For more than 40 years, Keystone Policy Center has been a catalyst empowering leaders to rise above entrenched positions to reach common higher ground. From health to agriculture and energy to education, Keystone has shaped public policy debates at the local, state, and national levels. Keystone’s exceptional combination of experience and expertise has led to groundbreaking progress when all other efforts have failed. By objectively analyzing and advising on issues, identifying key leaders and decision-makers, and using the framework of a focused collaborative approach, Keystone has helped leaders craft public policy solutions with significant, lasting impact. Keystone’s unique strategy provides a blueprint for policymakers and leaders to address today’s most pressing and vexing policy issues with shared, action-oriented solutions.
Colorado has the third largest share of students attending charter schools in the nation, after only Arizona and Washington, DC, with more than 15% of Colorado students attending charter schools this year. Given this, it is important to review how this public school sector is doing relative to the state and other school district managed public schools. This paper explores recent enrollment and academic performance data to identify key questions for educators, policy makers, and researchers to consider moving forward based on the findings.

Key Takeaways

• The percent of Colorado students enrolled in charter schools continues to grow, and charter schools saw increases in student enrollment during COVID-19 despite large declines in overall enrollment in public schools generally in the state.

• On average, charter schools had higher rates of student participation on statewide assessments of academic performance in Literacy and Math in the most recent year.

• On those assessments, charter schools had higher proficiency rates than district-run schools statewide and the majority of charter schools also outperformed their district average, consistent with historic performance trends.

• While it is not feasible to compare academic performance disaggregated by different groups of students given data reporting practices, there is substantial variability in academic performance in schools when comparing them to others serving similar demographics of students, particularly in schools with fewer students who qualify for free or reduced-price lunch, or are emerging multilingual or receive special education services. While demographics are associated with proficiency rates for all schools, the relationship between school demographics and assessment performance is weaker in charter schools than in district-managed schools.

• Academic growth in charter schools, as in district-run schools, varies widely by grade and subject area in 2020-21 and should be considered with caution at the school level.
**School Enrollment Trends**

Student enrollment in recent years has been quite volatile in Colorado schools and nationally, based both on the impacts of COVID-19 as well as declining birth rates since the 2008 recession. In Colorado school enrollment declined substantively in 2020-21, but then rebounded slightly in 2021-22, although not to pre-COVID levels. When looking more closely at historic enrollment data, it is evident that charter enrollment has been responsible for much of the increased enrollment in Colorado. In 2021-22, charter enrollment increased by over 2,000 students and charters now serve 15.3% of all Colorado students, up from 15% in 2021-22 and 14% in 2019-20. This increase in charter schools was responsible for over 2/3 of the total PK-12 enrollment year over year recovery across Colorado in 2021-22. The below chart shows the change in enrollment over the prior year in recent years.

![YEAR OVER YEAR CHANGE IN SCHOOL ENROLLMENT](chart)

Similar to overall enrollment trends, shifts in charter school enrollment varied widely by District and setting so it is important to look at individual schools and districts in addition to this holistic view.

**Student Participation in Academic Assessments**

While many prior analyses of summative academic performance have not focused on test participation rates – typically because most students have taken the required assessments for Colorado schools – it is an important factor to consider this year, as there were lower rates. Participation rates can help us ensure that outcomes are a representative sample of the school overall, and that students were not systematically excluded from the assessment.

Across grades and subjects, charter students had higher participation rates in these academic assessments than the statewide rate. This gap was greatest in middle school at approximately 15 percentage points. For charters and the state, middle school saw the lowest participation rates while participation was greatest at the high school level, where students took the SAT, a test often required to apply for college or scholarships.

![2021 ACADEMIC ASSESSMENT PARTICIPATION RATES](chart)

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In 2021-22, charter schools had higher rates of students meeting or exceeding expectations on state assessments when compared to district-run schools across grades and subjects, consistent with historic trends. This gap was greatest in 5th and 7th grade literacy. The gap was smallest in 4th grade math and 11th grade literacy. For charters and the state, literacy performance was higher than math performance at all grade levels.

Additionally, the majority of charter schools outperform their district in terms of students meeting or exceeding expectations in most grades and subjects, consistent with historic trends. The exceptions are in 8th grade math and 11th grade literacy. Of charter schools that outperform their districts they do it by a large margin, over ten percentage points on average in each subject and grade. When comparing the average difference between all charters and their districts, charters outperform their districts in most subjects, with the exception of 8th grade math and 11th grade literacy. The gap is largest in 5th grade literacy where charters outperform their districts on average by over 11 percentage points.
While these data points are useful, it is most appropriate to look at academic performance compared to schools with similar demographics. To broadly understand the student body characteristics within a school, we generate a School Demographic Index that includes measures research shows can impact student engagement, learning, and performance. The School Demographic Index includes measures like the proportion of district students eligible for free or reduced-price lunch, the proportion of district students learning English as a second language, the proportion of district students receiving special education services, and proportion of district students who enter or leave the school district in the middle of the year. Schools with a higher score on the School Demographic Index serve higher proportions of these students than districts with lower scores on the District Demographic Index. We looked at the relationship between the School Demographic Index and student performance on assessments by school in order to compare charter schools’ performance to district-run schools with similar demographics. Sample grade and subject level analyses are provided below; other assessments are available upon request, but reflect similar trends.

On 5th Grade Literacy assessments, district-run schools do slightly better on average than charters with similar demographics, though there is a stronger relationship between demographics and performance in district-run schools compared to charters’ relationship between demographics and performance in district-run schools compared to charters.
- Charter school performance is less tied to student demographics than district-managed schools.

7th Grade Literacy Academic Performance by School Demographics

On 7th Grade Literacy assessments there is a very similar relationship between demographics and performance between non charters and charters. Within this, demographics have more explanatory power for the relationship between demographics and performance in district-run schools than in charters, and charters with a lower School Demographic Index have a lot of variability in terms of performance.

NOTE: Growth data is not available for Grades 4-6 due to limited prior data on students; high school growth is not currently available.
In 11th grade math and literacy there is a much stronger relationship between demographics and outcomes. This is truer in charter schools than district-run schools; charter schools also have better performance than similar schools, although there is more variability in charters with lower School Demographic Index values. Taken together, these analyses show that in both district-run and charter schools, performance is variable, even when comparing schools with similar demographics. And while demographics do not fully explain the range of academic performance, across grades and subject areas there is a stronger relationship between demographics and rates of students who met or exceeded academic expectations in district-run schools than in charter schools. Taken together, these analyses show that in both district managed and charter schools, performance is variable, even when comparing schools with similar demographics. And while demographics do not fully explain the range of academic performance, across grades and subject areas there is a stronger relationship between demographics and rates of students who met or exceeded academic expectations in district managed schools than in charter schools.
While the percent at or above proficient on a standardized assessment is a key indicator of student learning and mastery of grade-level content, it does not necessarily communicate the progress a student has made through the year, regardless of whether or not they met state standards. Growth measures allow us to look at the impact a school has had on a particular student’s performance over the course of the year and is typically less correlated with student background. The growth measure is calculated by comparing the achievement of a student relative to their academic peers—students across the state who they had scored similarly to in prior years. Looking at student academic growth in charter schools relative to district-run school schools is one way to consider the impact of that particular school on a student’s learning.

Academic growth comparisons between charters and district-run schools tell a more mixed story than student performance. At some grade levels, charter schools on average showed higher growth than district-run schools while the opposite is true in others. This is somewhat of a departure from previous trends. In 2019, charter schools more consistently had higher growth than district-run schools, and the variability of this year’s data in charter and district-run schools alike may reflect the disruptions in learning that have taken place over the last two years.

In 2021, fewer than 40% of schools had median growth percentiles above 50. When comparing growth in charter and district-run school schools the story is mixed: charter schools saw lower growth than district-run schools in 5th Grade ELA but had higher growth in 7th Grade ELA and 8th Grade Math. Similar to average growth, a greater share of charters had growth percentiles above 50 than district-run schools in 7th Grade ELA and 8th Grade Math, but a smaller share in 5th Grade ELA.
Enrollment and performance data from the COVID-19 time period in Colorado has clear limitations and shows wide variation amongst schools and school governance types. However, this variation does not mean that there are not lessons that can be learned or issues that should be explored further within and based on the data. When it comes to school governance type in particular it is important that we consider the following:

- **Sharing of Best Practices:** It is important to understand what is happening in all schools, including charter and district-run schools, that are getting strong outcomes for students and share best practices with other schools, regardless of governance type. Charter schools were originally envisioned as pilot schools where innovative practices could be tested and, if effective scale; while they have strayed from this purpose it is important to consider in this context.

- **Equitable Funding:** While Colorado has a strong charter school law compared to other states because of its focus on balancing autonomy and accountability, there are still gaps in equitable funding, particularly for schools authorized by the Charter Schools institute. There are also wide gaps in equitable school funding both across and within districts, regardless of governance type. These inequities are compounded by the overall low education funding in Colorado. Given the disparate results achieved by schools and their ability to attract families, it is important that we continue to work towards equitable funding for all Colorado students.

- **Quality Authorizing Practices:** Given the variation in performance amongst charter schools, it is important to look at how charter schools are approved, monitored and held accountable by their authorizers. In Colorado all school districts are allowed to act as authorizers, along with CSI as the single statewide authorizer, which leads to wide variation in authorizing practices. Codifying what is high quality authorizing practice in Colorado and working to ensure these practices are consistent across the state, as well as rewarding strong practices, is an area for policy makers to consider moving forward. These quality authorizing practices can also have benefits for ensuring quality in district-run schools if implemented consistently.

- **Community Responsiveness:** Increased enrollment at particular schools amongst overall enrollment challenges, including charters, suggests that some schools may have been able to be more responsive to community needs than others over the pandemic. Understanding what exactly has made these schools more attractive to families is an important next step in ensuring all Colorado families have access to high quality schools aligned with their needs and interests.

- **Equitable Enrollment Access:** It is always important to consider data in context of their communities and students served. This paper tried to compare charters to communities in which they operate but without more detailed information on the specific students served by individual schools this is not conclusive. There is a need for ongoing research on who has access to what schools and how specific student groups are accessing and doing in different schools, but researchers are limited in their ability to do that because of data availability issues.
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