; Putnam, 2015). In his most recent book, *Our Kids*, Robert Putnam (2015) compared two schools, one with a high proportion of students benefitting from the FRL program (84%) and another with just a 23% FRL rate. Students from the school with the lower FRL rate performed better academically and on fitness tests than students from the school with the higher FRL rate. Research has shown that high income students attend highly selective colleges and universities in disproportionately large numbers as well (Reardon, 2013).

Parents' educational level is a strong predictor of student performance and household income. Children who have at least one parent with a college degree typically have more ambitious long-term aspirations (Fan and Chen, 2001), and home-school relationships tend to be stronger where parents are more educated as well (Epstein, 2000). Other factors related to parent education levels that positively impact student success include a decrease in violent behaviors (Eron, Walder, and Lefkowitz, 1971; Huesmann et al., 2002); a more stable home environment (Pew Research Center, 2015), and reduced rates of unemployment (Bureau of Labor Statistics, 2017). Finally, research has shown that the age a parent discontinued her education has an impact on the probability that her children will continue their education (Chevalier et al., 2013).

⁷ A low proportion of students, 21.7% --live in households where income exceeds the FRL qualification line. Because families begin to earn more, the longer their children remain at their private school, ACE extends the scholarship on a case-by-case basis for the remainder of the school year. On average, families who would not qualify for the FRL program earn \$22,000.00 more each year or slightly more than \$5100.00 more *per capita*.

	Median Household Size	Median Household Income	Per Capita
ACE	4.39	\$34,684.46	\$8,239.63
Colorado	2.4	\$62,520.00	\$26,050.00
Denver Metro	2.3	\$56,258.00	\$24,460.00

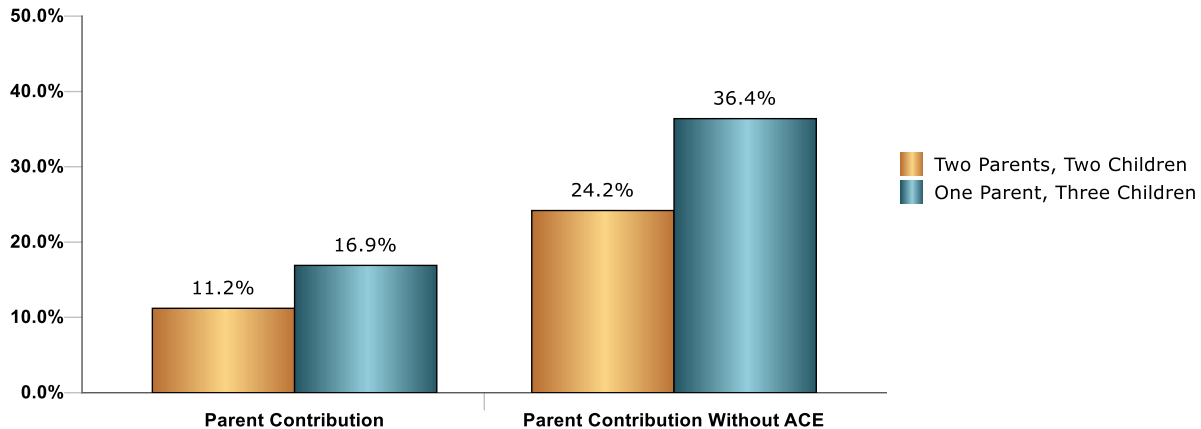
However, despite having a higher overall level of education, ACE families typically do not have the same earning power as their peers in Colorado and the Denver Metro region. On average, ACE families make about \$28,000 less than the median income of all households in Colorado and approximately \$21,500 less than the income of Denver households. ACE households have two more people per household than the average for Denver and Colorado as well. This translates to fewer resources per person, as ACE families' per capita income is 2.97 to 3.16 times smaller than the averages for Denver and Colorado respectively (American Community Survey, 2017).⁸



Despite having less income, ACE families devote a considerable portion of their household's resources to educating their children. On average, ACE parents contribute \$1,949 per child, which is 23.7% of the average tuition of \$8,233. The ACE scholarship is approximately \$2,255 per scholar, which comprises 27.4% of the cost of tuition.

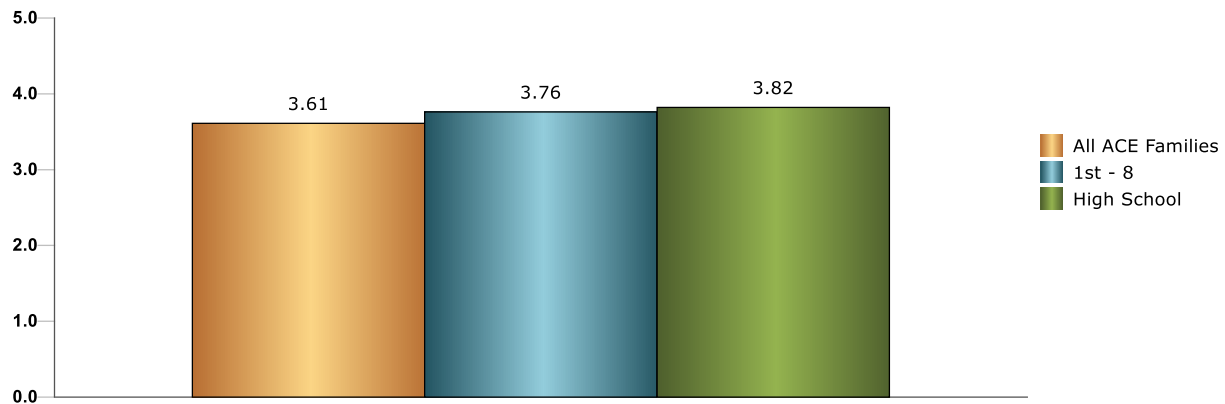
⁸ While the median household of an ACE family contains 4.39 persons, the median number of children is 3.4, and the median number of adults is 1.03. So, on average, this equates to a single parent taking care of three children.

Parent Commitment & ACE Impact



The average contribution per child shows a very strong commitment even though these families have little to spare. However, by looking at two examples of different household compositions that both match the median household size and income, it becomes apparent just how crucial ACE scholarships are to these families. For a family of four with two parents and two children, the average contribution would be 11.2% of their income with the ACE scholarship or 24.2% without it. Similarly, for a family with one parent and three children, the average parent contribution would be 16.9% of the family's income with the ACE scholarship and 36.4% without it. In both cases, the parent contribution would take a much larger bite out of these families' total incomes without the ACE scholarship offsetting some of the cost, making it nearly impossible for them to choose the best school for their children.

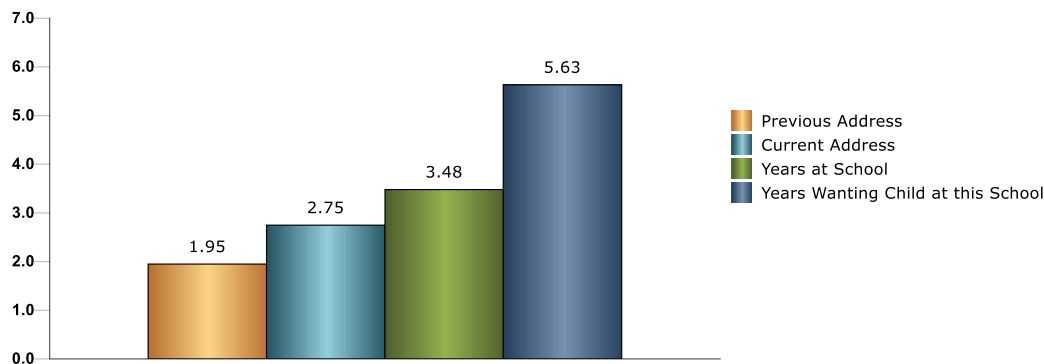
Average Years with ACE



It makes sense, that ACE families tend to stay with ACE for the long run. On average, all ACE families—including families of Kindergarten and Pre-K students—have spent 3.61 years with the program. ACE families of students in first through eighth grade have on spent 3.76 years with ACE, and families of high school students have been with ACE 3.82 years on average.

Stability

Stability at School

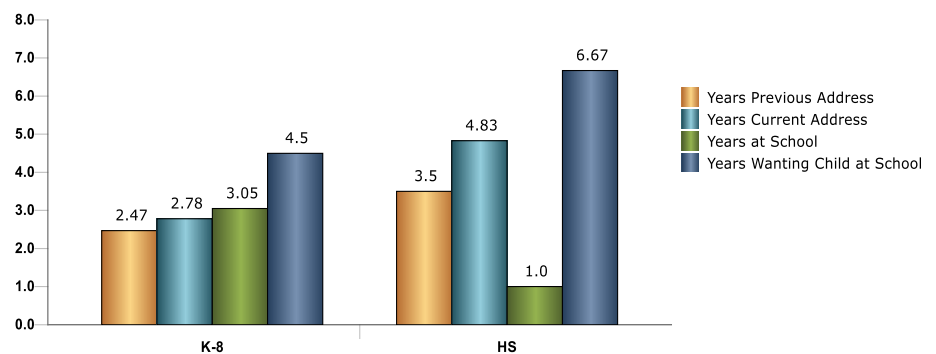


After starting at their current school, ACE students' families have stayed at their current addresses a full year longer than they stayed at their previous addresses (3.54

years to 2.51 years). More importantly, ACE children have attended their schools longer than they have lived at their current address by a full month, indicating that the schools are a stronger stabilizing influence than their homes.⁹ Years spent at the school reflects both satisfaction and parents' desire for their children to learn at that school. On average, ACE parents have wanted their children to attend their school longer than the length of time they resided at both their previous and current addresses. Student mobility has been shown to have a negative impact on student achievement as they try to cope with the transition to a new school (Schwartz et al., 2015).

The stabilizing influence of ACE schools is particularly notable in families of K-8 and high school students. Families of ACE high school students have spent about 16 months longer at their current address than their previous address, and K-8 families have been in their current school longer than they lived at their previous or current address.¹⁰ ACE parents as a whole also spent more time wanting their children to attend their current school than at any of their current or previous addresses.

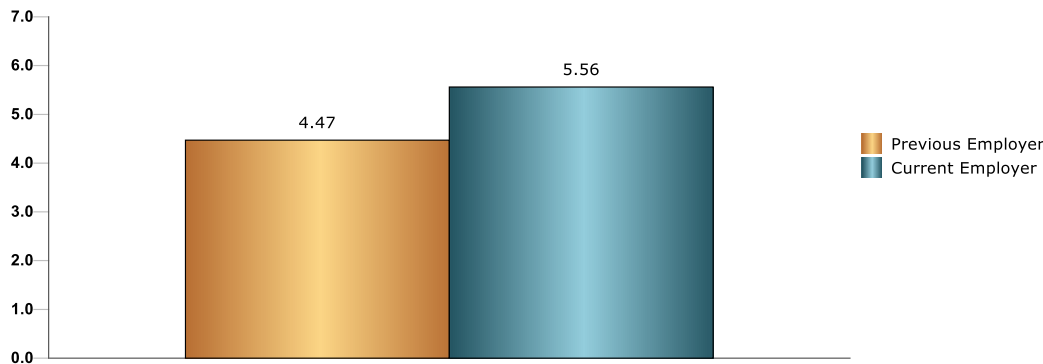
School Stability by School Status of Students



⁹ Unlike traditional public schools, children attending private schools are not forced into a new building should their parents move.

¹⁰ The reason why ACE Parents of high school students reported a low number at their current school is that most of their children were in school for only one year, as many were either Freshman or beginning their Sophomore year.

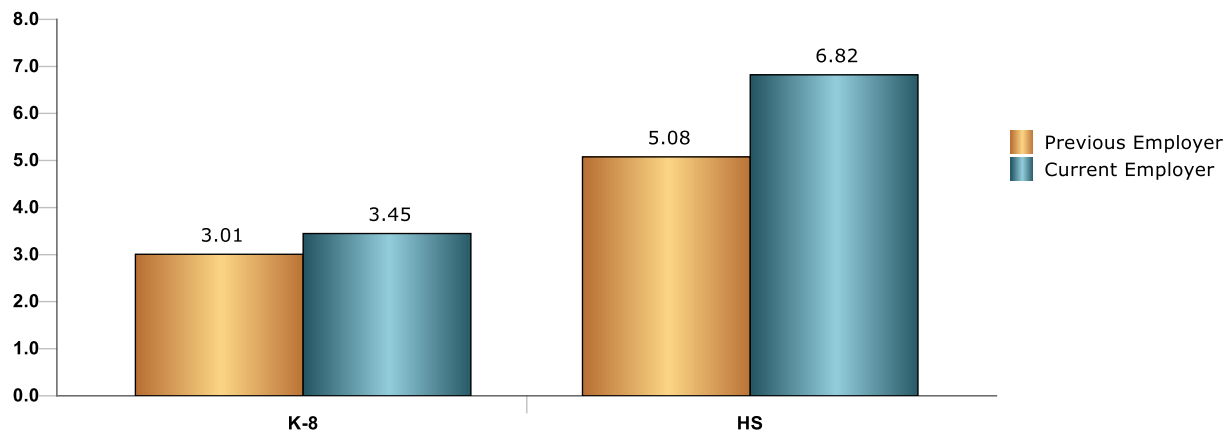
Stability in Employment



In addition to the benefit of children being able to attend the same school even if their families move, ACE parents reported working at

their current jobs thirteen months longer than they worked at their previous jobs. On average, US workers spend 4.2 years with the same employer; however, individuals without a high school diploma stay with an employer an average of 2.8 years (BLS, 2016).

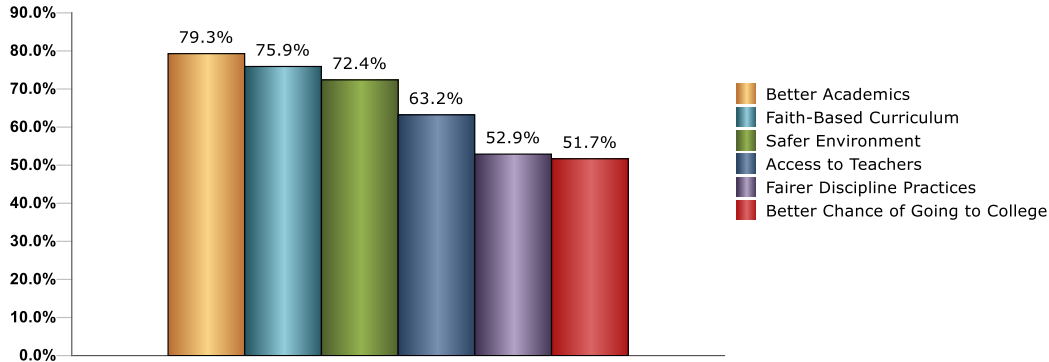
Stability in Employment of K-8 and High School Parents



The age of the student seems to have an impact on how long ACE families remain employed at either their current or previous jobs. Parents of K-8 students were at either their current or previous jobs for a little more than three years. Parents of ACE high school students, on the other hand, were at their previous jobs for slightly more than five years and have stayed in their current jobs for 6.8 years, or about 21 months longer than their previous job. ACE parents of K-8 students have also been in their current jobs longer, but only by about five months.

Selection

Top Reasons to Select a Private School

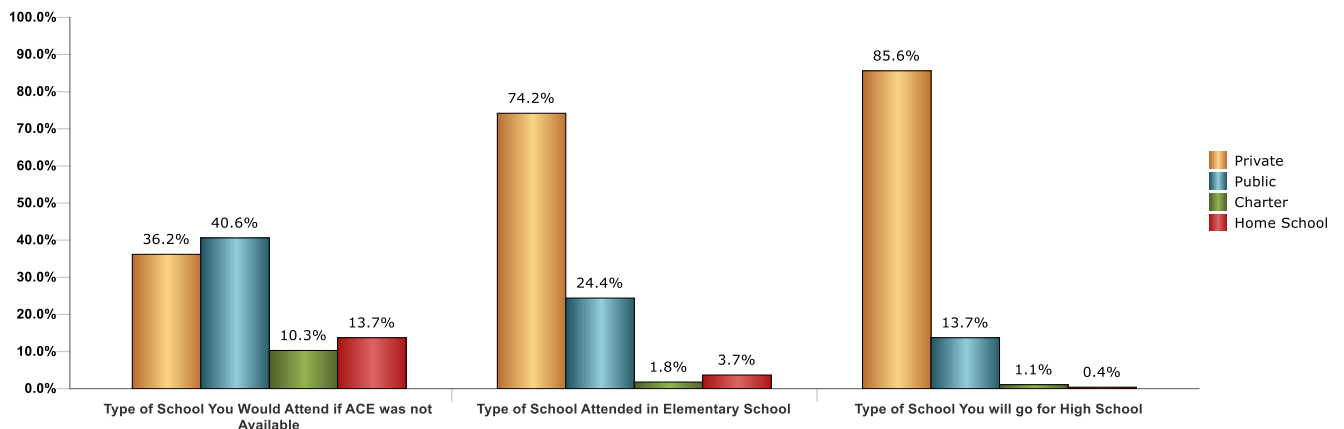


The chart to the left displays the factors that a majority of ACE parents cited for choosing a private school for their child.

Better academics was the most popular reason, followed by the

faith-based curriculum (79.3% and 75.9%, respectively). Overall, parents select private schools for primarily academic reasons, but safety is a critical component as well.

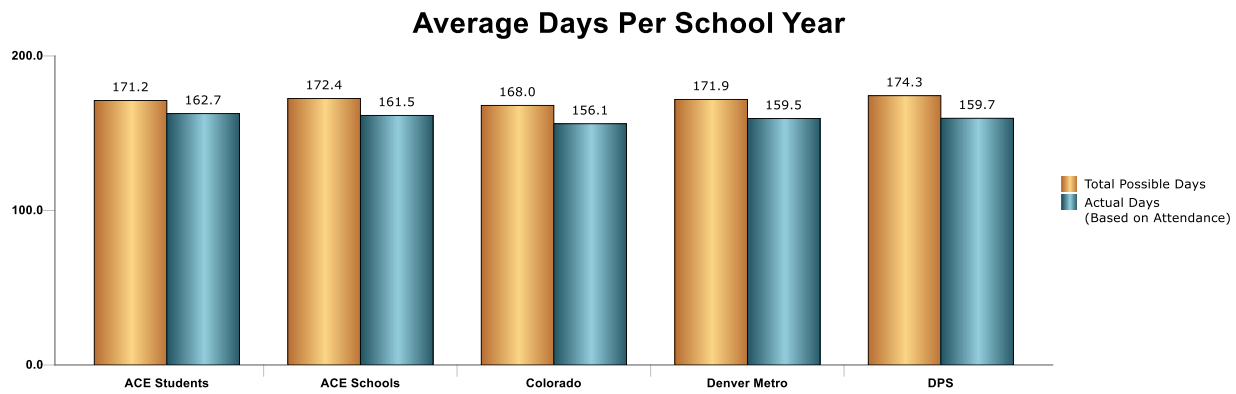
Students Choice of Schools



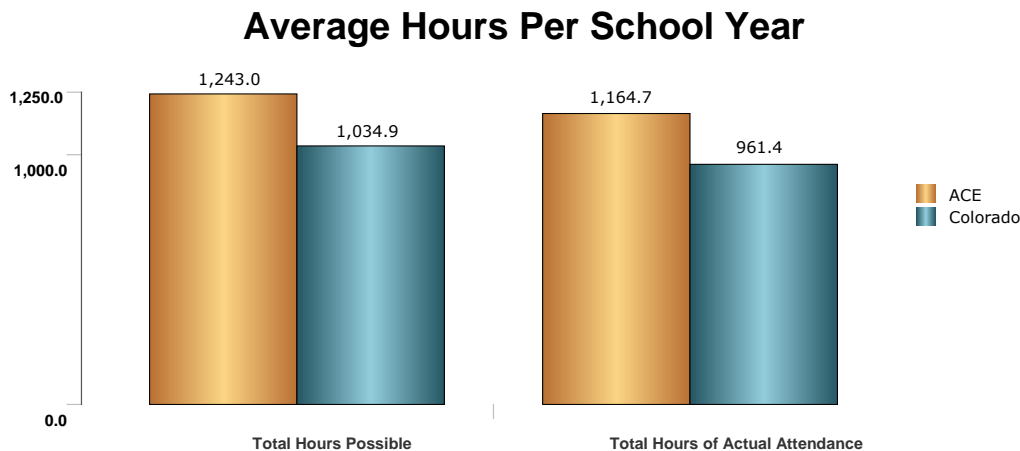
It is evident from the data that students prefer the school they attend and wish to continue attending that type of school in the future. More than 85% of middle school students stated that they wish to be enrolled in a private school when attending high school. However, many students recognized they would attend a public school if ACE did not exist (40.6%), and 10.3% said they may be enrolled at a charter school. These findings reinforce last year's findings, showing a strong likelihood that ACE students prefer their experiences at a private school to the possibility of attending other types of schools.

Student Academics

Attendance

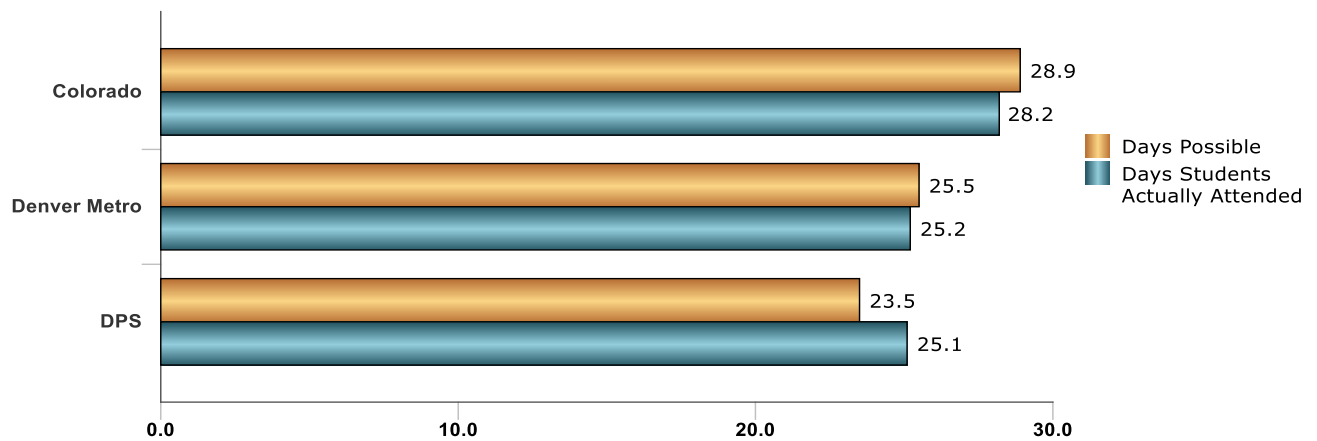


Over the previous five decades, research has proven that when children attend school more, they learn more and are more likely to graduate. While the total possible days that ACE students can attend school (171.2) is similar to schools across Colorado and Denver, when average attendance rates are factored in, ACE students actually spend more time in school than their peers in public schools (Colorado Department of Education, 2016).



ACE children also spend more time in school each day-- an average of 7.21 hours, which is a full hour more than Colorado students. When these hourly averages are considered as well, it becomes clear that ACE students spend quite a bit more time in school than other students in Colorado. Based on the total number of possible school days, ACE students could spend about 208 hours more in school each year than their peers throughout Colorado. When average attendance is factored in, ACE students spend about 203 more hours in school (Education Commission of the States, 2011; National Center for Education Statistics, 2017; Colorado Department of Education, 2018).

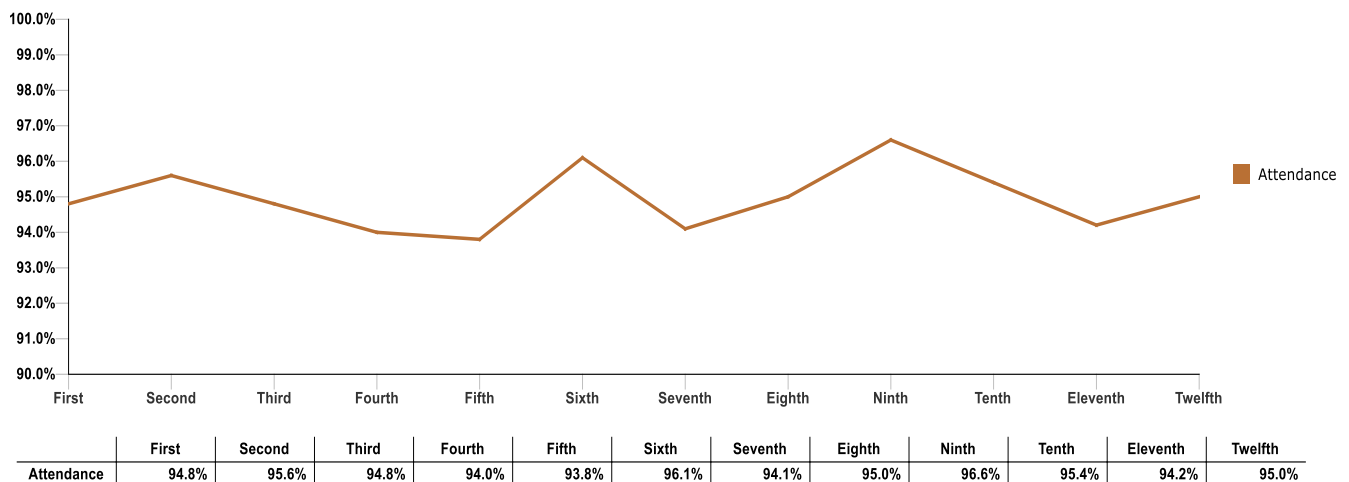
More Days that ACE Children Attend School



Denver Public Schools had more days possible students were in school due to a longer school calendar, but this school district reported the lowest attendance rate among Denver Metro and Colorado public schools.

All the extra hours that ACE students spend in school add up. The chart above illustrates that extra time in terms of extra days spent in school compared to students in Colorado, the Denver Metro area, and the Denver Public School system (DPS) based on possible school days and days students attended. Compared to Colorado, ACE students spend the equivalent of more than 28 full school days in class. ACE students also spend about 25 more school days' worth of time in class than students in Denver Metro and DPS schools. This is crucial for the low-income population that ACE serves, as research has shown that the achievement gap narrows when students are in school but widens the longer these children are out of school (Reardon, 2013). Of course, holding schools open for students only works when the students show up. The attendance rate for ACE children is very strong (chart below) at nearly 95%.¹¹

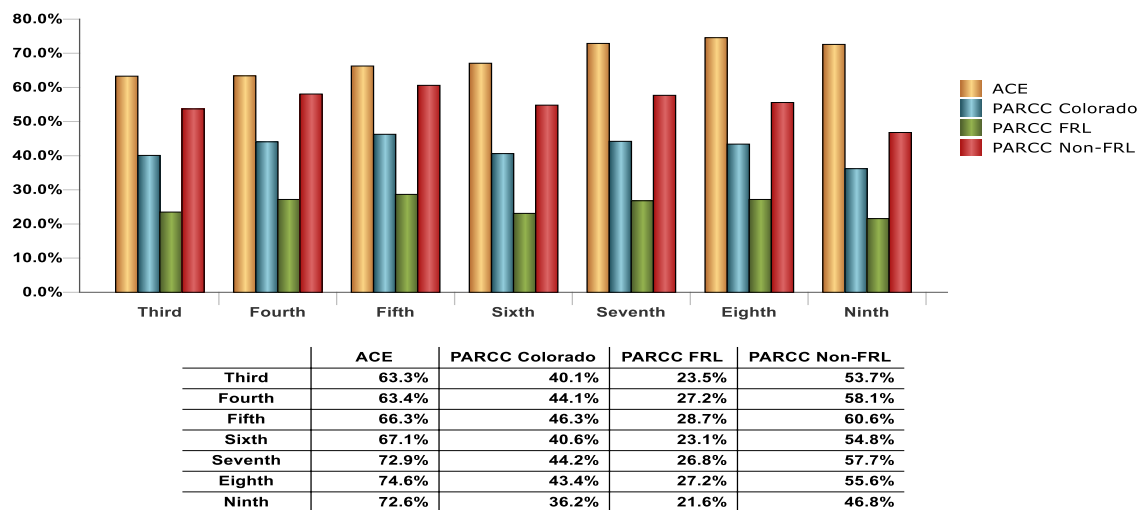
2016-17 ACE Attendance Rates



¹¹ Colorado public schools attendance rate is 92.9%.

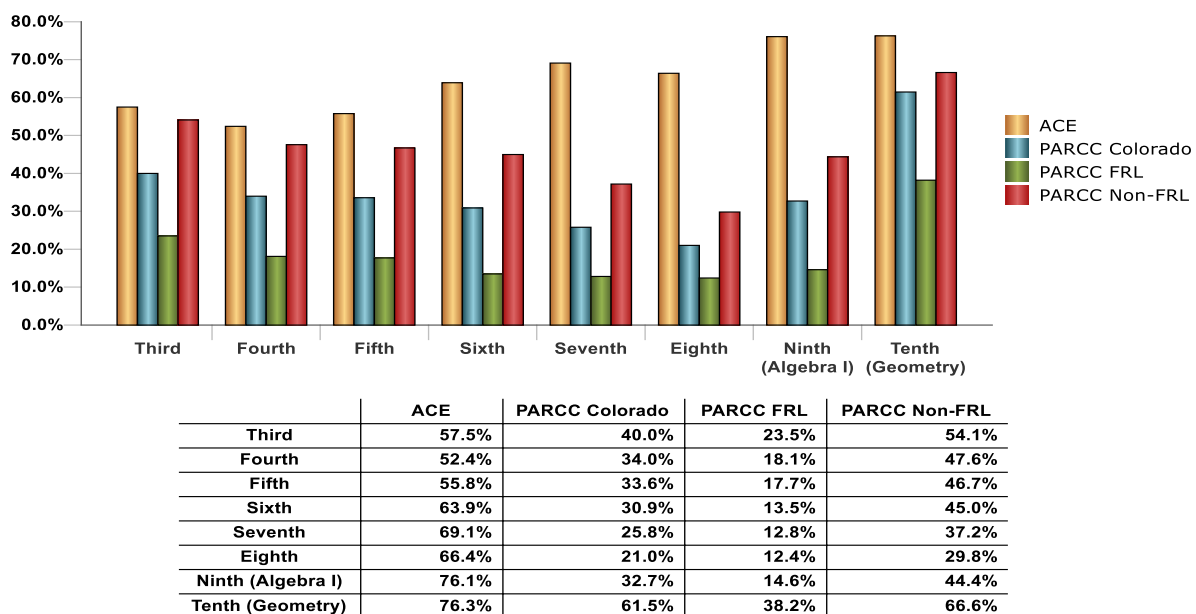
Academic Proficiency

Reading Proficiency Comparison



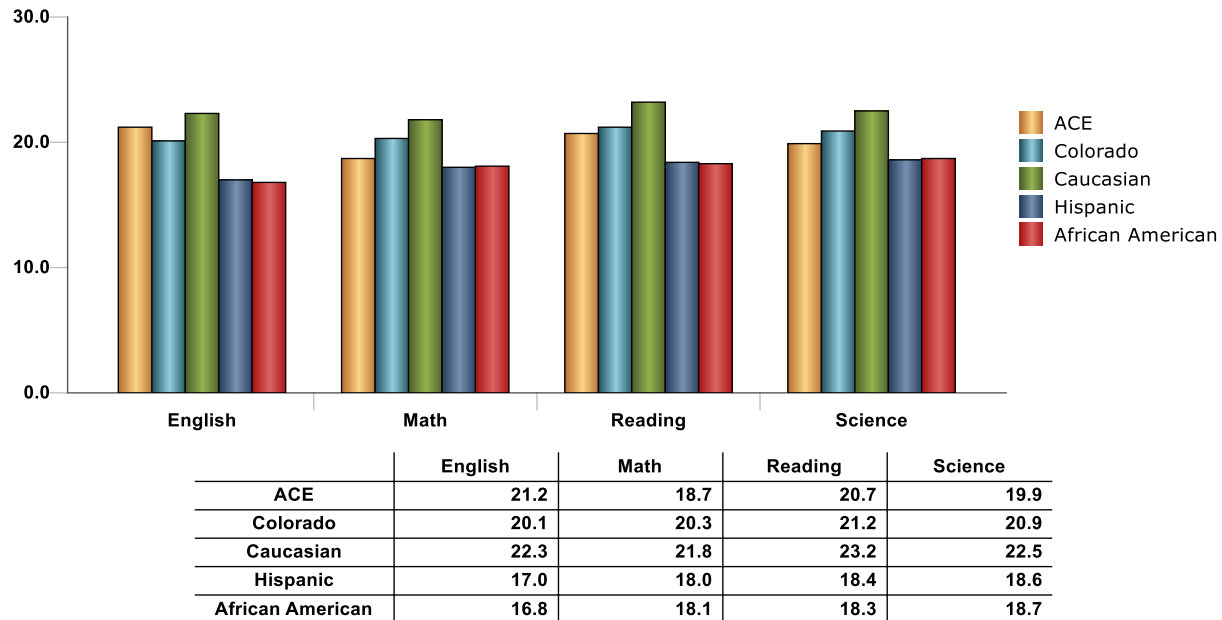
Not surprisingly, the greater the attendance, the better the children perform on standardized tests. ACE students outperformed all Colorado public school students in reading by 19.3 to 36.4 points.¹² ACE students performed similarly well in math, outperforming their public-school peers by 14.8 to 45.4 points (Colorado Department of Education, 2018).

Math Proficiency Comparison



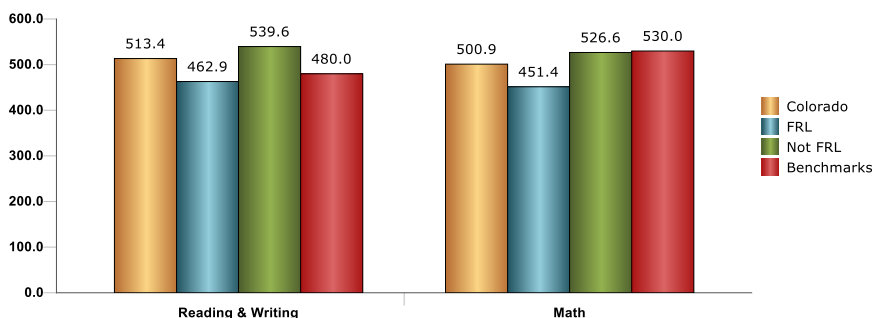
¹² The Colorado Department of Education collects data on reading up to the ninth grade. However, 76.3% of ACE scholars were proficient in this topic.

ACT Performance



The above chart illustrates ACT performance data based on the ACT 2017 Colorado Profile Report (ACT). These reports do not provide measures on low-income students, but they do provide information based on ethnicity. The ethnicities selected are the largest populations in Colorado, and both Hispanic and African American individuals are disproportionately likely to be categorized as low-income (Simms, Fortuny, and Henderson, 2009). It is apparent that ACE students' results are slightly lower than the average for Colorado students in some areas, but they are clearly outperforming most students in English. ACE students also score higher on this test in all four subjects than Hispanic and African American students (ACT, 2017).

SAT Score Comparison



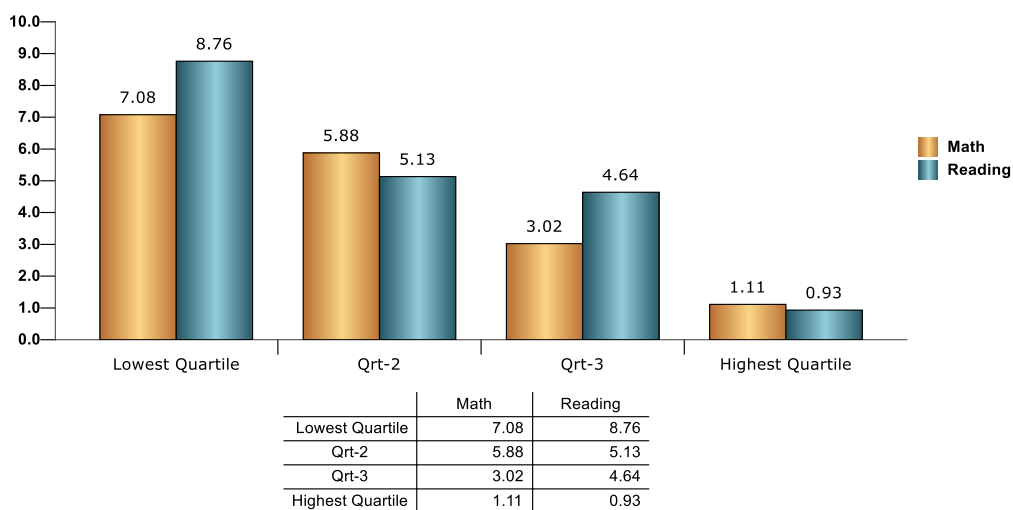
The chart to the left shows the performance of all Colorado students on the SAT, compared to the benchmark scores.¹³ It is apparent that low-income students in Colorado do not meet the benchmarks established by the SAT, providing further evidence that low-income students

do not typically perform as well on standardized tests as their wealthier peers.

¹³ A low number of ACE students (4) took the SAT in their Junior year, which is why a comparison is not provided.

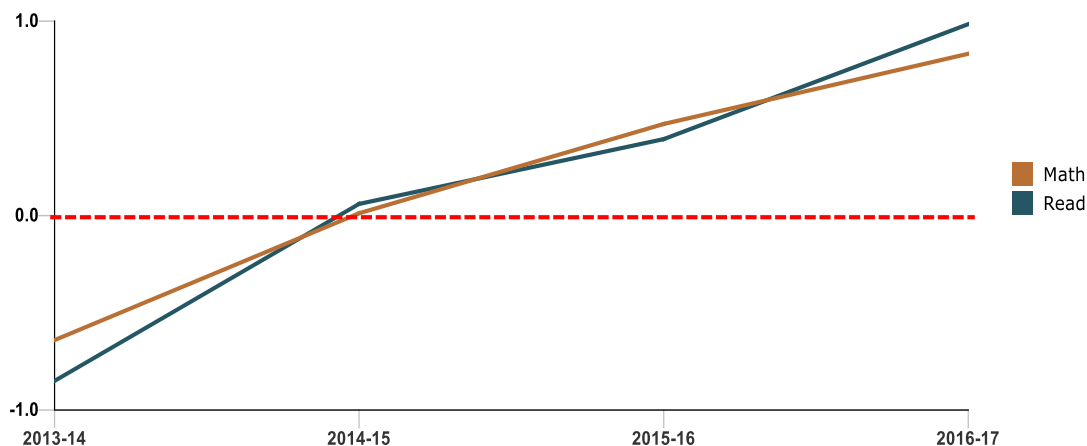
While understanding the proportion of students who are at or above proficiency rates and college readiness is important, it is also critical to compare the gains made by the highest- and lowest-performing students. The data tracked by ACE

Quartile Growth



include test scores gathered over a three-year period. Students are sorted into quartiles depending upon their scores that first year, and then their performance is tracked over that three-year period to see where they are making gains. Regardless of their initial performance level, all students posted gains in reading and mathematics, and the lowest-performing group made the strongest gains.

Multi-Year Proficiency Growth



The chart to the left tracks 196 students who began their tenure with ACE in the 2013-14 academic year over a four-year period. ACE students enter their

schools performing below proficiency in math and reading. By the middle of the second year, ACE students perform at proficient levels. By their fourth year of learning in a private school setting, ACE children are solidly proficient in both topics.¹⁴ This continues a trend found among ACE students where after the second year, they become proficient in both reading and mathematics.

¹⁴ Student proficiency was set utilizing a normal distribution. The line indicating proficiency is set at the mean (=0.0) with the standard deviation (1.0 to -1.0) indicating whether they are above or below proficiency.

High School Graduation

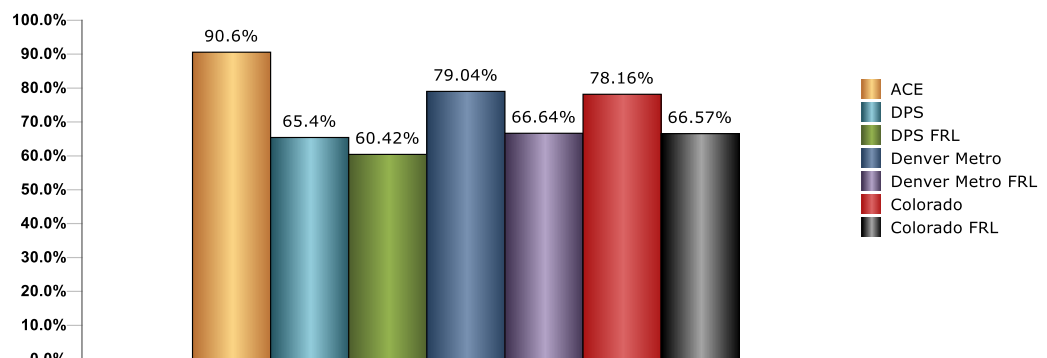
Four Year Graduation Rate Comparison					
Year	ACE 4-Year Graduation ¹⁵	DPS 4-Year Graduation	DPS FRL 4-Year Graduation	State 4-Year Graduation	State FRL 4-Year Graduation
2014	88.3%	62.8%	56.9%	77.3%	64.2%
2015	80.0%	64.8%	59.9%	77.3%	65.5%
2016	93.0%	67.2%	62.1%	78.9%	67.8%
2017	100.0%	66.6%	62.3%	79.0%	68.5%

Compared with students in schools throughout Colorado and DPS, a greater proportion of ACE scholars graduated from high school over the past four years. Perhaps more significantly though, the graduation rate for ACE scholars is far higher than the average high school graduation rate for low-income students across the state.

Four-year graduation rates are significant, as there are important benefits to earning a high school diploma even for those who do not continue their education in college. The median income for individuals with a high school diploma is \$188 more per week (\$9,400 per year) than for those who do not have a diploma. Diploma earners also have a lower rate of unemployment (5.2%) than those without diplomas (7.4%) (National Center for Education Statistics, 2014; Bureau of Labor Statistics, 2017). Moreover, those who earn a GED in lieu of a high school diploma must make time to prepare for the exam—a process which can take months of work.

Four-Year Rolling Average

Because ACE student population is small, a four-year rolling average gives a better indication of the actual graduation rate. The chart (right)



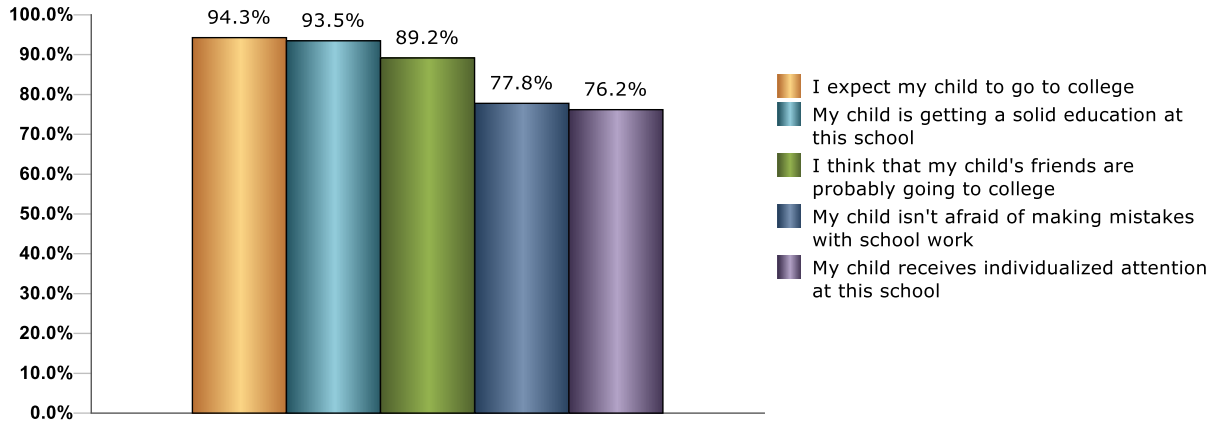
shows that ACE children graduate at statistically significant higher rates than their public school low-income peers.¹⁶

¹⁵ Calculated using the formula published on the Colorado Department of Education for on-time, four-year graduation.

¹⁶ *Chi-square* test of significant.

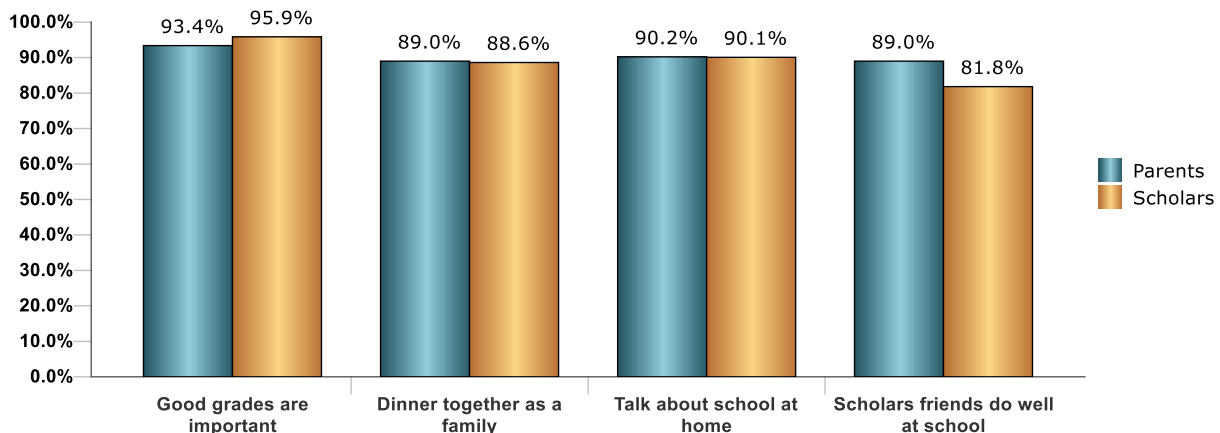
Attitudes

Parents' Educational Attitudes

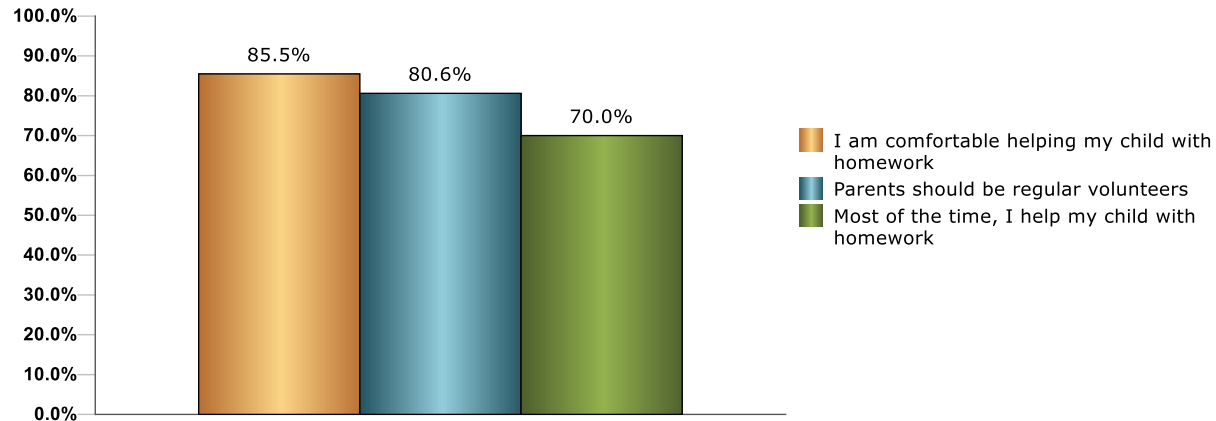


The vast majority of ACE parents report having positive attitudes in support of their child's education. Measuring parent attitudes towards education is critical, as research shows (as reported by Timkey, 2015) that parents who are involved and promote learning and education at home have a strong impact on their child's academic success regardless of social class or background (Dauber and Epstein, 1989). A notable example of this kind of engagement is families who eat dinner together, which encourages communication and allows parents to promote healthy behaviors and positive attitudes toward their child's education (Miller, Waldfoerger, and Han, 2012).

Educational Values

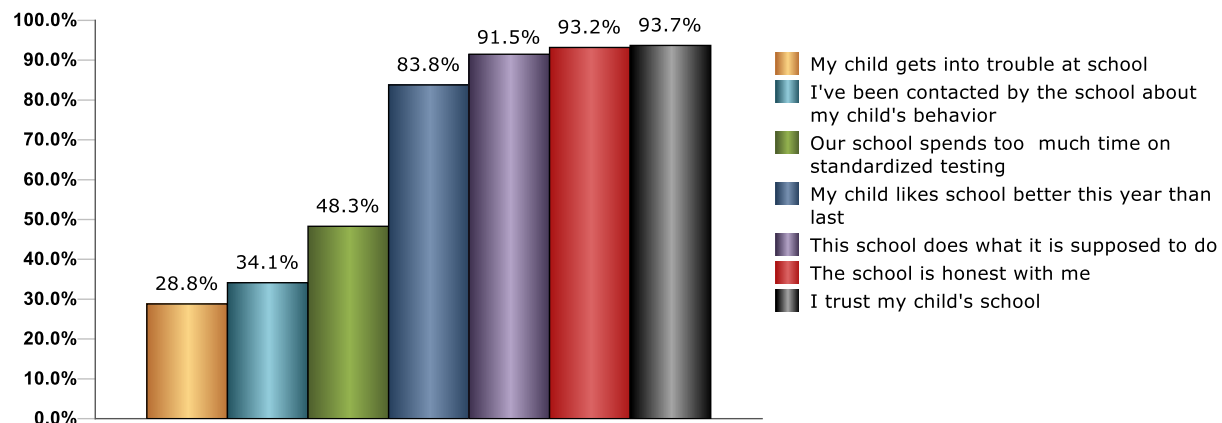


Parent Involvement



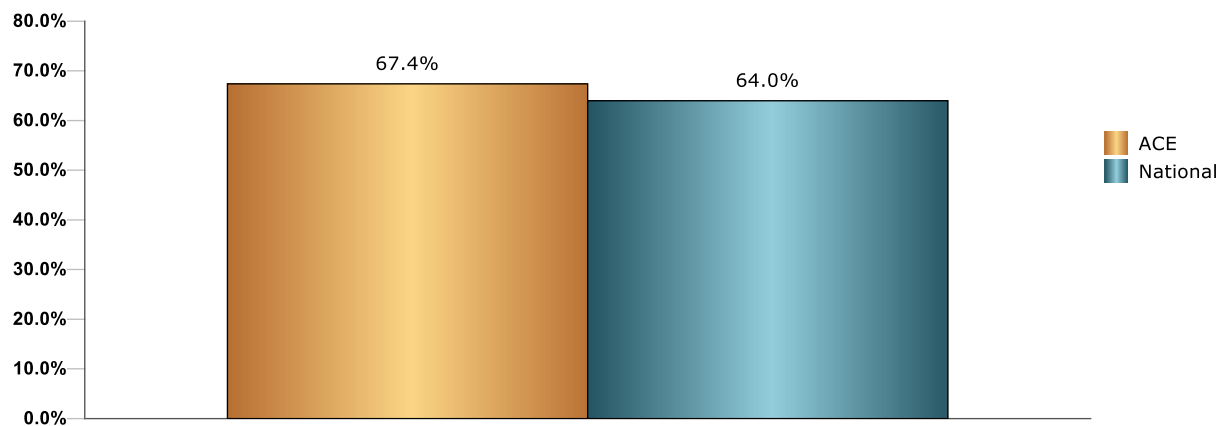
Another key part of parental involvement at home is helping their children learn to read by reading to them. Children who read frequently when they are between six and 11 years old reported being read to frequently by their parents (Scholastic.org, 2015).

School Trust



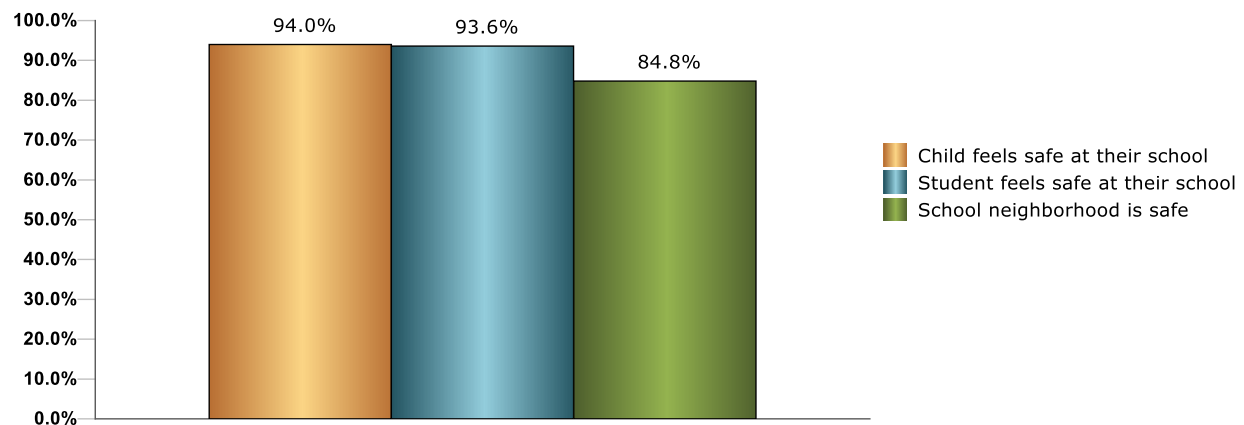
ACE parents have a high degree of trust in private schools – a paramount factor, as Adams and Forsyth (2006) wrote, “promoting parent-school partnerships is an effective means to enhance school and student performance,” (p. 3). Successful parent-school partnerships are a key factor in developing students’ psychosocial and overall cognitive skills. High levels of trust from parents are necessary, especially when only 36% of parents across the country are confident that their children receive a good education from their public-school system-- the highest level of confidence society has had in public schools since 2009 (Gallup, 2017).

Unhappiness with Neighborhood School



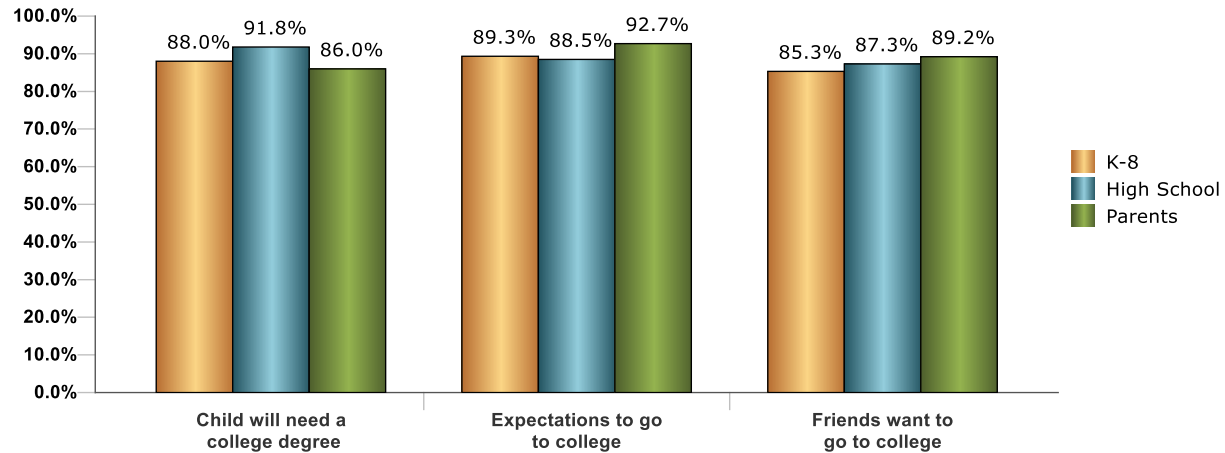
If the finding of overall confidence in the school system is used to represent parent dissatisfaction with local public schools, then ACE parents have a higher rate of public school unhappiness/dissatisfaction (67.4%) than the national average (64%), a likely precursor to their decision to send their child to a private school (Gallup, 2017).

Safety



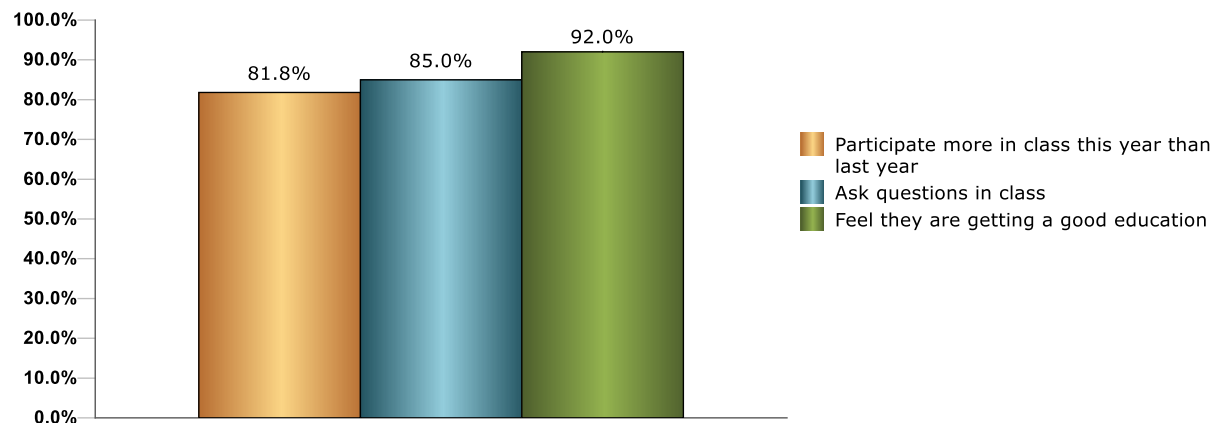
One item that nearly all parents and students agree on is that the school of their choice is safer. Ninety-four percent of parents say their child feels safe, and 93.6% of ACE scholars report the same. Feeling safe at school is crucial for academic performance and engagement (Lacoe, 2012). When students do not feel safe, they are less likely to focus in class and subsequently do not perform as well. In addition, students who are not safe at school may stay at home, and studies have shown that missing school has a profound negative impact on achievement.

College Attitudes



Nearly all ACE scholars have positive attitudes regarding college enrollment as well as strong support systems. Students who do not go on to higher education often do so because they lack basic knowledge about college, and they lack support for attending college. ACE scholars do not seem to experience this, as they receive considerable support from friends and family (Temple, 2009). ACE scholars are also aware of the importance of a college degree. Carnevale, Smith, and Strohl (2014) report that 35% of new jobs will require a bachelor's degree, and 30% of all new positions will require an associate's degree or some college education. The earning power of individuals with a college degree is also \$34,000 more than the median income of an individual with only a high school diploma (American Community Survey, 2017).

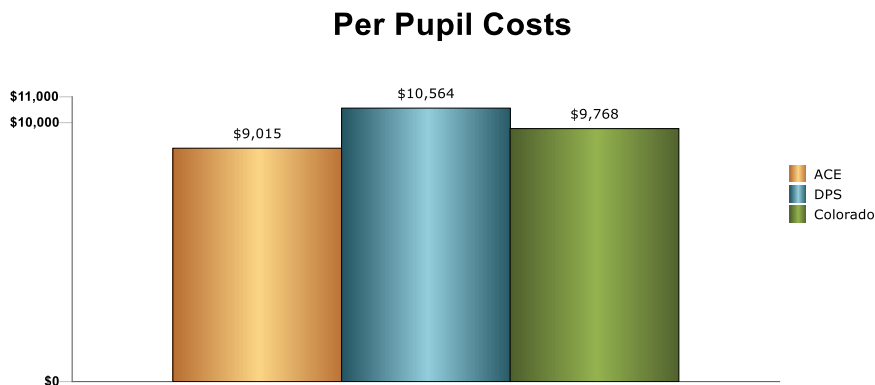
Student Engagement



ACE students put their positive attitudes about education into practice, as they show a high degree of engagement in the classroom. Nearly 82% report participating in class more this year than in the previous year, and 85% say that they ask questions in class. Furthermore, the vast majority (92%) feel that they are getting a good education. These results are likely connected to the positive attitudes of the students and their parents.

School Information

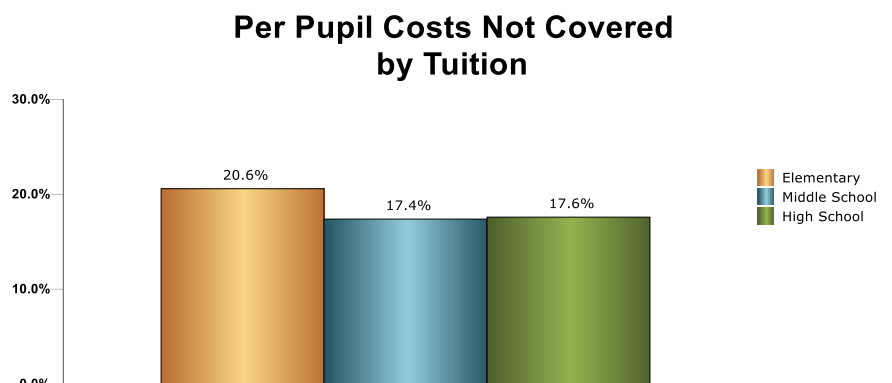
School Costs



It is expensive to educate children, and Colorado schools face issues with funding. According to the Education Law Center's school funding national report card, Colorado's spending on education is low compared to other states. Described as an effort score, Colorado is

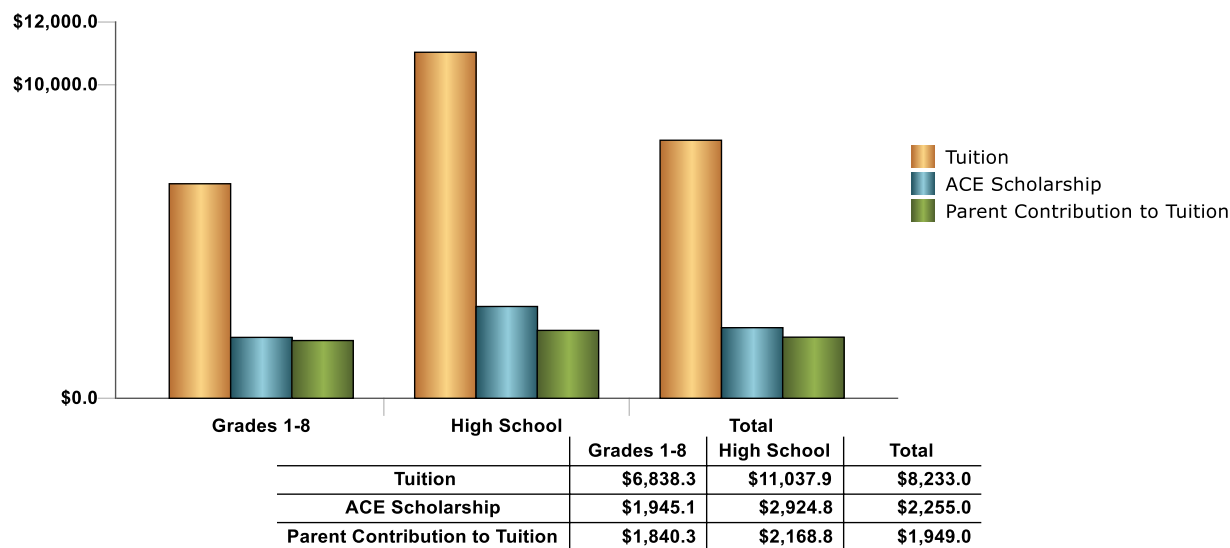
the fourth-worst state for school funding: earning a 0.028 score for dollars spent on education compared to GDP (Baker et al., 2017). Lack of school funding disproportionately harms students in rural areas where the potential for raising property tax dollars is limited and students have fewer options for attending better schools. The rise of marijuana tax income has helped to some extent, as \$300 million in marijuana tax revenue has been dedicated to fixing educational infrastructure (Lopez, 2017; Whaley, 2017). But while the extra funds are helpful, Colorado's overall spending on education relative to its GDP will need to improve to bring up the overall quality of the K-12 education system. ACE schools, meanwhile, spend \$753 less than the average per-pupil cost in Colorado and \$1,549 less than the cost for DPS¹⁷ (National Center for Education Statistics, 2017).

For private schools, the costs not covered by tuition can be substantial. Nearly a quarter of the cost to educate a child at the elementary school level is not covered. More than 17% of the cost for private middle schools and high schools are not covered by tuition either. This demonstrates the need for other forms of fundraising—including scholarships—to fill the gaps.



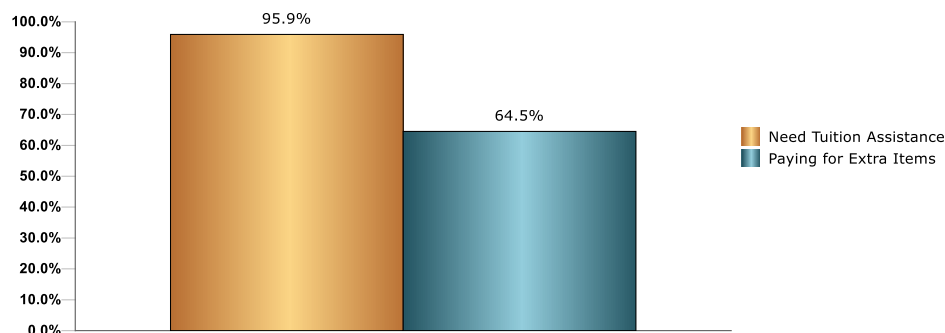
¹⁷ All public-school data are from the 2013-14 academic year.

Distribution of Fees



The ACE Scholarship is often the determining factor in whether a family can afford to send their child to a private school. As illustrated in the above chart, ACE and the families contribute about half of the dollars needed for tuition. The other half comes from other scholarships, multiple child discounts, and parents working for the school. Almost 96% of ACE parents indicated that without the scholarship, their child would not be able to attend a private school, and 64.5% have difficulty paying for extra items like fees, books, and field trips.

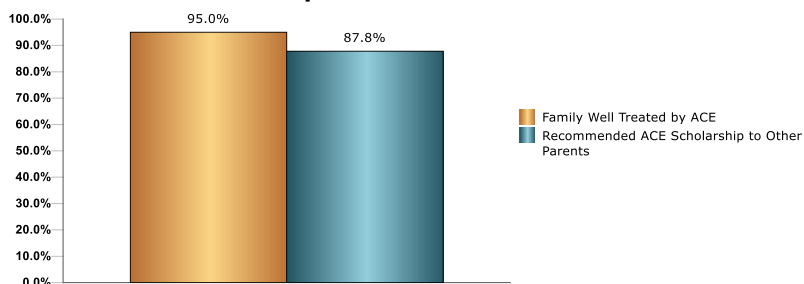
Need for Assistance



Parents' efforts to get their children into a high-quality school, receiving the ACE scholarship, and benefitting from school-based discounts signals to children that there are many people interested in making sure they receive

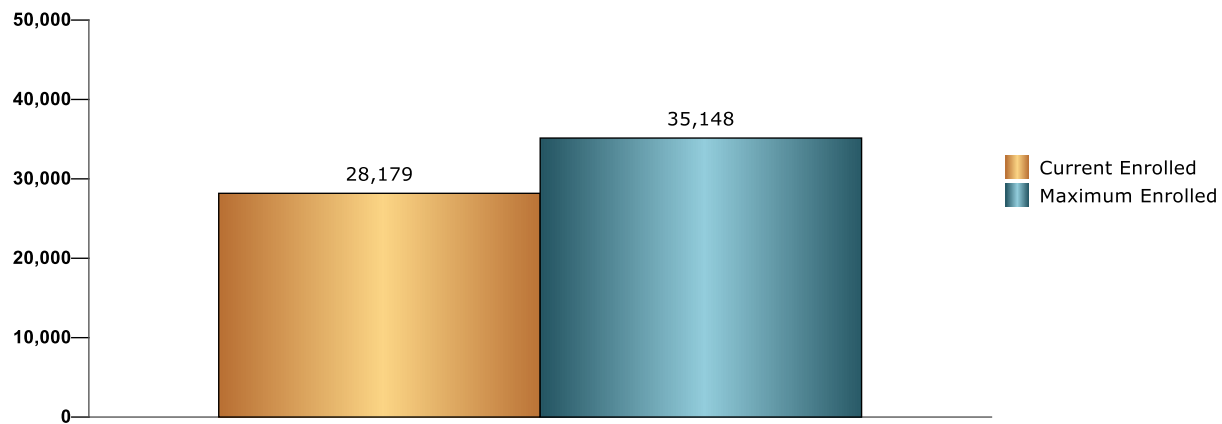
a good education. This attention leads them to understand the importance of trying hard (Myers, 2003). These families are keenly aware of ACE's interest in helping them educate their children, as 95% indicate that they have been treated well by ACE and nearly 88% have recommended ACE scholarships to others.

Experience with ACE



Enrollment

ACE Partner Schools Open Seats

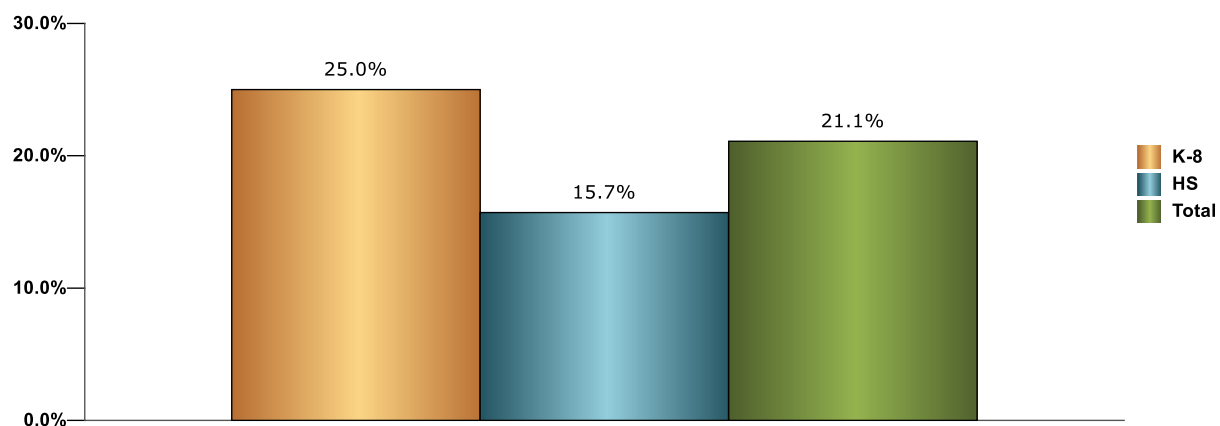


As of the 2016-17 academic year, schools with ACE scholars had a maximum enrollment of 35,148 seats for children but filled only 28,179 of those seats.

Enrolled	Maximum	Open Seats
28179	35148	6969

A breakdown by school type shows that high school and K-12 schools have more seats available. According to school administrators, there are 6969 spaces available in ACE schools. Catt (2015) reported there were approximately 14,000 open seats in private schools in Colorado, with about 6,000 of those seats located within the Metro Denver region. The chart below shows the availability --or open seats --at each type of school partnering with ACE.

Percent of Available Seats



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