

Pandemic-Associated Cyber Charter Enrollments and the Impacts on Rural School Districts in Pennsylvania

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Abstract: This study investigated the financial impact of cyber charters in Pennsylvania, parents' decision-making about cyber enrollment, and traditional rural school district and cyber leader responses to changing cyber enrollments to inform Commonwealth cyber charter policy. The data suggest that cyber enrollments and costs to rural districts have dramatically increased over time and cyber charter achievement data lag behind both brick-and-mortar charters and traditional public schools. Rural district leaders are experiencing increasing financial pressure due to cyber charter enrollment that, in many cases, has reached crisis proportions. Not only do cyber charter tuition payments affect the ability of a school district to provide needed instructional services and facility maintenance, but they threaten the viability of a school district. Cyber charter leaders, on the other hand, describe their cyber charter schools as uniquely responsive to families and students in ways that are atypical in traditional public schools, a perspective confirmed by parent survey data. Parents see cyber charters fundamentally as an option that affords their children more individualized attention and flexibility, while giving them more curricular control. By understanding effects, responses, and gaps, this work can inform policymakers about the ways in which charter policy is being experienced by students, families, cyber directors, and rural school district leaders.

Keywords: cyber charter school, rural schools, charter policy, cyber charter funding, school choice

Executive Summary

Purpose of the Study

Because of COVID-19, nearly all students participated in remote schooling during the 2020-2021 academic year. In Pennsylvania, between 2019-20 and 2020-21, cyber charter school enrollments increased by nearly 60 percent. On average, \$0.90 of each \$1.00 a rural Pennsylvania district spent on charter schools in 2019-20 went to a cyber charter and 99.7 percent of charter enrollment growth in 2020-21 occurred in cyber charters (Wernecke et al., 2022).

Although cyber charters are not new to Pennsylvania, traditional public school and cyber charter leaders' understanding of and response to increasing cyber charter enrollments is unexplored in rural educational research. Likewise, parents' reasoning for enrolling their children in cyber charters is poorly understood. Rural school district leaders, charter leaders, and policymakers need empirical information about increasing cyber charter enrollments. To inform Commonwealth cyber charter policy, this study presents findings about 1) the financial impact of cyber charters in Pennsylvania, 2) parents' decision-making about cyber enrollment, and 3) rural school district and cyber leader responses to changing cyber enrollments.

Methods

Statewide data produced updated evidence on the impacts of cyber charters on rural school districts, contextualized by interview and survey data.

- Publicly available financial data for cyber charter and rural school districts were used to examine the fiscal impact of cyber charter tuition payments on rural district budgets. These data also allow comparison between tuition payments to cyber charters for special education and spending by cyber charter schools on special education.
- Academic outcome data are based on school-level PSSA and Keystone results and district-level graduation rates. These data provide information about trends in the relative performance of rural and cyber charter students.
- An original survey asked rural parents/guardians why they opted into cyber charter school enrollment and under what circumstances, if any, they would return to their home district. The purpose of the survey was to understand the logistical, social, and institutional reasons for parents' decisions to enroll in a cyber charter.
- Interview data were collected from six cyber charter parents, 12 rural superintendents leading the most fiscally impacted districts, three Intermediate Unit (IU) directors, and two cyber charter directors. The purpose of the interviews was to understand the effects, implications, and local responses to increasing cyber charter enrollment. While the perspective of cyber charter leaders was critical to the study's aims, only two of 14 cyber charter school directors agreed to be interviewed despite multiple attempts at recruitment.

Project Results

- **Charter school enrollments have increased over time.** There was a particularly dramatic increase (nearly 60 percent) in cyber charter enrollments between 2019-20 and 2020-21.
- **Charter school tuition payments have increased over time.** This increase is not a product of inflation or increased charter enrollments alone. Using inflation-adjusted dollars, per pupil tuition has increased sharply over time.
- **Rural districts send the majority of charter tuition to cyber charters** (86 percent in 2021-22). These payments consume a large and growing share of their budgets (approximately 5 percent in 2021-22).
- **In 2021-22, cyber charters spent approximately \$0.44 of each \$1.00 received in special education tuition on special education.**
- **There are large and persistent gaps in the relative academic performance of cyber charter schools and rural school districts.**
 - On average, students in rural school districts meet state standards on PSSA and Keystone exams at substantially higher rates than students in cyber charter schools. Across years, subjects, grades, and student populations examined, the proportion of students scoring proficient/advanced on PSSA/Keystone exams was substantially higher in rural districts than in cyber charters.
 - Demographic differences do not explain large and persistent performance gaps. For example, students from low-income families reach proficient/advanced status, on average, at lower rates when they attend a cyber charter than when they attend a rural district.
 - Differences in achievement between rural schools and cyber charters are consistent across alternate measures of student success. Between 2010-11 and 2021-22, graduation rates were 36 percent higher, on average, in rural districts than in cyber charter schools. These differences persist when we restrict our comparison to students designated economically disadvantaged by the Pennsylvania Department of Education (PDE). Between 2010-11 and 2021-22, graduation rates for economically disadvantaged students were 23 and 45 percent higher, on average, in rural districts than in cyber charter schools.
- **Parents described cyber enrollment in terms of their response to dissatisfaction with the traditional school.** Sometimes this was COVID-19 related: “They listened to the largest voices, and made no accommodations for the quieter voices,” but just as often it was not: “I fear that rather than teach basic fundamental scholastic ideals, public schools indoctrinate, rather than educate.”

- **Rural school leaders described financial decisions made in response to the financial pressures of cybers.** One stated: “One thing that came off the list was the roof...it didn't make the cut because heat was more important right now.” The financial pressure of cyber charter enrollment on school districts has compelled some districts to develop new strategies, with limited success. Cyber directors’ points of view about why parents are opting into cyber charter schools in such large numbers were consistent with each other and parent survey data. Two salient ideas were parent control: “Parents get a chance to say, ‘I don't want them to read about the young Black girl in the forest,’ kind of thing.” And the extent to which students feel known and seen in their school: “...they get the attention that they're looking for, as individuals, they receive that at our school, and so that's what draws them to our school. It also pushes them out of their traditional school because they don't feel like their needs are being met.”

Conclusions

Findings suggest that steeply increasing cyber enrollments are exerting acute financial pressure on rural school districts that is impacting their abilities to serve students enrolled in their home school district. Public funds diverted to cyber charter schools result in uniformly poor academic outcomes as compared to the state’s return on its investment in traditional public school districts. Cyber charter leaders describe the cyber charter education as uniquely responsive to families and students in ways that they understand as atypical in traditional public schools, a perspective confirmed by the parent survey data. Parents describe cyber charters as a flexible option that affords their children more individualized attention and them more curricular control.

Policy Recommendations

Funding

- **Redesign the formula setting the regular education tuition rates paid by school districts to cyber charter schools.** Since cyber charter schools experience uniform costs for the average student, we recommend every district be charged a uniform flat regular education rate for cyber students. This rate should be based on average documented cyber charter spending. As a starting point, House Bill 1422 (2023) suggested a rate of \$8,000 per student for a Statewide Cyber Charter School Tuition Rate. This amount would exceed the rate charged to a small number of districts, however, and those districts should receive additional state aid to cover the increased tuition payments they would be forced to make with the change.
- **Redesigning the special education tuition formula so tuition rates are based on the actual spending by school districts for students with special needs.** Specifically, use the actual number of students receiving special education

services (rather than the assumed 16 percent of a district's average daily members) to generate per pupil special education spending figures used in the tuition calculation. In addition, apply a tiered special education funding rate for cyber charter students that more accurately reflects the variable costs of providing special education to students receiving different kinds of services. We suggest extending the model used by The Special Education Funding Commission to cyber charter schools.

- **Require charter schools to spend monies received for special education students on special education.** When cyber charter schools spend less on special education than they receive in special education tuition revenue, special education tuition rates paid in subsequent years should be reduced accordingly.
- **Ensure school districts receive adequate revenue to cover cyber charter costs that do not proportionally decline.** For example, if a class size is reduced by four students, the school district's costs to educate the remaining students does not decrease. This is a key recommendation for small rural schools in the Commonwealth and is a necessary means to ameliorate the outsized burden of cyber charter tuition on small rural school district budgets. Rural schools cannot continue to absorb the burden of cyber charter tuition. Traditional school students in the most fiscally impacted rural school districts attend schools in need of repair and additional staffing, when cyber charters have poor academic results and large financial reserves.

Transparency and Accountability

- **Cyber charter advertising.** Cyber charter advertisements should clearly state the source(s) of funding for the school operation as opposed to messaging stating that cyber charters are "free" or "tuition free." This messaging obscures that cyber charters are funded by local tax dollars redirected from traditional public schools. Suggested relevant policy for the consideration of the General Assembly is HB 1422 (2023) that provides standards for media advertisement specifying that advertisements indicate that costs are covered by taxpayer dollars.
- **Superintendents expressed significant concerns with the use of taxpayer dollars for lobbying.** Empirical data in this report suggests that the General Assembly should examine this issue in detail. Additional research is needed to investigate the extent to which these efforts exacerbate funding inequities.
- **For taxpayers and policymakers to better understand and compare cyber charters and traditional school districts, the same data for both types of institutions should be publicly available.** Given that both traditional public schools and cyber charters are publicly funded institutions, the requirements for transparency ought to be the same.

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Introduction

Rural traditional public schools are typically understood as primary institutions providing shared social identity, educational provision, and the source of direct and indirect economic benefits. Perhaps as a result of exposure to virtual learning during COVID-19, cyber charter enrollment has exploded across the United States (U.S. Government Accountability Office, 2022). Preliminary data suggest that more students than ever before are leaving their traditional district schools for cyber charters. Between 2019-20 and 2020-21, Commonwealth school district enrollments decreased by roughly 3 percent, brick-and-mortar charter enrollments remained relatively flat, while cyber charter school enrollments increased by nearly 60 percent. Although previous research funded by the Center for Rural Pennsylvania (the Center) has quantified the fiscal impacts of cyber charter school enrollment and academic outcomes of cyber charters (Schafft et al., 2014),¹ the most recent data included in that study were from 2011-12.

Since then, a series of changes in state policy have made it important to revisit the impact of cyber charters on rural districts. **First**, state education funding policy has been transformed as the Commonwealth has adopted two new formulas for distributing its largest subsidies to school districts with a new Special Education Funding (SEF) formula (adopted in 2014) and Basic Education Funding (BEF) formula (adopted in 2016).

Second, on average, \$0.90 of each \$1.00 a rural district² spent on charter schools in 2019-20 went to a cyber charter. This figure is based on the average of each rural district's percentage of charter tuition payments directed toward a cyber charter in publicly available annual financial report data, rounded to the nearest percentage.³

Third, the fiscal impact of cyber charter school tuition payments has significant effects on rural districts, as rural districts' annual payments to charter schools have increased from \$133 million in 2011-12 to \$208 million in 2019-20 (the most recent year with available data), exceeding a total of \$1.5 billion in revenue to mostly cyber charter schools between 2011-12 and 2019-20. In contrast, only 33 percent of rural districts reported tuition payments to brick-and-mortar charter schools in 2019-20. This study utilizes both quantitative statewide fiscal, demographic, and academic data to produce updated evidence on the impacts of cyber charters on rural school districts, survey data, and interview data to better understand why families are opting into cyber charters, how the pandemic has impacted cyber charter operations, and how rural district leaders

¹ Schafft, K.A., Frankenberg, E., Fuller, E., Hartman, W., Kotok, S., & Mann, B. (2014). Assessing the enrollment trends and financial impacts of charter schools on rural and non-rural school districts in Pennsylvania. Harrisburg, PA: Center for Rural Pennsylvania.

² We define rural districts based on rural "school district profiles" listed on the Center for Rural Pennsylvania's website.

³ Based on the Annual Financial Report Data for school districts and charter schools on the Pennsylvania Department of Education's website. For additional details about data, see the fiscal analysis section below.

and cyber directors are understanding and reacting to changing enrollment patterns and fiscal challenges.

School choice can look very different depending on where a student lives. While charter schools have proliferated in urban areas, in rural areas charter school options are often limited to online cyber charters. Charter proponents argue for the potential of all types of charter schools to foster educational innovation and the expansion of educational opportunities for students (Beck et al., 2016; Smarick, 2014). Families' decisions about which education option is best are based on consideration of available information and the weighing of trade-offs associated with each option (Prieto et al., 2019). Standardized test scores are a key factor in how families assess school quality, but academics are not the only consideration for families across school types (Prieto et al., 2019). Additional factors including teaching style, special programs, shared values and beliefs and smaller class size motivate families' decision-making (Bosetti, 2004). For special education students in particular, bullying and a sense of safety are of greater importance than academic achievement in cyber charter enrollment (Beck et al., 2014, 2021). A recent study found that parents of non-binary children were two to three times more likely to identify "mental health, safety, and bullying related concerns as motivating their choice of cyber schooling" (Beck et al., 2023, p. 1).

Charter schools are associated with significant debate and controversy. White and higher income students are overrepresented in cyber charter schools (Gulosino & Miron, 2017). Students of color are overrepresented in cyber charter schools in 19 of 20 states, but the extent of the overrepresentation varies significantly, with the racial composition of Pennsylvania's cyber charter schools nearly aligning with the racial enrollment of other schools (Mann, 2019). Students of color are over-represented in Pennsylvania cyber schools, but not significantly when compared to other states. However, diminished achievement is a consistent finding of cyber charter school research (Ahn & McEachin, 2017; CREDO, 2015; Mann et al., 2016). A Stanford University study found academic underperformance in the cyber schools in their study and, a two to threefold increase in unscheduled student inter-school transfers (CREDO, 2015). Fiscal impacts are an additional source of concern. Increases in charter school enrolments represent decreased revenues to traditional public schools (Choades, 2018; Rose et al., 2017; Schafft et al., 2014). While most disbursements in the Commonwealth accrue from urban school districts because of the high numbers of urban charter schools, the smaller economies of scale among rural schools mean that revenue shortfalls are more difficult to absorb (Schafft et al., 2014).

Given current statewide enrollment trends and the fact that cyber charters have historically been the only school choice option for most rural Pennsylvania students, further study examining fiscal, instructional, and policy implications for rural Pennsylvania meets a critical need. State policy on related issues such as school consolidation, closure, school funding, and charter law tends to have a unique impact on rural communities. Rural communities are dependent upon their schools, so as state

policy changes, so do rural communities.⁴ Given current statewide enrollment trends and the fact that cyber charters have historically been the only viable school choice option for most rural Pennsylvania students, empirical information about the fiscal, instructional, and policy implications for rural Pennsylvania is critically needed. Additionally, with current legislative proposals regarding charter funding in Pennsylvania, the results are timely in focusing on the enrollment and financial impact of cyber charter schools on traditional public schools and school districts as the General Assembly will need data to help guide policy proposals and legislation related to charter school funding and accountability. This information provides information about the following:

First, this research provides data about the current impacts of cyber charter school enrollments on rural school districts, local impacts of state policies, and how district and cyber leaders are strategically responding to funding and enrollment shifts. This research is critical as policymakers need to be cognizant of the financial impact that these policies place on traditional public schools and districts. Given the importance of need-based state aid for rural districts, policymakers depend on robust data to inform the needs of rural districts to inform where/how resources are distributed.

Second, the report provides results about the current academic performance of cyber charters relative to traditional public schools to determine academic outcome differences. Given current and growing cyber charter expenditures, it is necessary to understand and make transparent any relative academic outcomes between cyber charter schools and traditional districts. This information will be critical not only for the General Assembly, but for the Pennsylvania Department of Education.

Third, the rise in cyber charter enrollments suggests the need to better understand parental school choice and the fiscal significance of these trends. In 2011, traditional public districts made total tuition payments of \$261 million to cyber charter schools. Of this total amount, \$218 million (83 percent) was paid to cyber charter schools that had lower PSSA performance than the sending districts (Schafft et al., 2014).

Fourth, the pressure of cyber schooling on school districts has compelled some districts to develop new strategies, including reorganizing their own virtual-schooling and even, in one case, a cyber charter option. Directors of Intermediate Units (IUs) provide unique wider-lens, multi-district perspectives that complement interviews with cyber charter directors and traditional school leaders. In sum, this increased shift toward cyber enrollment bears closer attention in order to inform policymakers, rural school districts, and cyber charters about innovative practices to provide viable education options to rural communities.

⁴ Tieken, M. C. (2014). *Why Rural Schools Matter*. University of North Carolina Press.

Goals and Objectives

In sum, the study has two overriding goals:

- 1) Better understand responses to cyber charter enrollment at the institutional level and the ways in which these policies have spurred institutional adaptation and response, and;
- 2) Better understand the decision-making of rural parents who enroll their children in cyber charter schools across the Commonwealth.

Methods

This mixed method study used both quantitative and qualitative data. The quantitative statewide fiscal, demographic, and academic data produces updated evidence on the impacts of cyber charters on rural school districts. Survey and interview data provide understanding about why families are opting into cyber charters, how the pandemic has impacted cyber charter operations, and how rural school superintendents are understanding and reacting to changing enrollment patterns and fiscal challenges.

Fiscal Analysis

This portion of the analysis draws on publicly available enrollment, outcome, and fiscal data from the Pennsylvania Department of Education (PDE). We identify rural districts using the Center for Rural Pennsylvania (Center) definition and school district profiles, available from the Center's website. The Center's definition of rural is based on data from the 2020 census. We distinguish between cyber charter schools and brick-and-mortar charter schools using PDE's "List of Charter and Cyber Charter Schools File."

Enrollment and demographic data included cyber charter and rural school district enrollments from publicly available October 1 enrollment data for the respective years released by PDE each spring in "Public School Enrollment Reports" and "Public Schools Percent of Low-Income Reports" files. These data allowed us to trace trends in rural school district and cyber charter school enrollments before the pandemic, during the pandemic (2020-21), and immediately after the return to in-person instruction during the 2021-22 academic year. Data for 2022-23 were not yet released at the time that our enrollment analysis was completed.

To complete our fiscal analysis, we used publicly available annual financial report files for cyber charter and rural school districts. These data allow us to examine the fiscal impact of cyber charter tuition payments on rural district budgets (in total and as a percentage of district spending and revenues) and how the fiscal impact of these tuition payments have changed over time. These data also allowed us to investigate the relationship between tuition payments by rural districts for special education and spending by cyber charter schools on special education, a major finding of an earlier study on rural school districts and charter schools in Pennsylvania sponsored by the Center.

Our main fiscal analyses are based on data from the 2012-13 through the 2021-22 school years. 2021-22 is the most recent school year with publicly available annual financial report data. We begin our fiscal analysis with 2012-13 data because this is the earliest school year with publicly available data on the number of students enrolled in charter schools who resided within each rural school district. Data on charter school enrollments allow us to appropriately contextualize changes in charter school tuition payments by expressing tuition payments on a per pupil basis. For the 2016-17 through 2021-22 school years, each school district's charter school enrollments are reported in "district fast fact files" available on the Future Ready PA Index website. Data for the 2012-13 through the 2016-17 school years are still available on the Pennsylvania School Performance Profile website.

Our analysis of academic outcomes is based on school-level PSSA, Keystone, and graduation rate data. These data permit us to report information about trends in the relative performance of rural and cyber students that can help contextualize other findings and provide additional data about rural and cyber charter performance for lawmakers. For consistency with PDE's method for aggregating proficiency rates from the school to district levels, average proficiency/advanced rates aggregated from school-level data in this report are weighted by test takers.

Structure of Charter School Tuition in Pennsylvania

School districts in Pennsylvania are fiscally responsible for students who reside within their borders but attend a charter school. A statutory formula determines the tuition rate each school district is charged for residents attending charter schools.

This formula calculates two distinct tuition rates for each school district annually: a rate for students with a special education designation and a rate for students without a special education designation. The statutory formula determines how these rates are calculated based on information about each school district's finances and enrollments. Each school district's tuition rate varies based on these calculations. Districts are charged the same nonspecial education or special education rate for students attending a charter, whether that student is enrolled in a brick-and-mortar charter school or a cyber charter school.

Nonspecial education tuition rates are calculated for each school district using form PDE-363, Funding for Charter Schools. For each district, the nonspecial education tuition rate is based on an expenditure per Average Daily Membership (ADM) figure calculated for each district. This figure is calculated by first deducting spending in a limited number of areas specified in the school code from each school district's total expenditures. Deductions include spending from federal funds that charter schools also receive and spending on transportation which school districts are required to provide for charter school students. This modified total expenditure figure, called "selected expenditures," is then expressed on a per student basis. The resulting per student spending figure is

called "Selected Expenditures per Average Daily Membership" and it is the nonspecial education tuition rate districts are charged.

Since spending by school districts varies, the rate districts pay for a charter school student varies as well. For example, in 2021-22 the lowest nonspecial education tuition rate was \$8,917.04 per charter ADM for Hazleton Area SD. The highest nonspecial education tuition rate was \$23,798.97 per charter ADM for New Hope-Solebury SD. As a result, a charter school could receive anywhere from \$8,917.04 (for a student from Hazleton Area SD) to \$23,798.97 (for a student from New Hope-Solebury SD) for two of its students without a special education designation—even if the charter spent the exact same amount of money on the Hazleton Area SD and New Hope-Solebury SD students.

School districts receive special education funding from the state on behalf of charter schools. The costs associated with educating students with a special education designation varies by the kinds of services those students receive. For this reason, the Special Education Funding formula distributes special education funding to school districts through a formula that varies across three cost categories. This formula was created and in 2021 updated by the Special Education Funding Commission. However, school districts do not distribute tuition to charters based on the cost categories used in the state special education funding formula. Instead, the special education charter school tuition rate for each school district is calculated by dividing that district's special education spending (including for charter school tuition at the special education rate) by an estimated count of special education students. Specifically, the formula assumes that each district's special education spending was used to fund a special education population equal to 16 percent of the district's average daily membership. For those districts fiscally responsible for a population of special education students greater than 16 percent of their average daily membership, districts are charged a special education tuition rate that is greater than their actual spending on special education students. This means that these districts are required by the state to spend more per student on special education students enrolled in charter schools than special education students enrolled in district schools. For example, approximately 29 percent of the students for which Huntingdon Area School District was fiscally responsible in 2021-22 were designated special education students (546 students in total).⁵ The district reported spending approximately \$6.3 million on those special education students in the 2021-22 school year, approximately \$11,596 dollars per special education student. However, the calculations embedded in the charter school special education formula assumes that Huntingdon Area School District spent \$6.3 million in special education funding on about 298 students (16 percent of its average daily membership in 2021-22). As a result, the special education tuition rate calculated for Huntingdon Area School District for 2021-22

⁵ This figure is based on the number of SD and CS special education students reported for the district in the most recent proposed Special Education Funding file released by PDE. These pupil counts are used by the state when calculating the portion of the state's special education funding subsidy that is driven through the formula and allocated to each school district.

was \$30,007.68 per charter student, even though the district's actual spending per special education student was \$11,596. These patterns are discussed in further detail below.

Data Limitations

There are several limitations to the available data used for conducting our fiscal analysis. First, for fiscal data, cyber and brick-and-mortar charter school tuition payments are aggregated into a single category in PDE files before the 2015-16 school year. As a result, we cannot observe directly how much districts spent on cyber vs. brick-and-mortar charter schools before 2015-16.⁶

Second, there are several challenges to using Keystone and PSSA data over time. Keystone and PSSA exams were not administered during the 2019-20 school year. We do not report data from the 2019-20 school year as a result. Moreover, changes in the standards assessed on the PSSA/Keystone exam impact the comparability of average proficiency rates over time. Specifically, the adoption of new state standards increased the rigor of the exams in 2014-15. Representatives from PDE have previously advised against comparing proficiency rates from exams administered in 2014-15 and subsequent years with proficiency rates from exams administered before 2014-15. As a result, our comparisons of Keystone and PSSA performance begin in the 2014-15 school year and exclude prior years.⁷

Survey

In the fall of 2022 (September-December), with assistance from the staff at Penn State's Survey Research Center (SRC), we distributed an original, web-based survey to parents/guardians of cyber charter school students who currently reside within a rural district. SRC assisted with the process of conducting the anonymous web-based survey with eligible participants. The survey included 25 total survey items, including basic demographic and qualifying information. The surveys were conducted using a secure server and secure online survey platform (Qualtrics XM). Surveys were programmed by trained SRC staff, and an anonymous survey link was created. As part of the quality control protocol, data was downloaded each week during the survey period and evaluated to ensure integrity.

⁶ In those years where PDE has distinguished between payments to cyber and brick-and-mortar charter schools, rural districts directed 90 percent, on average, of all special education charter tuition payments to cybers. Similarly, rural districts directed 90 percent of all non-special education charter tuition payments, on average, to cybers. Across all years with available data, the percentage of a given form of tuition (both special and non-special) directed to cybers deviated by no more than 2 percent from this average (between a low of 88 percent for special education tuition payments sent to cybers in 2018-19 to a high of 92 percent for non-special education tuition payments to cybers in 2020-21) from this 90 percent average.

⁷ For an example of comments from PDE officials on comparisons, see the quotations provided in "[Pa. says 2015 standardized test scores dropped precipitously because of added rigor.](#)" July 14, 2015, WHY?.

In addition to collecting demographic data on the respondent and the students enrolled in cyber charter school, surveys queried parents about why they opted into cyber charter school enrollment, and under what circumstances, if any, they would return to their home district (for full survey items and frequency of responses, see Appendix 1). We aimed to understand the logistical, social, and institutional reasons for parents' decisions to enroll in a cyber charter. Understanding parental school choice is particularly important given the increase in recent cyber charter enrollment increases associated with COVID-19. In addition to information on the district where parents reside, the survey collected additional information from respondents such as grade level and years of enrollment in a cyber charter. See Appendix 2 "Survey Design and Data Collection" for additional information.

We drew from a convenience sample of cyber parents/guardians living in rural school districts since there was no systematic method of obtaining a known population (due to the fact there is no publicly available dataset with this information and there is no systematic way of obtaining parent/guardian contact information). Surveys were disseminated in three ways to minimize response bias and maximize response volume. First, we distributed surveys via rural school district administration willing to participate by sending the link to parents/guardians living in the district with children not currently attending the district school. Second, while we planned and attempted to distribute the anonymous surveys via cyber charter operators, only two cyber operators agreed to distribute our survey link to parents. To further maximize responses, we also distributed the survey link via the largest private Facebook group for Pennsylvania cyber charter parents with an electronic link to the survey. We additionally asked parents who took the survey to send to other parents within their cyber parent network. This yielded a sample of eighty-one respondents who completed the survey, although 11 did not fully complete the survey.

Of the school districts in which respondents resided, 42 percent come from a single rural school district in eastern Pennsylvania. Similarly, 53 percent of respondents have a child who attends the same cyber charter school. The relatively low number of usable survey responses combined with the geographic clustering of respondents raise questions about the overall representativeness of the survey data for understanding parental decision-making and create challenges for interpreting the survey results. We also are unable to assess any possible response bias from respondents (i.e., particular groups of potential respondents being more or less likely to respond to the survey than others). Even given these limitations, survey data provide some suggestive information about how some parents evaluate educational options for their children.

Interviews

Interview data were collected from virtual semi-structured interviews with six of 22 cyber parents who indicated on their survey they would be willing to be interviewed, a sample of 12 rural superintendents who lead one of the 42 most fiscally impacted

districts, three Intermediate Unit (IU directors), and two cyber directors. The purpose of the interviews was to understand the effects, implications, and local responses to increasing cyber charter enrollment. We used semi-structured interview methodology to understand participants' points of view and experiences as situated within their particular rural context in the state. Interviews were conducted by two members of the research team, and all were transcribed and open-coded to identify emergent themes. Interviews were virtual.

Superintendents were sampled from rural districts in the top 20th percentile for the greatest proportion of current expenditures diverted to cyber charter school payments. Twelve interviews provided data saturation, meaning that additional interviews were no longer producing new information.⁸ The semi-structured superintendent interviews ranged from 18 to 28 minutes in length. The interviews facilitated in-depth understanding of superintendent perspectives on how state-level policies around cyber charter schools have affected district functioning, as well as district-level measures superintendents have enacted in response to increased cyber charter enrollments. In order to understand a multi-district perspective, we also interviewed Intermediate Unit (IU) directors using purposive sampling in order to understand models of institutional response to increasing cyber charter enrollment. Response to our requests were low; only three IU directors participated. These interviews were 12, 22, and 33 minutes in length.

While we were very interested in better understanding the impacts of the COVID-19 pandemic from the perspective of cyber charters, only two of 14 Pennsylvania cyber charter school directors agreed to be interviewed despite multiple attempts at recruitment. While far from representative, the two interviews (15 and 19 minutes in length) provided key information about operational adaptations in response to changing parent and student needs, institutional structure, and future plans based on expanding enrollments. General questions included: "What reasons do you hear from parents about why they have chosen your cyber charter?", "What do you think are the particular strengths of your cyber charter?", and "Why do you think that more parents are choosing cyber charter schools?" All interview protocols are in Appendix 3.

Results

Fiscal Impact of Cyber Charter School Enrollments on Rural School Districts and Demographic and Enrollment Trends in Both Rural and Cyber Charter Districts

Demographic Analysis

Enrollment Trends by Sector

The number of students enrolled in Pennsylvania charter schools has increased dramatically over time, from 19,440 students in the 2001-02 school year to 163,625 students in 2021-22. Table 1 illustrates trends in enrollments by school type.

⁸ Creswell, J & Poth, C. (2018). *Qualitative inquiry and research design*. Sage.

Table 1. Statewide Enrollment in Traditional Public School Districts and Charter Schools by Type

	Traditional Public School District: Urban	Traditional Public School District: Rural	Charter School: Brick-and-Mortar	Charter School: Cyber
2001-02	1,273,665	489,988	16,965	2,475
2002-03	1,270,779	486,676	20,840	3,913
2003-04	1,271,607	481,590	24,212	6,791
2004-05	1,274,378	478,379	27,715	9,026
2005-06	1,275,060	474,616	31,414	11,545
2006-07	1,266,481	470,107	33,566	14,162
2007-08	1,253,626	462,468	36,635	17,892
2008-09	1,241,318	453,561	39,095	20,406
2009-10	1,236,926	446,224	42,238	22,583
2010-11	1,235,371	439,766	46,514	25,624
2011-12	1,214,097	430,667	51,208	29,969
2012-13	1,197,729	425,972	84,568	34,897
2013-14	1,186,544	418,745	92,120	36,596
2014-15	1,177,696	411,742	96,769	36,001
2015-16	1,175,001	407,256	98,257	34,603
2016-17	1,174,634	403,825	100,785	32,968
2017-18	1,171,315	398,746	103,257	34,501
2018-19	1,175,251	393,434	105,904	37,355
2019-20	1,176,399	390,455	108,290	38,266
2020-21	1,141,538	374,732	108,368	60,884
2021-22	1,141,728	374,200	106,863	56,762

Source: [Pennsylvania Department of Education Public School Enrollment Reports.](#)

The enrollments of both virtual and brick-and-mortar charter schools have expanded over time. Brick-and-mortar charter enrollments were more than five times higher in

2021-22 than they were in 2001-02. Cyber charter enrollments have increased at an even higher rate. Although brick-and-mortar charter enrollments were nearly double those of cyber charters in 2021-22, Cyber charter enrollments were more than 21 times higher in 2021-22 than they had been in 2001-02.

The majority of Pennsylvania charter school students living in rural and non-rural communities across the state attend a brick-and-mortar charter school. Over time, however, the relative size of the cyber charter sector has increased. In 2001-02, 13 percent of all students enrolled in Pennsylvania charter schools were enrolled in a cyber charter school. The cyber sector's share of charter enrollments has more than doubled in recent years, with 35 percent of all students enrolled in a Pennsylvania charter school enrolled in a cyber charter school in 2021-22.

Enrollments in traditional public schools declined during this same period. While the number of students enrolled in charter schools increased by 144,185 between the 2001-02 and the 2021-22 school years, the number of students enrolled in traditional public school districts declined by 247,725 students, from 1,763,653 to 1,515,928. Rural school districts have experienced the greatest decline in enrollments during this period. Enrollments for districts designated urban by the Center declined by approximately 10 percent between the 2001-02 school year and the 2021-22 school year. Rural districts' enrollments during this same period, in contrast, declined by approximately 24 percent.

Enrollments During COVID-19 Disruptions

Although the number of cyber charter schools remained the same (N=14), there was a particularly dramatic increase in cyber charter enrollments during the pandemic, with the number of students enrolled in cyber charter schools growing from 38,266 in 2019-20 to 60,884 in 2020-21, a 59 percent increase. Enrollments in brick-and-mortar charter schools increased only slightly during the same period, from 108,290 students in 2019-20 to 108,368 students in 2020-21, an increase of less than 1 percent.

The number of students enrolled in both brick-and-mortar charter and cyber charter schools declined slightly between 2020-21 and 2021-22, with the number of students enrolled in brick-and-mortar charter schools declining by 1 percent and the number of students enrolled in cyber charter schools declining by 7 percent. Despite this modest decline, cyber charter school enrollments in 2021-22 remain substantially larger than cyber charter school enrollments in 2019-20. Relative to 2019-20, cyber charter enrollments in 2021-22 increased by 48 percent.

Between the fall of 2019-20 before the pandemic and the fall of 2021-22, both brick-and-mortar charter and traditional public school districts experienced a decline in enrollments while cyber charters, as noted above, experienced an increase.

Since charter school enrollments have increased over time, we would expect aggregate tuition payments and the share of current expenditures used for charter tuition to increase as well. The next section discusses these patterns in more detail.

Fiscal Analysis

Aggregate Charter School Tuition Payments

Our fiscal analysis identified the following patterns. First, we found that payments by both rural and urban districts to charter schools have increased dramatically since 2015-16. Second, we found that increased charter payments have resulted in the share of current expenditures consumed by charter tuition increasing dramatically between 2015-16 and 2021-22. Third, we found that increased charter tuition payments since 2015-16 are not simply explained by increased charter enrollments. Specifically, we find a large increase in spending on charter school tuition even after we adjust for charter enrollments by expressing tuition payments on a per charter student basis. Finally, since all dollar values reported in this report have been adjusted for inflation, we can conclude that increased spending over time is not the product of inflation.

Aggregate charter school tuition payments have increased dramatically over the seven-year period with data broken down by charter school type, as displayed in Table 2. For clarity, we have adjusted all dollar values for inflation. For all districts, total tuition payments to charter schools (both brick-and-mortar and cyber) increased by 49 percent between 2015-16 and 2021-22, from \$1,800,349,340 to \$2,679,205,824 in inflation-adjusted dollars. Total charter school tuition payments increased dramatically for rural school districts during this same period, from \$193,650,083 in 2015-16 to \$326,878,058 in 2021-22 in inflation-adjusted dollars. The rate of increase in tuition payments was higher for rural districts (69 percent) than for non-rural districts (46 percent).

Tuition payments to cyber charter schools have increased at a higher rate than tuition payments to brick-and-mortar charters schools for both rural (78% increase in inflation-adjusted dollars) and urban (104% increase in inflation-adjusted dollars) districts.

Table 2. Aggregate Charter School Tuition Payments

	Tuition Paid by Rural School Districts			Tuition Paid by Urban School Districts			Tuition Paid by All School Districts
	Brick-and-Mortar Charter Schools	Cyber Charter Schools	Total Charter Tuition	Brick-and-Mortar Charter Schools	Cyber Charter Schools	Total Charter Tuition	Total Charter Tuition
2015-16	\$35,519,796	\$158,130,287	\$193,650,083	\$1,226,184,962	\$380,514,295	\$1,606,699,257	\$1,800,349,340
2016-17	\$37,647,059	\$153,428,429	\$191,075,488	\$1,314,666,114	\$372,190,611	\$1,686,856,725	\$1,877,932,213
2017-18	\$43,001,018	\$164,511,751	\$207,512,769	\$1,400,434,753	\$410,620,937	\$1,811,055,690	\$2,018,568,459
2018-19	\$43,147,468	\$184,550,759	\$227,698,227	\$1,513,483,464	\$470,523,538	\$1,984,007,002	\$2,211,705,229
2019-20	\$44,778,225	\$179,904,387	\$224,682,613	\$1,540,230,407	\$553,244,868	\$2,093,475,275	\$2,318,157,888
2020-21	\$43,145,142	\$294,437,899	\$337,583,041	\$1,633,132,861	\$764,702,036	\$2,397,834,896	\$2,735,417,937
2021-22	\$45,083,632	\$281,794,426	\$326,878,058	\$1,577,564,624	\$774,763,142	\$2,352,327,766	\$2,679,205,824

Source: Tuition Payment Data from Annual Financial Report Data (Expenditure Detailed, Tuition Schedule File), Pennsylvania Department of Education. Rural school districts based on CRP definition from 2020 census data. As per CRP, all districts not deemed rural are classified as urban. All financial figures are adjusted for inflation using the Act 1 Index.

Charter School Tuition as a Share of Current Expenditures

To contextualize these increases in charter school tuition payments, we also examined the share of school district budgets diverted to charter school tuition over time. To adequately prevent one-time spending in areas such as facilities from skewing our analysis, we express charter tuition as a percentage of current expenditures.

Table 3 reports charter school tuition payments as a share of current expenditures since 2015-16. Across the commonwealth, the percentage of current expenditures diverted to charter school tuition has grown substantially over time. From 6.2 percent in 2015-16 to 8.7 percent in 2021-22. The share of current expenditures diverted to charter tuition is highest in urban districts. The proportion of current expenditures spent on charter tuition by rural districts is still substantial, however. The highest share of tuition to charter schools from rural districts is for cyber charters. Moreover, it has increased over time from 2.3 percent in 2015-16 to 4 percent in 2021-22.

The difference between rural and urban districts in the share of current expenditures diverted to charter school tuition is explained in part by the higher share of students from urban districts attending charter schools. For example, 12% of all students for which non-rural districts were fiscally responsible in 2021-22 were charter school students. In contrast, only 5% of all students for which rural districts were fiscally responsible were charter school students. These figures are based on the “2021-22 Adjusted Average Daily Members” and 2021-22 “CS Average Daily Members” figures reported in the most

recent (at the time of this writing) proposed basic education funding file released by PDE.⁹

Table 3. Charter School Tuition as Percent of Current Expenditures

	Urban	Rural	All
2012-13	6.61%	2.74%	5.68%
2013-14	7.37%	2.77%	6.25%
2014-15	7.35%	2.70%	6.23%
2015-16	7.33%	2.79%	6.24%
2016-17	7.50%	2.73%	6.37%
2017-18	7.93%	2.95%	6.75%
2018-19	8.57%	3.22%	7.32%
2019-20	9.06%	3.22%	7.71%
2020-21	10.35%	4.80%	9.06%
2021-22	9.85%	4.63%	8.66%

Source: Annual Financial Report Data, Pennsylvania Department of Education. Rural school districts based on the Center’s definition from 2020 census data. Percentages calculated using financial data not adjusted for inflation.

To further contextualize increases in charter school tuition payments over time, we use charter school enrollments reported for each school district to express tuition payments on a per charter student basis. This permits control for the impact of increased charter enrollments on district tuition payments. For the 2016-17 through 2021-22, each school district’s charter school enrollments are reported in “district fast fact files” available on the Future Ready PA Index website. Data for the 2012-13 through the 2016-17 school years are available on the now defunct Pennsylvania School Performance Profile website.

Table 4 reports average tuition per charter student annually between 2015-16 and 2021-22 (the most recent data available). Figures are displayed for urban districts, rural districts, and all districts. Figures have been adjusted for inflation.

⁹ The proposed basic education funding file with data from 2021-22 can be found on the [Education Budget](#) page of PDE’s website as of July 2023.

Table 4. CS Tuition Per Charter Pupil in Adjusted Dollars

	Urban SDs	Rural SDs	All SDs
2015-16	\$13,366	\$15,573	\$13,573
2016-17	\$13,872	\$15,737	\$14,042
2017-18	\$14,457	\$16,635	\$14,654
2018-19	\$15,242	\$17,407	\$15,440
2019-20	\$15,664	\$17,421	\$15,818
2020-21	\$16,004	\$17,388	\$16,163
2021-22	\$16,147	\$18,234	\$16,375

Source: Tuition data from Annual Financial Report Data, Pennsylvania Department of Education. Charter school enrollment data from school district fast facts data. Rural school districts based on CRP definition from 2020 census data. As per CRP, all districts not deemed rural are classified as urban. All financial figures are adjusted for inflation using the Act 1 Index.

Across all districts in the Commonwealth, average payments increased by 21 percent in inflation-adjusted dollars, from \$13,573 paid per charter student in 2015-16 to \$16,375 per charter student in 2021-22. The rate of increase for rural school districts was 17 percent and for urban school districts 21 percent. Table 4 shows that charter tuition payments increased even when we control inflation and charter enrollments by expressing tuition payments on a per charter student basis.

Rural School District Tuition Payments

We can observe the number of charter school students for which each urban and rural school district was fiscally responsible in publicly available data from PDE. However, current data from PDE does not distinguish between cyber and brick-and-mortar charter school students for which each urban and rural school district was fiscally responsible. Annual Financial Report data after 2015-16 does distinguish between the tuition payments made by rural and urban school districts to cyber and brick-and-mortar charter schools. Table 5 reports the percentage of total charter tuition payments made by rural, urban, and all school districts to cyber charter schools.

We find that the vast majority of charter tuition paid by rural districts was reserved by far for cyber charters. We also find that the share of charter tuition paid by rural districts to cybers has increased over time, from 82 percent in 2015-16 to 86 percent in 2021-22.

Table 5. Cyber Charter Tuition as Percent of Total Charter Tuition

	Urban	Rural	All
2015-16	24%	82%	30%
2016-17	22%	80%	28%
2017-18	23%	79%	28%
2018-19	24%	81%	30%
2019-20	26%	80%	32%
2020-21	32%	87%	39%
2021-22	33%	86%	39%

Source: Annual Financial Report Data, Pennsylvania Department of Education. Rural school districts based on the Center's definition from 2020 census data. Share of cyber tuition before 2015-16 estimated based on average share of cyber tuition for each district after 2015-16.

Tuition for Special Education

As noted above, each school district pays either a special or non-special tuition rate for residents who attend a charter school, depending on whether or not the resident student receives special education services. The proportion of cyber charter school tuition paid at the special education rate increased slightly between 2015-16 (30 percent statewide, 29 percent of rural district cyber tuition) and 2021-22 (36 percent statewide, 36 percent of rural district cyber tuition). On average, a slightly higher proportion of the students enrolled in charter schools received special education services than traditional public schools in 2021-22 (approximately 23 percent of cyber charter school students and 20 percent of brick-and-mortar charter schools student compared to approximately 18 percent of students enrolled in urban districts and 19 percent of students enrolled in rural districts.¹⁰

As noted above, charter school special education tuition rates are based on a calculation that assumes each district's special education spending was for a special education student population equivalent to 16 percent of the district's average daily membership. For those districts with a special education population greater than 16 percent of the district's average daily membership, the special education charter school tuition rate per charter student is greater than the district's actual special education spending per student. In 2021-22, a large majority of both urban and rural school districts were fiscally responsible for a special education population that was greater than 16 percent. As a result, for these districts the charter school special education

¹⁰ These figures are based on the special education enrollments reported in the Future Ready Index fast fact data files for 2021-22.

tuition rate calculation assumes the district spends more per special education student than it does in reality. In 2021-22, 89 percent of urban districts were fiscally responsible for a special education student population that was greater than the 16 percent assumed by the current tuition formula. Moreover, 97 percent of rural districts were fiscally responsible for a special education student population that was greater than the 16 percent assumed by the current tuition formula.¹¹

In Schafft et. al’s 2014 analysis of charter school funding and rural school districts for the Center for Rural Pennsylvania, they found a gap between the amount of tuition received by charter schools for special education and the amount those charter schools then spent on special education. To investigate whether and to what extent special education tuition dollars sent to charters continued to exceed special education spending, we compared aggregate special education tuition payments to charters and the special education spending charters reported on their annual financial reports.

Overall, we find that aggregate charter tuition payments at the special education rate are large and have grown over time, reaching \$868 million in 2021-22 for all school districts. Rural districts have spent a substantial amount on special education charter tuition, and those payments have also increased over time. In 2021-22, rural districts spent approximately \$120 million on special education charter school tuition payments. This amount is about 106 percent higher, in inflation adjusted dollars, than in 2021-22.

Table 6. Total Tuition to Charters at Special Education Rate

	Urban	Rural	All
2015-16	\$521,796,348	\$58,132,210	\$579,928,558
2016-17	\$560,777,501	\$60,753,266	\$621,530,767
2017-18	\$533,135,990	\$69,390,511	\$602,526,501
2018-19	\$621,896,493	\$75,635,255	\$697,531,748
2019-20	\$639,660,601	\$81,919,470	\$721,580,072
2020-21	\$729,016,430	\$113,460,550	\$842,476,980
2021-22	\$748,453,663	\$119,684,175	\$868,137,838

Source: Annual Financial Report Data, Pennsylvania Department of Education. Rural school districts based on the Center for Rural Pennsylvania’s definition from 2020 census data.

¹¹ These figures are based on SD and CS ADMs (rather than enrollment) since both school district and charter school special education tuition spending are subject to the 16 percent assumption embedded in the tuition calculation.

Comparing the tuition received from all school districts with special education spending by charters, we find a large gap between the funding received by charter schools for special education students and spending on special education by the charters receiving those funds.¹² These trends are illustrated statewide in Table 7 below. Since charter schools do not report how much they spent on rural vs. urban districts, the figure reports data on a statewide basis.

In 2021-22, for example, only 54 percent of the special education district tuition payments to charter schools was subsequently reported by charter schools as special education spending in the 2021-22 school year.

These trends are consistent across school types, though cyber charters appear to spend a smaller share of the tuition they receive for special education on special education students than brick-and-mortar charter schools. For example, in 2021-22 only 44 percent of the special education district tuition payments to cyber charters was subsequently reported by cybers as spent on special education.

Table 7. CS Special Education Tuition Revenue vs. CS Special Education Spending

	Cyber CS Special Education Spending as Share of CS Special Education Revenue from SDs
2015-16	51%
2016-17	53%
2017-18	51%
2018-19	48%
2019-20	43%
2020-21	42%
2021-22	44%

Source: Annual Financial Report Data, Pennsylvania Department of Education. Rural school districts based on the Center's definition from 2020 census data. Special education spending based on expenditures reported under "Special Programs Elementary/Secondary, 1200." Tuition based on tuition reported at special education rate in tuition schedule files. Percentages calculated with figures are not adjusted for inflation.

¹² For details on how the assumptions embedded within the current formula for determining special education tuition rates creates this pattern, see David Lapp and Joshua Lin, [Charter School Special Education Funding in Pennsylvania](#).

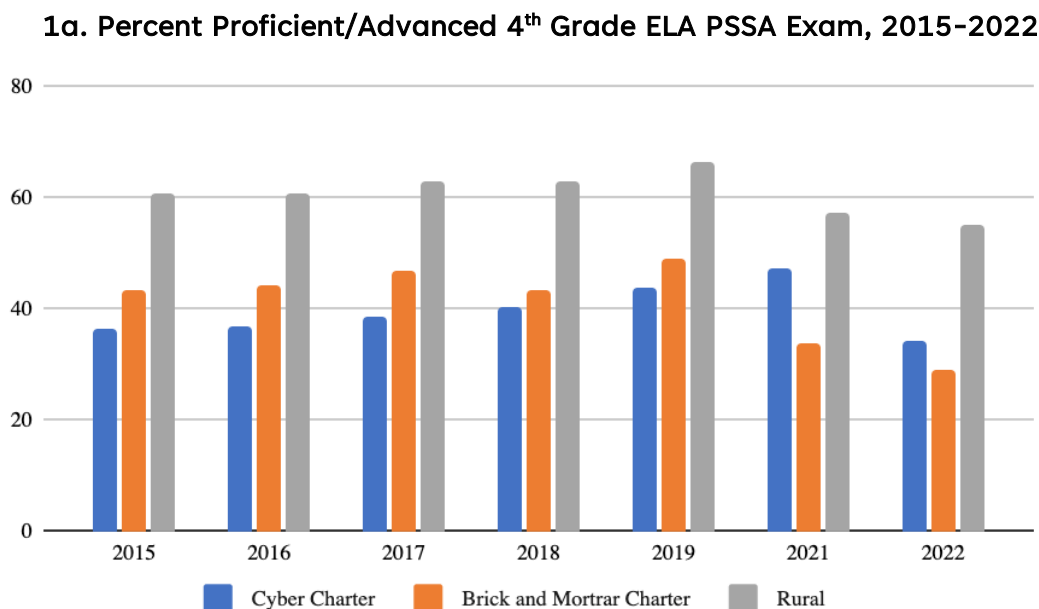
Outcomes

We also examined relative achievement across rural, cyber, and brick-and-mortar charter schools. To complete our analysis, we compared PSSA exams scores and Keystone exam scores for all students by school type. Across our analyses, we find large and persistent gaps in the relative performance of charter schools and rural districts. In most years and across most tests, those gaps are largest between rural districts and cyber charters. On average, rural and urban school districts have similar outcomes. We have excluded urban districts from the figures below for simplicity but have included information about those districts in the Appendix. For illustrative purposes, we report PSSA/Keystone performance for benchmark grades of 4th, 8th, and 11th grade.

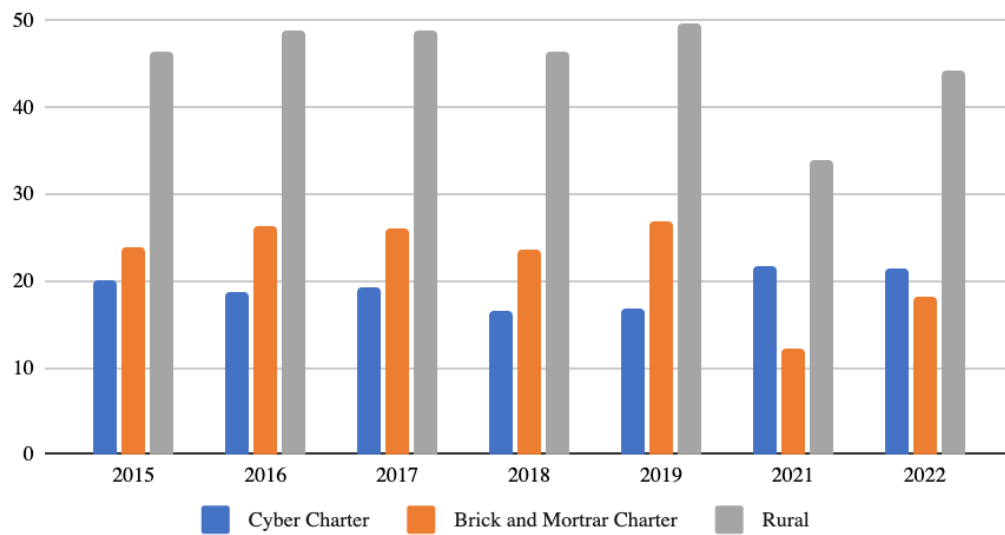
PSSA 4th Grade Exams

Figure 1 displays these patterns across subject areas for 4th grade exams between 2015 and 2022. As the figure makes clear, rural districts outperformed cyber charters, on average, across each subject area. In the most recent year of data, for example, the gap between rural districts and cyber charters in the percentage of test takers scoring proficient/advanced on the PSSA 4th grade ELA exam was 21 percent (Figure 1a), in 4th grade math 23 percent (Figure 1b), and in 4th grade science 19 percent (Figure 1c). These gaps in average proficiency rates are consistent across years.

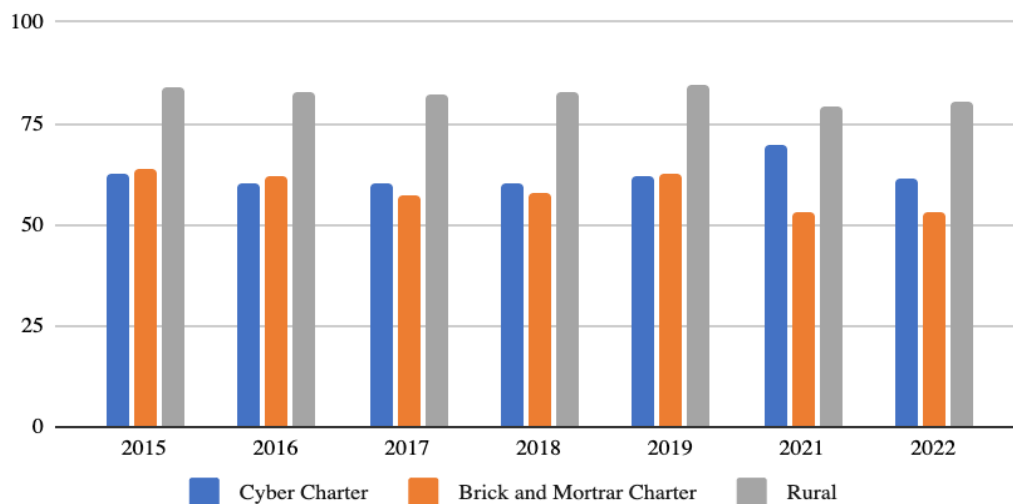
Figure 1: Patterns Across Subject Areas for 4th Grade Exams Between 2015 and 2022



1b. Percent Proficient/Advanced 4th Grade ELA PSSA Exam, 2015-2022



1c. Percent Proficient/Advanced 4th Grade Science PSSA Exam, 2015-2022



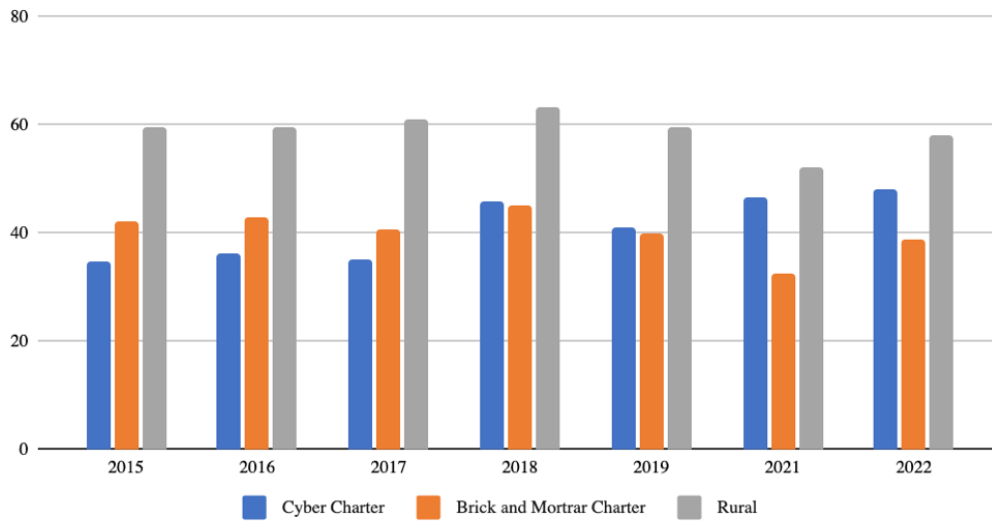
PSSA 8th Grade Exams

We also find consistent gaps in the percentage of test takers scoring proficient/advanced on the 8th grade PSSA exams between rural districts and cyber schools as well, as displayed in Figure 2. Although these differences in proficiency rates are smaller in magnitude, they are substantial and again persist across years and subject areas. The gap between rural districts and cyber charters in the percentage of test takers scoring proficient/advanced on the 8th grade ELA exam was 10 percent

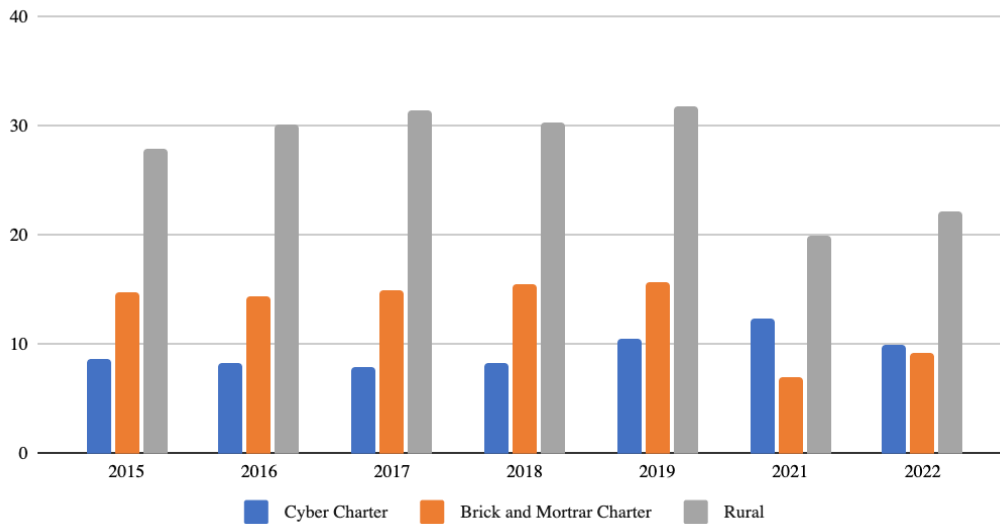
(Figure 2a), on the 8th grade math exam was 12 percent (Figure 2b), and in 8th grade science was 7 percent (Figure 2c).

Figure 2: Percentage of Test Takers Scoring Proficient/Advanced on the 8th Grade PSSA Exams

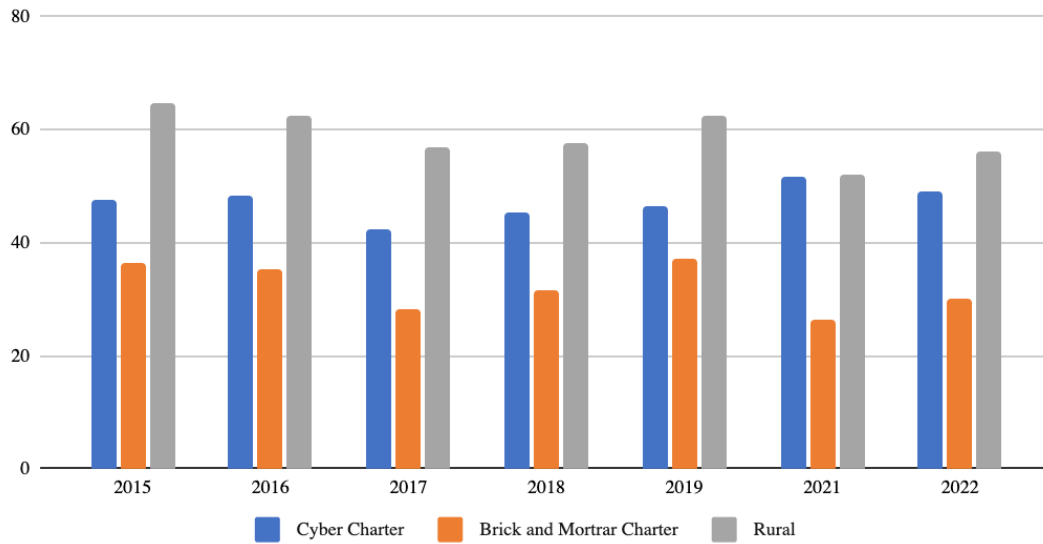
2a. Percent Proficient/Advanced 8th Grade ELA PSSA Exam, 2015-2022



2b. Percent Proficient/Advanced 8th Grade Math PSSA Exam, 2015-2022



2c. Percent Proficient/Advanced 8th Grade Science PSSA Exam, 2015-2022

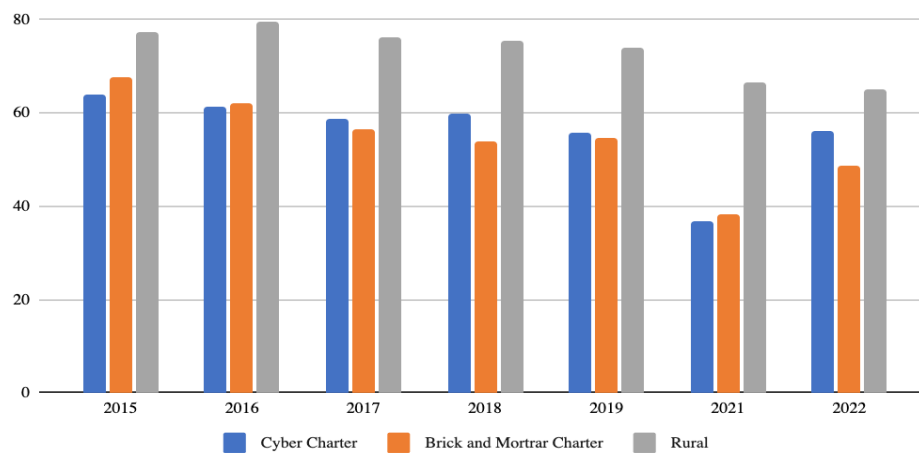


Keystone Exams

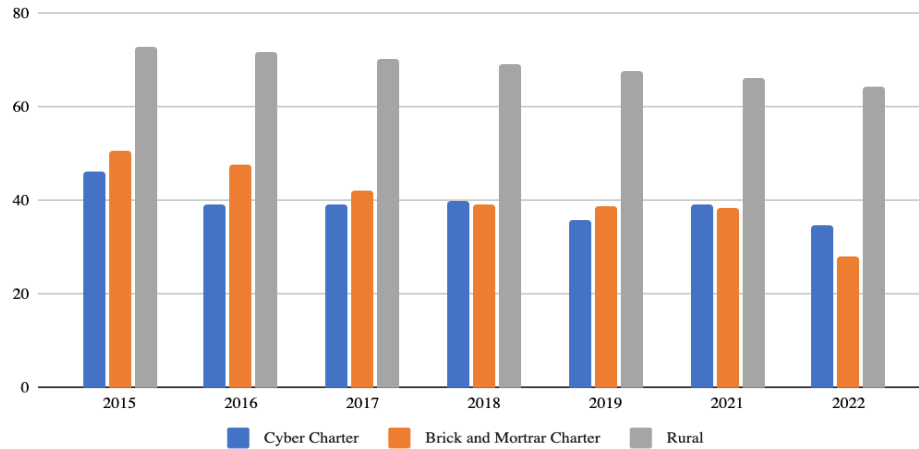
These patterns are also consistent when we compare results from Keystone exams administered in 11th grade. Figure 3 displays achievement by school type. The gap between rural districts and cyber charters in the percentage of test takers scoring proficient/advanced on the Keystone Literature exam was 9 percent (Figure 3a), on the Keystone Algebra I exam was 30 percent (Figure 3b), and the Keystone Biology exam was 14 percent (Figure 3c).

Figure 3: Achievement by School Type

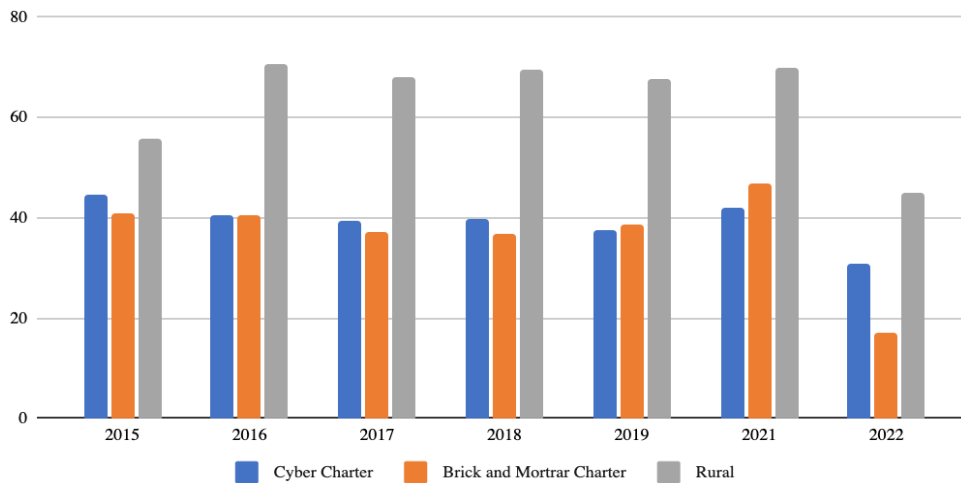
3a. Percent Proficient/Advanced Keystone Literature Exam, 2015-2022



3b. Percent Proficient/Advanced Keystone Algebra I Exam, 2015-2022



3c. Percent Proficient/Advanced Biology Exam, 2015-2022

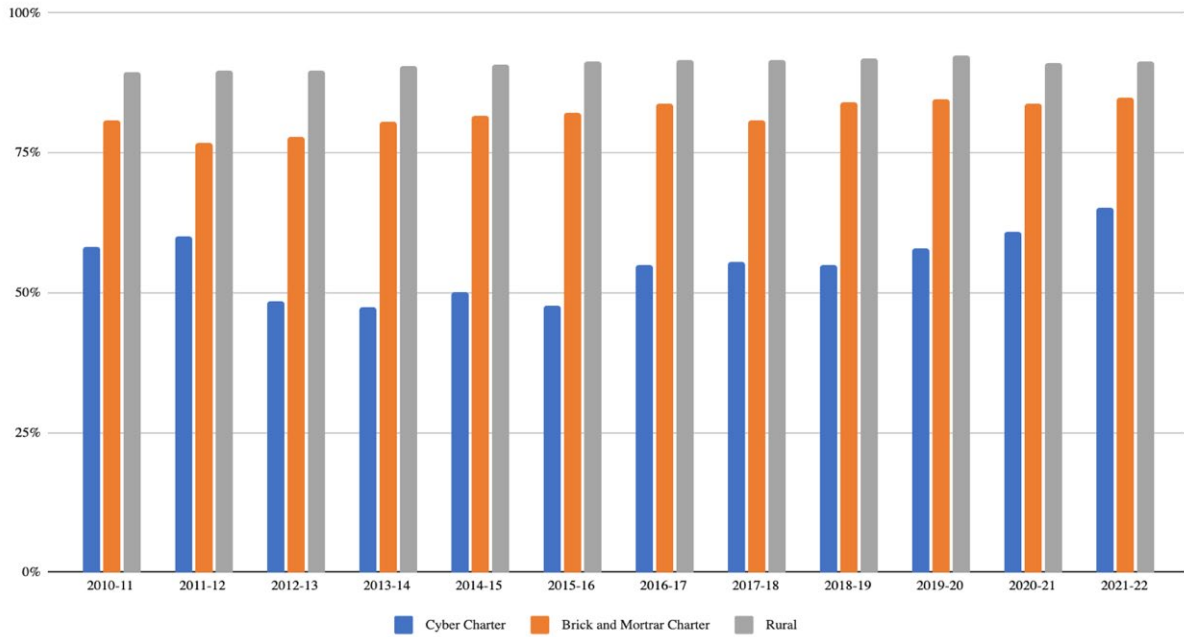


Graduation Rates

As an additional measure of achievement, we also compared the four-year cohort graduation rate for rural districts, brick-and-mortar charters, and cyber charters. These patterns are displayed in Figure 4.¹³ We again find large and persistent gaps over time. These gaps are again consistent across years. Between 2010-11 and 2021-22, graduation rates were, on average, 36 percent higher in rural districts than in cyber charter schools.

¹³ PDE follows a careful procedure to appropriately attribute students to the correct LEA when calculating graduation rates. As a result, students who leave for enrollment reasons are not included in the cohort for the calculation of graduation rates. The technical documentation can be found [here](#).

Figure 4: Four Year Cohort Graduation Rate, 2010-11 – 2021-22



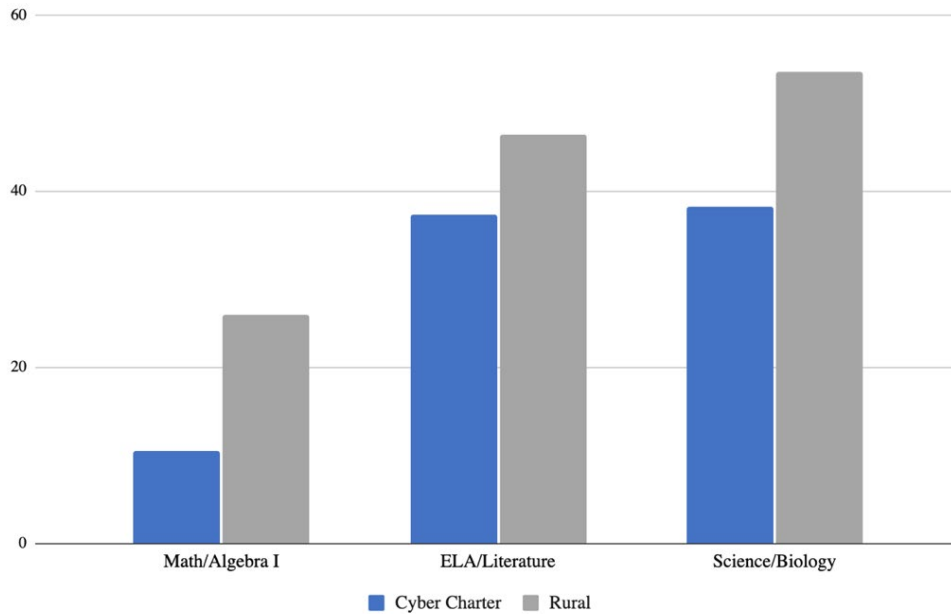
Focus on Students from Low Income Families

On average, the proportion of economically disadvantaged students enrolled in brick-and-mortar charter schools in 2021-22 was higher (60 percent) than in rural (45 percent) and urban (42 percent) school districts. The proportion of students from low-income families enrolled in cyber charter schools was comparable to rural and urban districts (44 percent).

We also examined the performance of students designated economically disadvantaged on PSSA and Keystone exams in 2022. For simplicity, we report the proportion of test takers designated economically disadvantaged by PDE who scored proficient/advanced across all grades in Mathematics/Algebra I, ELA/Literature, and Science/Biology.

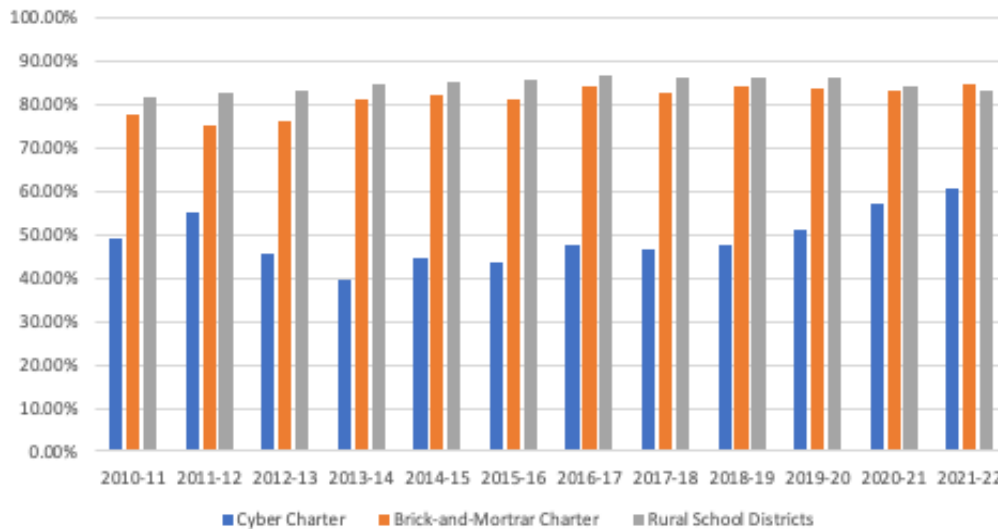
We again find large and consistent gaps between the performance of students enrolled in traditional rural school districts and cyber charter schools. On average, students from low-income families achieve proficient/advanced status at substantially higher rates when they are enrolled in a rural school district than when they are enrolled in a brick-and-mortar charter or a cyber charter school. Students from low-income families enrolled in cyber charters, on average, were proficient/advanced on 2022 exams at rates that were 15 percent lower than rural districts in Mathematics/Algebra I, 9 percent lower than rural districts in ELA/Literature, and 16 percent lower than rural districts in Science/Biology. These patterns are displayed in Figure 5.

Figure 5: Economically Disadvantaged Student Percent Proficient/Advanced on PSSA and Keystone Exams, 2022



We also examined the four-year cohort graduation rates for economically disadvantaged students by school type. We again found large gaps between cyber charter schools and rural districts. These gaps ranged from a high of 45 percent and a low of 23 percent.

Figure 6: Four Year Cohort Graduation Rate for Economically Disadvantaged Students, 2010-11 – 2021-22



Parental Motivations for Cyber Charter Enrollments

Survey Response

Eighty-one respondents completed the survey, although 11 did not fully complete the survey. This left 70 survey returns in which all or nearly all of the survey items were completed. The 81 respondents reside in 28 different school districts and their children go to seven different cyber charter schools. Of the school districts in which respondents resided, 34 (42 percent) come from Country Ridge,¹⁴ a single rural school district in eastern Pennsylvania. Similarly, 53 percent of respondents have a child who attends the same cyber charter school, Keystone Cyber Academy (KCA).¹⁵ Of the 34 respondents from the single district, 28 had a child attending KCA. The relatively low number of usable survey responses combined with the geographic clustering of respondents raise questions about the overall representativeness of the survey data for understanding parental decision-making and create challenges for interpreting the survey results. We also are unable to assess any possible response bias from respondents (i.e., particular groups of potential respondents being more or less likely to respond to the survey than others). Nonetheless, keeping these cautions in mind, the data provide some suggestive information about how some parents evaluate educational options for their children.

Given the proportion of respondents residing in a single school district, we attempted to assess whether there were systematic differences between respondents residing in that single district and those residing elsewhere. Three summated scales were developed from the survey items, School Attachment, Community Attachment, and COVID-19 Policy Perceptions (descriptions of these scales are in Appendix 4).¹⁶ Independent T-test comparison of means were conducted to assess statistically significant differences in these scales across the group of respondents from the one district and all other respondents. No significant differences were detected (analyses not shown here). This leads us to conclude that on the basis of this evidence, there do not appear to be statistically significant differences between respondents from the one school district and all other respondents that would skew the data.

Sixty parents answered the question about how likely they would be to enroll their child in the cyber charter for the next two years (or as long as the child was eligible). Of those 60 respondents, 78.3 percent said they would be “very likely” to continue their child’s enrollment, and another 11.7 percent said they would be “somewhat likely.” Only 5 percent of respondents replying to this survey item stated that it would be “very unlikely” that they would re-enroll their child in cyber charter.

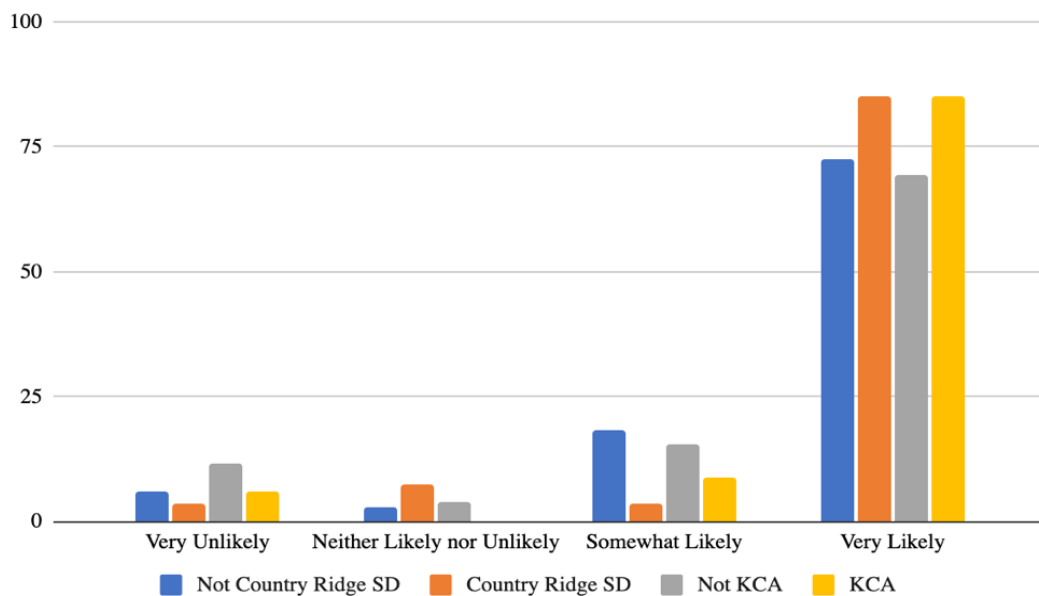
¹⁴ This is a pseudonym.

¹⁵ This is a pseudonym.

¹⁶ The survey items were included in the survey to construct scaled variables with the intention of comparing differences across parental groups who were relatively more or less inclined to send their child back to traditional public schools. However, nearly everyone who responded to the survey overwhelmingly stated they were not inclined to send their child back to traditional public schools. This, combined with the relatively low number of responses, made this planned analysis moot.

In Figure 7, we compare responses to this question between respondents residing in the Country Ridge School District (23 valid responses) and those residing elsewhere (33 valid responses). We also compare responses to this question between respondents with a child attending KCA (34 valid responses) and those attending a different cyber charter (26 valid responses). No distinct patterns emerge across these four groups of respondents. However, across *all* groups, there is a strong positive inclination to re-enroll children in a cyber charter and especially among respondents residing in the Country Ridge School District (with 85.2 percent stating they would be “very likely” to re-enroll their child in cyber charter) and those sending their child to the KCA (with 85.3 percent stating they would be “very likely” to re-enroll their child in cyber charter).

Figure 7: Percent of Respondents Stating the Likelihood of Re-enrolling Their Child in CS the Following Year



Note: No respondents chose the “somewhat unlikely” answer choice.

Respondent Characteristics

The respondents overwhelmingly identified as the mother to the child enrolled in a cyber charter (89 percent). The average time respondents had lived within their home school district (as distinguished from the charter school) was about 16 years, although one respondent had resided within their home school district for only one year and one respondent reported living within the home district for over 40 years. Nearly one-third of respondents had a bachelor’s degree. Another nearly 40 percent of respondents reported some college or an associate degree or vocational certificate (see Table 8). Seventy percent of respondents said that if their child were enrolled in the local school district, they would not be eligible for the free or reduced-price lunch program.

Table 8. Respondent Characteristics

	N	Percent
Respondent Relation to Student		
Mother	72	88.9
Father	4	4.9
Grandparent	3	3.7
Foster Parent	1	1.2
Other	1	1.2
Years Residing in Home School District		
1-10	29	36.7
11-20	29	36.7
21-30	11	13.9
More than 30	10	12.7
Education of Respondent		
Some HS, no diploma	1	1.2
Alternative HS diploma (incl. GED)	2	2.5
Regular HS diploma	6	7.4
Some college	12	14.8
Associate degree or vocational certification	20	24.7
Bachelor's degree	26	32.1
Master's degree	9	11.1
Professional or doctoral degree	3	3.7

Note: There were 81 valid responses to the question about respondent relation to the student. The other two survey items had 79 valid responses each.

Reasons for Cyber Charter Enrollment

Given that this survey was conducted towards the end of the worst impacts of the COVID-19 pandemic, we were interested in gauging the extent to which health and safety concerns associated with the pandemic shaped previous parental decision-making. Amongst those who responded (65 out of 81), the pandemic appears not to have played a primary role in enrollment decisions in most cases (see Table 9). Nearly 50 percent said that COVID-19 exposure was “not at all important” in the cyber charter enrollment decision, while only 20 percent noted it as “extremely important.” Only slightly over one third of respondents stated that home district COVID-19 policies were very or extremely important in cyber charter enrollment. Parents described cyber enrollment in terms of their response to deep dissatisfaction with the traditional school. Sometimes this dissatisfaction was COVID-19 related, “They listened to the largest

voices, and made no accommodations for the quieter voices,” but just as often it was not: “I fear that rather than teach basic fundamental scholastic ideals, public schools indoctrinate, rather than educate.”

We split the analysis between parents reporting on students who had enrolled in the cyber charter prior to March 2020, or afterwards. About two thirds of respondents (66.7 percent) reported enrolling their child in a cyber charter March 2020 or later, while only one third reported enrolling their child prior to March 2020. The data comparing these groups are somewhat difficult to interpret because the number of observations is relatively small. That said, just over 64 percent of those who had enrolled their child in cyber charter school after March 2020 said that concerns about COVID-19 exposure were very or extremely important in the enrollment decision. That compares with 16.7 percent of parents whose child was enrolled in cyber charter prior to March 2020.

Table 9. COVID-19 Concerns and Cyber Charter Enrollment Motivations, by Percent

	Not at All Important	Slightly Important	Moderately Important	Very Important	Extremely Important
I had concerns about COVID-19 exposure	47.7 (31)	10.8 (7)	12.3 (8)	9.2 (6)	20.0 (13)
<i>Student enrolled prior to March 2020</i>	50.0 (12)	16.7 (4)	16.7 (4)	4.2 (1)	12.5 (3)
<i>Student enrolled March 2020 or after</i>	47.1 (16)	2.9 (1)	5.9 (2)	14.7 (5)	29.4 (10)
I disagreed with COVID-19 policies at our home district	36.9 (24)	10.8 (7)	18.5 (12)	16.9 (11)	16.9 (11)
<i>Student enrolled prior to March 2020</i>	45.8 (11)	12.5 (3)	12.5 (3)	12.5 (3)	16.7 (4)
<i>Student enrolled March 2020 or after</i>	23.5 (8)	8.8 (3)	26.5 (9)	23.5 (8)	17.6 (6)

Note: Response percentages are displayed with raw numbers in parentheses.

We asked parents about factors that would influence their decision to re-enroll their child in the traditional school district of residence. Other than a bi-modal response on a question about a return to pre-COVID conditions in the school (with about one-third identifying this as an “unimportant” factor and slightly of 40 percent identifying it as “very” or “extremely important”), most responses appear to point to a broader dissatisfaction with the school district, its academic quality and the perception of school administrators (see Table 10).

Table 10. Importance of Factors Affecting the Consideration to Re-enroll in the Local Public School District, by Percent

	Not at All Important	Slightly Important	Moderately Important	Very Important	Extremely Important
A return to pre-COVID-19 school conditions	35.8 (19)	-	20.8 (11)	17.0 (9)	26.4 (14)
More academic options (e.g., languages, AP courses, etc.)	5.7 (3)	1.9 (1)	18.9 (10)	22.6 (12)	50.9 (27)
Better academic quality	3.8 (2)	3.8 (2)	9.4 (5)	17.0 (9)	66.0 (35)
Improved school extracurriculars	22.6 (12)	1.9 (1)	24.5 (13)	18.9 (10)	32.1 (17)
Improved relations and/or communication with administrators	3.8 (2)	-	13.2 (7)	17.0 (9)	66.0 (35)
Better quality administrators	3.8 (2)	1.9 (1)	11.3 (6)	15.1 (8)	67.9 (36)
Better school policies	7.5 (4)	1.9 (1)	9.4 (5)	13.2 (7)	67.9 (36)
Improved school environment	5.7 (3)	1.9 (1)	13.2 (7)	11.3 (6)	67.9 (36)

Note: Response percentages are displayed with raw numbers in parentheses. 53 valid responses for each item.

Based on these results, along with the strong indication that most respondents did not show interest in re-enrolling their child in traditional public schools, we would not

expect the waning of the pandemic to have a significant effect on child school enrollment decisions.

Results of Survey Open-Ended Questions

The survey also included a number of open-ended questions. After a bank of survey questions on school policies related to the COVID-19 pandemic, there was an open-ended question, “Do you have any additional comments about how your home school district responded to COVID-19?” Other open-ended questions included, “Are there any other important reasons not mentioned above that affected your decision to enroll your child in a cyber school?” and “What characteristics of your cyber charter have most positively impacted your decision to stay in your cyber charter?”

With regard to school COVID-19 policies, several respondents spoke positively about the efforts of the school district. One person responded, “I greatly appreciate the personal concern and individual effort that school staff and faculty put forth to show love and support in the community during the pandemic.” Similarly, another wrote:

“From what I understand, the school district had a plan in place for distance learning prior to COVID and were better prepared than other school districts in the area. My assumption is that most people in the district did not want masking and were probably hostile to most measures. I'd assume that includes most of the staff/administration, too, but I feel they made a reasonable effort to develop a plan for distance learning and getting students back to school. It was a difficult situation because guidance seemed mixed and constantly changing, plus the politics of the situation. I think the district was mindful of limiting the school's liability/keeping up appearances while trying to return to in-person.”

However, by far most responses to the question about district responses to the pandemic were more negative. Parents complained about the lack of preparation on the part of school districts, sub-par online instruction, and inconsistent policies and implementation. One parent wrote, “I wish they had picked either virtual or in-person for the year and stuck with it. The back and forth was miserable. And on top of that if our child had an exposure then she was sent home to QT. Which left us at the mercy of others.” Another wrote, “They listened to the largest voices, and made no accommodations for the quieter voices. They published a strict safety plan but did not follow it.” Still another wrote that:

“I know COVID was challenging for all schools, but I feel [our school district] is especially incompetent and offered fewer choices than other districts in our area to keep students learning and engaged. I also feel that with those they have in charge and making decisions, they will continue to make bad choices and fail to help students close the learning gaps that have opened.”

A smaller number of parents noted that they felt the pandemic guidelines were an overreach and simply misguided. One wrote, “My ‘district’ is supposed to value education. Rather, it taught fear of a virus we still know nothing about, preach completely ridiculous safety measures that someone with common sense could easily see through, and put sports rather than education on a pedestal.” In total the comments from these respondents suggest that the pandemic was less a critical event that directly led to enrollment decision changes than the culmination of longer-brewing frustrations with the school or district that seemed to confirm parents’ negative opinions.

Frustrations with the school district included both social and academic issues. Bullying was a concern for many parents and noted by 19 parents in open-ended responses. One parent wrote, “He was bullied in and out of class and it wasn’t taken seriously by staff,” and another similarly wrote, “Bullied at school and nothing was done.” Many parents wrote at some length about the negative impact of bullying on their child or children and the safety issues bullying posed, for example “Dangerous students need to be removed from classrooms. Permanently. Their rights to education and social opportunities are being protected, but who is looking out for the rights of the rest of the students who are being mentally, emotionally, and physically assaulted every day?”

There were also suggestions from the open-ended responses about how the pandemic and hot-button cultural issues had divided communities and undermined the school-community relationship. A parent shared, “It wasn’t just the employees of the district we became disenchanted with; it was also the other parents. Our idea of it being a community, where we all looked out for and cared for each other’s children, was sadly a fantasy on our part.”

Other parents viewed the school as furthering political and cultural positions they took exception to. One parent wrote, “I pulled my daughter because of the liberal agenda. I felt like the school put female students in harm’s way.” Another wrote, “Trans/Nonbinary are mental health issues and should be treated as such and not encouraged at school.” And yet another wrote, “There is too much focus on LGBTQ, and it is very demonstrative.”

The academic and administrative issues raised by parents included the perception of unresponsive teachers and administrators, a lack of academic rigor. A parent wrote, “I know Covid was challenging for all schools, but I feel [our school district] is especially incompetent and offered fewer choices than other districts in our area to keep students learning and engaged. I also feel that with those they have in charge and making decisions, they will continue to make bad choices and fail to help students close the learning gaps that have opened.”

On the other hand, parents spoke quite positively about their children’s experiences with cyber charters. One parent wrote, “The cyber charters were the only ones teaching effectively and safely during that time. I feel that my kids received a much better education than their peers during covid because they attended [a cyber]. Better

curriculum, and better remote delivery of curriculum.” Another wrote, “[the cyber] has provided more opportunities than what (our school district) ever could. Teachers are hands on, keep parents in the loop, make sure students are being challenged and offer way more academically. They are now Honor Roll students and are learning at a higher level than what the (school district) curriculum offers for their grade level. We will not go back to a circle of hell.”

In sum, the survey data should be interpreted cautiously because of the relatively low number of responses and the over-representation of respondents from a single school district and with children in a single cyber charter. Nonetheless, the respondent data from these parents suggests that while COVID-19 played a role in school decision-making, that had in most cases far less to do with health and safety concerns (though some parents had these as well) as with broader dissatisfaction with the social and academic environments of the local school.

Parent Interview Response

Of the 81 rural surveys, 22 respondents indicated interest in participating in a virtual interview. Semi-structured interviews provide respondents the opportunity to delve more deeply into ideas, tell stories about their experiences, and ask clarifying questions of the interviewer. Likewise, for interviewers, semi-structured interviews lend themselves to conversational interactions with follow up and clarifying questions and, importantly, the latitude to pursue ideas that may have been yet unconsidered in more structured data collection strategies.

All 22 potential interviewees received two email invitations to schedule an open-ended interview with one of the research team members. Of the 22 people who indicated potential interest, six participants completed interviews. The interviews were semi-structured and ranged in length from 16 to 28 minutes with a mean of 21 minutes. Interviews were recorded with permission and transcribed. Inductive analysis was performed using a common qualitative data software platform. The interview protocol can be seen in Appendix 3. Three prominent themes are discussed below.

Parent Dissatisfaction with Traditional District Cybers and Traditional District Online Learning During COVID-19

Uniformly, parents expressed dissatisfaction with the online learning associated with their traditional schools. While some respondents expressed understanding of the challenges faced by their traditional school district considering the rapidly evolving nature of school closures (“they did the best they could”), the interviewed parents were deeply unhappy with their traditional district’s online learning options. One describes their child’s experience and how that impacted the family’s decision to enroll in cyber:

“During the first part of the issue, half the time the Zoom didn't work or half the time the meeting didn't work... It was just a big process. Then when they talked

about coming back in the fall, I said, 'I can't do this because I feel like now, I'm doing a disservice to my children because they're not learning anything.'"

Similar to this parent, others were concerned especially about the possibility of having to continue with the traditional school district's online programming into the 2020-21 school year amid uncertainties about additional school closures. For the parents interviewed, not only was their district's emergency online learning during COVID-19 closures their first exposure to online learning, but for those who opted not to return to traditional public school buildings amid the uncertainty of additional closures, the traditional district's cyber program was their first experience with online learning. They were deeply unsatisfied with the district's cyber option. A parent describes their child's experience with the district's cyber school option below:

"You had to log in for our district cyber in the morning for like 10 minutes. The teacher said what your assignments were for the week and that was it. There wasn't any interaction. She didn't go over the actual assignments. She just said, do assignment 1, 2, 3, due at the end of the week... There was no detail. It was all just 'complete this by the end of the week.'"

Another stated:

"And after the three weeks of being with this district charter and it not getting anywhere, no support...No interaction. It was just him and I all day doing these lessons...It was just you print out this worksheet, you fill it out and you scan it. So, it was very limited. Not much interaction. Wasn't going well. And when we got the cyber charter to, hey, you're off the waitlist, can you join? Oh, absolutely. And that's what we did, and we've loved it ever since."

Parent Perception on the Relative Flexibility of their Traditional School District and their Cyber Charter

Parents had strong opinions about the flexibility of the traditional school as compared to their cyber charter school. It should be noted that some of these opinions were based on the flexibility and convenience uniquely associated with online learning and simply could not transfer to in-person learning. Two excerpts of this category follow.

"My husband is self-employed, and we had the ability to travel during the school year while taking education with us. So, we did a lot of, I call them working vacations with the kids. We'd venture out I think it was like mid October, we just went out camping and the kids were still able to take their school with them and I didn't have to worry about educational permission slips and them missing out

and my daughter falling behind or my son falling behind and not being able to catch up.”

Another parent describes the physical day-to-day freedom that the cyber charter affords:

“...They have so much freedom. They spend hours outside playing football, baseball, whatever they want to do. They come and go in and out of my house as they want, they don't have to sit at a desk. They can lay in their bed; they can sit on the floor. There's structure but no structure.”

But there was a second strand among the responses that spoke to deep dissatisfaction about the perceived lack of inflexibility and unwillingness of the traditional school district to change. One stated, “they cannot treat every kid the same because they're not, some kids are different.” These responses capture contributing factors to the parents’ decisions to unenroll from their traditional schools. In sum, parents perceived that the traditional schools were inflexible in their approach to individual differences. Often the expressed dissatisfaction related to perceived lack of responsiveness of the school to parents’ wishes for individualized instruction.

“...There needs to be more collaboration and accepting of parents' feedback and actually taking it to heart. Not just paying lip service to like, well, you get to voice your opinion at a school meeting, but then they don't do anything with it. They don't pivot. They don't pivot to the pace that the kids learn. They just kind of ram them through the material because they have to hit the deadline, and it doesn't matter if the kids know it or not...I think part of it is that this is the way that we've always done things.”

Another voiced this sentiment this way:

“...Her teachers in both of those grades like kindergarten were like, ‘I don't know what to do for her. I mean, she's done with her work and my hands are tied. I can't really do anything else for her to enrich her education.’ So, she spent a lot of time drawing, doodling and waiting for the other kids to catch up...I think that they do a lot for no Child Left Behind. And I think tremendous strides have been made in that particular realm. But I think that from the flip side, you're leaving out these other kiddos who excel...I think that traditional schools, their hands are tied when it comes to helping students who don't fit inside the box of just an average student.”

Cyber Charters Offer More Opportunities

Respondents frequently described more opportunities afforded by their cyber charter as compared to their traditional school. One set of opportunities described were material items such as school supplies, courses, and field trips. But cyber charter parents also described new opportunities for their children to be repositioned in positive ways when, from their point of view, they were previously seen by their traditional school in a much more negative light. Both types of opportunities are captured below.

Materials, Courses, and Trips Provided by the Cyber Charter School:

“We get up to a \$300 reimbursement for community classes. So, the flute lessons that my daughter takes, we can fill out a form and have the teacher complete the form and send in a receipt, an itemized receipt, and we can submit that and get reimbursed for that, which is really great. And we also get a stipend three times a year for ink use...And then at the beginning of the school year before it starts, we get a big box with all the supplies that we would need for the entire school year. And that includes art supplies, gym supplies, science supplies, all the workbooks for all the core courses, math supplies, reading books. It's a Christmas in July. It's fairly exciting.”

“And they've added field trips this year, now that everything is more opened up, and we've been going on field trips like two, three times a month.”

“The school that we chose offers a foreign language starting in third grade. So that was really important to us. My daughter takes Spanish and started French as well. The other thing that was really important for both of my girls when they started is they offer honors classes.”

Students are Repositioned by the Cyber School:

The following excerpt is representative of the ways in which parents appreciated how their children are seen as capable and talented by their cyber schools. One said: “I checked his grades every day. I knew exactly where he was, no doubt. They would tell me his scores are some of the highest in the school. He's great, he's on pace.” In some cases, in their traditional schools, achievement was low and students were sometimes excluded from special opportunities, but the students excel in the cyber charter and their specific talents are recognized. In the first excerpt reflecting this idea, a parent describes how well their student is doing academically in the cyber charter school, but also the way that the student has been included in art experiences. Referring back to her experience in the traditional school, the parent asks: “So what could they offer her if she can't get into the club she likes?”

“And I have to tell you, her grades have never been better... But as her counselor said, she's got a 4.0. Next year she's going to do a dual enrollment with X College and the charter school is paying for it for 11th and 12th. So, there are a lot more opportunities...She started playing the flute and three months later she got the flute solo at the band concert.... In public school, she tried out for art club. They said it wasn't good enough. She did art at the school she currently attends; they told me that the impressionists would've been jealous of her brush strokes, and she was in the art show... I feel like sometimes the public schools are a little ‘who you know’ to get into something. And here's a kid who has maybe 10, 12 notebooks full of artwork and she really loves to draw, but they told her she wasn't good enough.”

These excerpts highlight the ways that the strong financial position of cyber charters enables them to support families in ways that traditional school districts cannot. The cybers can provide basic learning materials such as books, technology, and art supplies in addition to a wide array of in-school opportunities and financial support for private lessons. These “perks” are dictated by differences in the financial situations of cyber charters as compared to rural districts in the state. However, parents described experiencing an ethic of care (Noddings, 1984; 2005) from their cyber charters that appears to be less connected to financial restraints, and more so based in an approach or philosophy taken by the cyber charter with their children. Across every parent interview, parents describe that their children are seen as valued individual learners with distinct strengths and areas for growth.

Rural District Leader and Cyber Director Response to Increasing Cyber Charter Enrollment

How Rural District Superintendents and Intermediate Unit (IU) Directors in the Most Fiscally Impacted Districts are Experiencing Online Enrollments

Below we discuss three major themes that describe the responses of superintendents and IU directors: the financial impact of cyber charters, superintendents’ actions to retain and regain enrollments, and superintendents’ actions to impact cyber charter policy.

Superintendents Talk About the Fiscal Impacts of Cyber Charters

Rural leaders expressed considerable concern about the fiscal impact of cyber charter enrollments—“I'm sure you hear the budget is probably the number one impact,” one superintendent summarized. Another leader stated: “the one thing that came off the list was the roof.... it didn't make the cut because heat was more important right now.”

Rural leaders spoke at length about the ways the fiscal allocations are unjust, how the financial impact has negatively affected rural districts’ operations, and restricted what they are able to provide their students and communities because of the negative impact of cyber costs.

Although many rural leaders spoke about how they were “not opposed to having options for students”, they stated the way current cyber charters are being funded is not only unfair but “criminal,” as one superintendent put it. “I'm not against the competition at all, it's just I'd like to be on a level playing field with my competitors.” Leaders shared that cyber charter payments significantly exceed what it would cost for them to educate the same student, which “just doesn't make sense”, said a superintendent, since cyber charters do not have the same level of expenses such as buildings, grounds, food service, athletics, and extracurriculars.

“If it only costs [our] district 11, let's say, round it up to \$11,000 to educate a student and they do one of the options to go to a [cyber charter], then that cost should only be \$11,000 to the district. And on top of that, those districts don't even have to worry about transportation. They don't have to worry about meals. It's so obvious to the public schools. I'm not sure why it's not that obvious to the politicians that keep talking about charter school reform, but we never see it happen.”

Another superintendent who partners with an organization to run a district-run virtual school shared that: “Our tuition rate right now is a little less than \$17,000 that goes to a cyber school. And we know we can educate that kid similarly for \$5,500.” Because cyber charters draw students from across the state, they receive vastly different tuition payments according to where each student comes from, even though the cyber charter school is providing the same educational program to all of its students.

Rural leaders also shared frustrations not only around how much money cyber charters are receiving, but, from their point of view, a lack of accountability cybers charters have for how the money is spent:

“My concern, [is]... so what are you doing with the money, right? You're receiving \$12,500. There's clearly not levels of accountability to the same degree that there are with [my district]... I mean, take, for example, state assessments, right? So, we all know that we receive federal funding if 90 percent or more of Pennsylvania schools are going to take the Keystones or PSSAs. So why is it that there's no penalty or accountability if cyber students... Which again would probably have to come to a physical site. They might be able to do it online, but the administration of that test would be, I would think, kind of unique in and of itself. But again, it's almost like they get a pass.”

Recent research finds that drive times to testing sites have no impact on test performance, even when student characteristics are controlled (Kingsbury et al., 2021). This superintendent's statement about his perception of low PSSA participation rates among cyber charter school students exemplifies a common concern among his peers

that cyber schools are not held to the same accountability standards as traditional public schools. Leaders also spoke about the ways cyber money is being spent on advertising with “giant billboards” or on cyber charter CEO salaries. “Some of these CEOs offer these different programs they're making in the millions. I'm not even making \$120,000. So, there's a lot of policy that does need to be looked at and changed, level the playing field. If we are held to a standard, they need to be held to a standard, the same standard across the board.”

This superintendent continued:

“The cyber charter CEO, somebody that was out in Western PA, was just federally indicted within the last year or two because his salary was upwards of \$350,000. So those are the stories that concern me, and quite frankly, if you look, these individuals aren't educators. They don't have education backgrounds; they have business backgrounds. So, we live in a capitalistic society and people capitalize on these things all the time.”

Further, leaders expressed frustration that advertising claims cyber charter schools are “free”, while the cost comes back to the school district and is paid for directly with tax dollars but returns a profit for the cyber charters. “People shouldn't be making a profit off of taxpayer dollars.” The issue of advertising and lobbying was particularly contentious for rural school leaders, with over half of interviewed district leaders talking about it directly, reporting that they strenuously objected to public funds being spent on these activities.

Rural leaders explained that cyber tuition costs are significant for their small school district budgets: “We only graduate between 75 and 80 kids a year. And so, every single student that would leave and, say, go to a cyber charter, that's a significant percentage. Whereas if you graduated, say, 500, one or two kids leaving, that percentage isn't a significant impact.” Because of fixed costs, often related to economies of scale, rural districts need to generate additional revenue and/or reduce their spending on students enrolled in the district to make up for funds diverted to cyber charters. One states: “We are crippled right now. That expense of almost \$3 million is insane and we don't recoup that in tax revenue. It just doesn't happen.” Superintendents described how if a single student moves to a cyber charter school a district cannot pay less on electricity, heat, and the salary of a teacher to afford the tuition payment they are required to pay. Instead, the district needs to reduce its spending on students who remain in the district or generate additional revenue by increasing taxes on local residents. For example:

“It's a financial hit that we always got to be aware of and it's going up every year, the cost associated with it. We always have to have a part of our budget and our increases in taxes going to that... our local tax millage increase that we're getting to offset the cost.”

One superintendent spoke about how during the pandemic the district experienced greater student transiency resulting from families moving into their district and enrolling in cyber charters without ever attending the local school district:

“They've been in cyber school their whole lives. So, they just stay in the cyber school, then we pick up the cost. If we get a child with special needs, you don't know what you're getting... so how do you survive? And you know what the state tells you? You're gonna have to make it work. Okay, so get blood out of a stone somehow?”

Funding for special education was another area of significant concern. The superintendents expressed their views related to the high number of students who become newly identified by the cyber charter as in need of special education when the same students failed to meet the criteria for an Individualized Education Plan (IEP) when they were enrolled in the traditional district school. “The increase of students being identified with IEPs in cyber charter is unethical. I mean, it 100 percent is...I think there's more to the dollars that follow rather than the needs that are necessary.” From the superintendents’ points of view, the high number of new special education identifications are financially motivated, given the increased tuition payment for a student requiring an IEP compared to a student without an IEP. While states ultimately have the responsibility of identifying students in need of special education services under the Individuals with Disabilities Act (IDEA), this responsibility is passed down to Local Education Agencies (LEA) (Collins et al., 2015).

“I think the cyber charter funding is the major impact because if we look at the amount of money that we pay for the cyber students, particularly special ed, that it seems like when we lose some kids, they don't leave special ed, but somehow, they turn into identified. So that increases the tuition cost. But cyber tuition is the fourth-largest expense in our budget. And we tracked over about the last 10 years, about 72 percent of our tax increases have paid for cyber charter tuition.”

At the very time that districts need more resources, due to the hardships brought about by the COVID-19 pandemic, districts are experiencing an increase in cyber charter tuition payments. A superintendent summarized, “I think the biggest thing that it impacts on our end is how are we financially going to be able to make things happen in our district if I'm paying this amount of money towards cyber.” From their point of view, cyber charter payments result in fewer resources available for basic district operations and maintenance, let alone growth and innovation. One district leader reflected:

“We were in a very, very desperate financial status at the end of 2020. I came on and we only had \$100,000 in the fund balance, and that's on a \$17 million budget. So, we were really in a very bad situation financially. Staffing was getting cut. So, you couldn't offer those great opportunities, let alone build up the facilities, make sure that you have preventative care when it comes to responding to a COVID pandemic, all those pieces. We were really just hanging on to keep the finances afloat and keep the district moving forward.”

Leaders also shared that cyber tuition influences their ability to invest more financial resources on “social-emotional learning, social work” as there is “real need for educational interventionists” after the pandemic. “So, for example, right now I'm without a middle school guidance counselor. And we are as lean in every position as possible for personnel. If we had an extra 1.5 million, we would have extra people here.”

In one telling excerpt pasted below, one superintendent stated that cyber charter payments more negatively impact his rural school district's finances than the funding formula that was just found unconstitutional by the state supreme court (*William Penn Sch. Dist. et al. v. Pa. Dept. of Educ. et al.*):

“That state level policy is inappropriate. I could argue that we don't need more money, we just need to pay fewer cyber bills. If I had that million dollars back and we weren't paying that tuition, the school district wasn't responsible and the taxpayers weren't responsible for paying that tuition, I'd have an extra million dollars...I'm here to say that if you fixed that formula of us paying the bill on cyber charter tuition, you wouldn't need to dedicate more monies to the school districts necessarily. I can't speak for every school district, but a million dollars? We don't need extra money if we had that million back.”

These financial consequences of increasing cyber charter tuition are described in the most dire terms by the interviewed superintendents. There is real concern that cyber charter tuition is threatening the very viability of their rural districts. District consolidation is a looming concern:

“Yes, there's districts that aren't happy about cyber charter, but it doesn't cripple them. We are crippled right now. That expense of almost \$3 million [for the cyber charter] is insane and we don't recoup that in tax revenue. It just doesn't happen...at this rate, I don't know how a small district...if that's the goal of government to get rid of the 501 whatever it is, districts in the state, this is a step towards that. Maybe that is the goal. I don't know...I get it, if that's the plan. But as a district, we will not survive. Not on that budget, not with those numbers.”

Superintendents' Actions to Retain and Regain Enrollments

The fiscal pressure of cyber charter enrollment on school districts has compelled rural leaders to develop new strategies to both retain and regain student enrollment, including new strategies such as reorganizing their own cyber-schooling options. “Going forward, we have to continue to find ways to just sell what we offer, sell what we believe is best for kids. We are, again, revamping, continually revamping our virtual learning academy and just trying to get people to give it a chance.”

On top of an already overwhelming load, given that rural leaders are known to take on more roles than non-rural counterparts (Zuckerman et al., 2023) —especially given the devastating impact of the COVID-19 pandemic—rural leaders are now having to act as marketers, sales representatives, and virtual school leaders to compete with cyber charter enrollment. In fact, nearly all leaders understood parents to be their “customers” and spoke about how it was their job to provide “customer service.” Most dramatically, many rural leaders created or expanded their own virtual school offerings. As one leader shared, “... And now, it's kind of been a race to offer something that's even better than what these cyber charters offer but try to work on bringing these families back.” Leaders of school districts without virtual schools at the beginning of the pandemic spoke about how parents and students who left for cyber charters are now accustomed to their cyber charter and are unwilling to try the district’s virtual school. As one superintendent described, “So the beauty of [our virtual school] is, at least at this point, we're not losing additional students to outside [cyber charters]. It's just that had we done this in the beginning, I think we'd be in a much better position.” Leaders also described establishing hybrid models where they keep students in touch with the district school, but also allow kids to take virtual classes.

One superintendent described his district’s plans:

“Number one, we're trying to make sure that our students who are in the district remain in the district, but I think that the second-pronged approach to addressing [is]...to make sure that we are reaching out to those families, we are letting them know that these are the options available. “

Beyond running virtual schools, leaders spoke about doing a better job of connecting with families and connecting with them early. For example, one leader described:

“We do a lot of things with our younger population. We have a kindergarten camp in the summer where we're bringing five-year olds into the district for a week of instruction early. We're doing things with our pre-K kids to try to build those relationships with families as well to get them into the district. I think once they're inside, they're successful and they're happy, then we have the opportunity to keep them.”

Similarly, many leaders spoke about being more intentional about listening to the concerns of parents and families and making sure they let students know that their teachers care about them. Leaders were clear that this was always a goal, but they spoke about striving to be more explicit about how they foster school-community connections and provide reminders to families that the school cares about them and their children. “So we've really put forth a lot of effort to build those relationships.... I need you [the teachers] to also be a student expert. I need you to also understand that there are some challenges with students that you also need to figure out that ethic of care to help the students to be successful.”

Given that that some parents felt that cyber charters provided more transparency around what is happening in schools, one district leader describes a new communication initiative initiated to ensure families knew what was taking place in the school:

“So, it's something that every principal in each of the four buildings does. They send out on Sunday night...it's kind of like a week at a glance for parents... ‘Here's 10 bullet points,’ or like, ‘Here's a Monday through Friday window of a week,’ and that then corresponds to the phone blast...so, we try to really build the communication lanes for parents and make sure that they are not only receiving the information, but they feel comfortable in having the conversation with administration, teachers, and the like... I think that that's also helping to shape how do we not only attract students but keep them connected to the school.”

“Well, I think we're open to, ‘You might not have to be in the building all day long.’ Maybe we have internship programs, we have some other opportunities for them to possibly earn some credit outside of the school building, which could be an incentive. Maybe they come in for four classes or maybe they do part of their day online and the other part through some other avenue. So, I think we're open to thinking outside the box to obtain the graduation credits that they would need.”

Another rural superintendent stated:

“So now we've pivoted, yes, you had to during COVID, but now we've pivoted to add blended opportunities, if you want to take some cyber classes and some face-to-face classes, that's an option. Over the summer, if you want to take credits for advancement to graduate early, you can do that. If you need to take credits via cyber to stay on track to graduate on time, that's an option as well...so I think before it was, ‘No, we only provide instruction face-to-face,’ but as a public face-to-face school, we honestly also have to provide cyber options in order to keep our kids with us.”

Rural leaders described their awareness of how policy changes might upset parents and push them towards cyber school. For example, given the paucity of bus drivers, rising gas prices, and overall difficulties in transporting students since the pandemic, one district leader spoke about the challenges in reworking their transportation program.

“I've had conversations with parents that their child is on the bus for 45 minutes to an hour because they're going out pretty far...we found in doing some of our transportation studies...we weren't doing cluster stops. So, we would stop, house here, house here, house here, and so that adds time. So...this year we said, ‘Okay, we're going to stop at the third house. Everyone's going to have to walk 50 to 100 yards, or parents are going to have to drive the kids and stay at the bus stop.’...so, we have to figure out what is convenient, what's reasonable, what's unreasonable for parents. So...because being rural, we had to think about what does it feel like, again, in the life and times of our parents and our students as well.”

This example illustrates the challenge superintendents experience with decisions that may have been simpler in the past. In trying to reduce long ride times for some children, they risked upsetting parents of other children who now have a less conveniently located bus stop. Leaders must make decisions with awareness not only of a policy's impact on students, but also how to negotiate parent satisfaction or risk them leaving for cyber charters. “...anytime we got any kind of indication that somebody was unhappy, we were reaching out, talking to those parents, trying to come up with a solution for their kid that made sense.”

Superintendents also spoke about specific initiatives to regain students who had left their district and the limited success of these strategies.

“The guidance counselors always reach out with very limited success. It's normally the whole family, all three kids, if that's the case...so they have this family level commitment to the cyber charter way of educating...we have school counselors...we've tasked them with calling [cyber parents] in an effort to get the family back. I've made some phone calls myself with very limited success.”

And;

“We [administrators] did over a hundred home visits in about a two-week time timeframe. We knocked on doors, we offered some opportunities to come in, come back to come back to brick-and-mortar, but also have the flexibility of maybe if they like that virtual learning, take a look at what we can offer. Look at our local virtual academy...more or less, we're customer service at its finest.

We're letting parents choose the type of schedule they want for their kids, and we're willing to accommodate pretty much anything as long as it's reasonable and doable.”

One district hired a dedicated staff member whose primary responsibility it is to persuade cyber charter families to return to the district.

“...We are up to seven students that have returned from cyber charter, and two that we were able to have a conversation with to stop them from leaving our school...And then in addition to that...we found that...we had some students that we were paying for that weren't in our school district. And so, we were able to drop seven more students off of our role. So that would be 14, and then a home visit yesterday is bringing back two more. So, we're up to 16 students in the first month of having a person who's nothing but sales and an advocate for our school district.”

While such a staff position would have been unthinkable even five or ten years ago, this action has recouped significant financial returns, and has enabled the district to retain students who were considering enrolling in a cyber charter.

Additionally, some leaders spoke about marketing activities to try and get students and parents back.

“We actually send out information every Friday to the individuals who haven't returned...[we] put together little brochures with updated information, pictures of some of the student activities going on in the school, some of our extracurriculars for the high school, they'll [take pictures of] musical practices...this is what you're missing out on... I don't know if we'll ever get them back, to be honest, but we're going to keep sending out those brochures and keep reaching out to these families and letting them know what positive things we've got going on in the district [and] why they should be back at school.”

And;

“We send out flyers to those families that are currently in cyber schools and let them know that we have a cyber program...making phone calls to talk to them about why they left the district, why maybe they would want to return especially to brick-and-mortar.”

Leaders also spoke about wanting to build a bridge to families who are currently in cyber charters with their district school—to make sure cyber charter families are, “actually still part of our environment” at the local school district, “because we want

them to still have a connection,” one superintendent shared. Cyber families in some districts are invited to athletic events, pep rallies, and dances—even offering the use of the district computer lab for cyber charter students to use to access their cyber curriculum.

As these examples describe, traditional school leaders are prioritizing communication and flexibility as key strategies to persuade cyber charter families to re-enroll in their home district. One superintendent characterizes his approach as based on “dignity and respect.”

“...We had some kids that went to charter cyber schools, I opened the library for them, I opened the gym for them. I told them they could participate in school plays, and musicals. I invited them, made them feel part of a school, and then hopefully that they would turn around and say, ‘You know what? This cyber charter is nice, but I really don't feel like I'm with anybody.’ So, you invite them to the play, you have a senior prom for them and things like that...I know districts that are as creative as possible to make them kind of feel part of it, which in return you would think that they might turn around and say, ‘You know what? I want to come back.’”

While district leaders were clear about the financial impacts, many spoke about wanting students to return because they genuinely believed their district could offer a better education than what is provided by the cyber charter. Rural school leaders were clear that students who return to the district after enrollment in a cyber charter often had made poor academic progress.

“What we've found is that, when students do come back to us, they're far behind grade level. They have an expectation that their grades are going to maintain the 90s and 100s that they're getting in cyber charters, and that just doesn't happen, because there's absolutely no rigor [in the cyber charter] and they're usually two plus years off grade level.”

And;

“But too, I've noticed if the kids come back, there's certain skills that are lacking. There's also an element of... fatigue sets in for the kids. And I do feel bad for them, but they're just absolutely exhausted getting back to that traditional seven-and-a-half-hour school day. And so sometimes they just get frustrated just out of that mental exhaustion of just socially coming back to a building of, say, 500 kids and going through school all day long. And so sometimes you lose them, and they say, ‘Ah, I tried it again, but this just isn't for me.’”

Superintendents' Actions to Impact Cyber Charter Policy

Every rural leader interviewed spoke about the need for numerous policy changes related to cyber charter funding. One superintendent clarified, "And we're not anti-cyber charter because we know that it's a place for some kids that's a good thing for them. But what we are for is fair funding and accountability within that." Leaders tended to place the blame for current funding structures that they see as inequitable on the state. "[There has] been almost like the bending of rules, if you will, for the cyber charters and there really hasn't been a high level of accountability," as one leader put it.

Seeing the state as the entity able to make a change, many leaders have spent a great deal of energy and time advocating for policy change. Leaders have written in their local newspapers, published white papers, presented locally and in Harrisburg, and routinely met with members of the General Assembly. As one superintendent put it "we've been trying to organize some meetings and sharing some of our thoughts with them. So maybe on the political side we could help them gain an understanding of where we are and what difficulties that we're dealing with." They have formed coalitions, both within their IUs and through state education agencies to coalesce around creating change. One leader shared:

"I think it was PASA and PSBA kind of came together and pushed out this referendum. It said, 'We can't afford to continue to pay for cyber schools the way that they are, so we need to change the funding formula.' All that kind of stuff. I think we're up to like 460 districts across the state who finally signed it. That really [angered] all the cyber parents... They started showing up to board meetings, and then the other side of the public, the non-cyber side, started showing up to board meetings. It became this great debate battle of, 'Well, how's cyber funded and aren't you getting funding for our students?' It gave us the opportunity to educate everybody on how it worked. Now there's like this divide within the community where, 'We're residents of this district and we're paying \$16,000 for your kid to go to cyber...that should be coming to our kids.'"

Superintendents have made efforts to promote the changes to cyber charter funding they feel are necessary and will continue to do so. However, superintendents generally did not feel optimistic about their attempts to foster policy change. As one superintendent put it:

"I will keep sending messages to our politicians. I've had our school board pass a resolution requesting that the state does look into cyber charter reform. I believe almost 500 school districts have done so with school board resolutions asking for cyber charter reform. That doesn't seem to work, but we're going to keep those types of pressures on them."

Several of those interviewed shared anecdotes of their interactions with state legislators; state legislators have suggested that, “Both parties need to sit down and hash this out. Public ed has to sit down with charter.” But some superintendents were skeptical of such an approach. As one superintendent stated:

“It’s ludicrous, because why would they want to sit down? Why would cyber charter want to sit down? They have everything they want right now. The amount of money we’re paying right now and the lack of accountability, then in terms of graduation rates and test scores, it’s not even comparable in terms of what I believe is better, which is public ed, in our local districts.”

Even so, some superintendents spoke about having conversations with cyber charters, trying to find a solution that would be mutually beneficial. But one superintendent summarized, “That didn’t get me anywhere.” Again, while leaders have advocated for policy change, interviewees perceived that the “cyber lobby is too strong.” Over half of the district leaders interviewed expressed serious concerns about campaign funding and lobbying. Leaders perceived that such efforts work to disadvantage rural school districts. It is clear that leaders would welcome restrictions to prevent taxpayer dollars from going to cyber charter lobbying. Leaders perceived that the lack of policy change with regard to cyber charter funding is attributable, at least in part, to lobbying efforts.

While there are no formal restrictions against lobbying with taxpayer dollars in Pennsylvania (see *Lobbying services*, 61 Pa. Code § 60.6), district leaders reported they have no funding to lobby on behalf of their schools. They explained that they were barely able to balance their own budgets—using money for anything outside of directly serving their students was not possible. Although a full analysis of taxpayer dollars used towards lobbying is beyond the scope of this study, according to *the Pennsylvania Department of State’s Lobbyist Disclosure Directory* (2023), the cyber charter with the highest enrollment, Commonwealth Charter Academy, has spent over \$700,000 on lobbying since 2020.

Some rural leaders have pivoted in their approach, claiming that “it’s been 20 years, guys; quit the negative part... let’s showcase what we are doing right [in public schools], because I don’t see it going away.” Others expressed that they feel their advocacy has “fallen on deaf ears”, stating “The amount of money that’s rolled up in cyber charters and marketing and campaigns and things, I’m not sure if we’re going to gain any traction there. I’m just one guy, so I’m not sure I can do much.” Other leaders are not optimistic that changes to cyber charter funding will occur:

“I’d love to say I’m going to continue to advocate to the lawmakers, but I think it just falls on deaf ears so I’m running out of energy and hope... If the governor, if Shapiro, were to call, I’d say, ‘Don’t give us more money, just fix the funding. I’m

done writing checks to [cyber charters]. We can't afford that.' If Shapiro were to call me, that's what I'd tell him.”

If the General Assembly fails to correct the perceived funding inequities, many rural leaders claim they will have to consolidate, and due to mass superintendent resignations, they predict there will be critical shortages of superintendents to lead the remaining consolidated schools.

“If they don't get this cyber charter school thing straightened out, school districts are going to merge. However, in the back of my mind, in my conspiratorial thought process, maybe that's what they want. I don't know. They have to realize that schools are hurting. People are hurting. Superintendents are getting out of this job like crazy. They're jumping ship like nuts. They're just leaving the profession. They said there'll be a shortage in this country next year of about 5000 superintendents nationwide...that's a lot of superintendents.”

How Cyber Charter Directors Report Adapting to Increasing Enrollment and How This May Affect Future Operations

While the perspective of cyber charter directors was critical to this inquiry, only two of 14 Pennsylvania cyber charter school directors agreed to be interviewed despite multiple attempts at recruitment, including phone calls, emails, and Center for Rural Pennsylvania-initiated efforts at communication. While far from representative, the two interviews provided key information about operational adaptations in response to changing parent and student needs, institutional structure, and future plans based on expanding enrollments.

Neither of the two cyber directors described any marked operational changes in response to increasing enrollment. One reported hiring more teachers: “We hired more faculty and staff to accommodate, especially during the COVID period.” Instead, their responses were more about maintaining and developing programming integral to their missions: One said, “We are going to continue to improve our educational programs...and to get the message out there to families that what our program has to offer.” Directors discussed working through student waiting lists, hiring more staff, reinstating field trips, and expanding existing programs.

Cyber directors' points of view about why parents are opting into cyber charter schools in such large numbers were consistent with each other and echoed the perspectives of parents reflected in the survey data. Two ideas were most salient. The first was parent control. For example, one director explained, “Parents get a chance to say, ‘I don't want them to read about the young Black girl in the forest,’ kind of thing. You'll be surprised, but that happens.” Another theme is related to physical safety:

“So, this is another reason we will get some kids, and I know this is why I hear a lot of kids moving to cyber is because of the safety issue. Parents are beginning to fear for their kids' safety whenever they go to a public school just because of all of the nonsense...so there's a lot of fear out there of being in a public school system where there's a lot of turmoil and turbulence, and a concern for actual physical safety in buildings. So, a lot of parents will pull their kids out.”

From the perspective of one cyber director, parents come to cybers because of the opportunity to exert control over the curriculum. They explained: “Meaning, ‘I know, because I'm right there, what my child is learning, what they're being exposed to. I know I can put the stop sign up when I need to.’ It's the control they get over their child's education.” More specifically, this cyber director stated:

“Well, because we have some parents that don't want their children to learn certain things. They don't want them to learn about diversity. They don't want them to learn anything that has to do with sexual orientation. Those kinds of hot button politically charged issues that are happening now, or that we're hearing a lot of talk about now. There are some parents that don't want their children exposed to any of that.”

The second theme was the extent to which students feel known and seen in their school, “...they get the attention that they're looking for, as individuals, they receive that at our school, and so that's what draws them to our school. It also pushes them out of their traditional school because they don't feel like their needs are being met.”

Parents described the differences in the school's response to their concerns and this dynamic was reported in the cyber director interviews. One said, “I have heard that parents will say, ‘We really feel like we matter to you people, that you know and care about my child, and I really appreciate that.’ We hear that a lot. ‘That you are here to listen, not to just push us off.’” Another related perspective about the draw of cyber charters was about achievement. One cyber director noted that cyber charters, “...accommodate high achievers and honor students. We had a set of parents who were just fighting with their school because their kid needed more, and they couldn't provide it. It provides for individualized instruction and differentiated instruction....” Similarly, the other cyber director stated: “Some of our parent feedback has been that they feel like their children have fallen through the cracks of a district system...they want that individualized attention. And that is why we do what we do.” Cyber directors' points of view about why parents are opting into cyber charter schools in such large numbers were consistent with each other and echoed the perspectives of parents reflected in the survey data.

The presented perspectives suggest that rural school leaders understand the increasing pressure of cyber charter enrollment in financial terms. Cyber charter leaders, on the other hand, describe the cyber charter education as uniquely responsive to

families and students in ways that is atypical in traditional public schools, a perspective confirmed by parent survey data. Parents see cyber charters fundamentally as an option that affords their children more individualized attention and them more curricular control. By understanding effects, responses, and gaps, this work can inform policymakers' understanding of cyber charter policy in the state, cyber charter operators' understanding of the reasons behind increasing enrollments and funding concerns, and rural school district's understanding and responses so that they might develop strategic responses and innovative practices to provide viable education options to rural communities in the face of increasing cyber charter enrollment.

Policy Considerations

Funding

- The General Assembly should consider redesigning the formula setting the regular education tuition rates paid by school districts to charter schools. Given the nature of cyber charter school costs, we recommend every district be charged a uniform and flat regular education rate for the cyber students for which they are fiscally responsible. This rate should be based on documented cyber charter spending. As a starting point, HB 1422 (2023) suggested a rate of \$8,000 per student for a Statewide Cyber Charter School Tuition Rate. This amount would exceed the rate charged to a small number of districts, however, so we propose those districts should receive additional state aid to cover the increased tuition payments they would be forced to make with the change.
- Given the disconnect between special education tuition payments and special education spending by cyber charter schools, we recommend redesigning the special education tuition formula and basing tuition rates on the actual number and cost of educating students with special needs in cyber charter schools. Specifically, apply a tiered special education funding rate for cyber charter students that more accurately reflects the actual costs of providing special education. We suggest extending the model used by The Special Education Funding Commission to cyber charter schools.
- Lawmakers may consider requiring charter schools to spend the money they receive for special education students on special education. When charter schools spend less on special education than they receive in special education tuition revenue, special education tuition rates paid to those charters in subsequent years should be reduced accordingly.
- Cyber charter school tuition payments have increased faster than district spending, as indicated by the fact that cyber charter tuition (as a share of current expenditures) has increased since 2015-16. Charter tuition payments have also increased faster than inflation and charter enrollments since, in inflation-adjusted dollars, tuition payments per charter student have increased

steadily. Taken together, these patterns indicate that the fiscal burden of cyber charter school tuition payments on district budgets has grown over time. In aggregate, districts will need additional revenue to maintain existing spending levels on traditional public school students as a result. We encourage the legislature to consider the impact of growing costs for charter tuition as they consider their constitutional obligation to adequately fund public schools in the Commonwealth.

Transparency and Accountability

- Cyber charter advertising. Cyber charter advertisements should clearly state the source(s) of funding for the school operation as opposed to messaging stating that cyber charters are “free” or “tuition free”. This messaging obscures that cyber charters are funded by local tax dollars redirected from traditional public schools. Suggested relevant policy for the consideration of the General Assembly is HB 1422 (2023) that provides standards for media advertisement specifying that advertisements indicate that costs are covered by taxpayer dollars.
- Superintendents expressed significant concerns with the use of taxpayer dollars for lobbying. Empirical data in this report suggests that the General Assembly should examine this issue in detail. Additional research is needed to investigate the extent to which these efforts exacerbate funding inequities.
- In order for taxpayers and policymakers to better understand and compare cyber charters and traditional public school districts, the same data for both types of institutions should be publicly available. Given that both traditional public schools and cyber charters are publicly funded institutions, the requirements for transparency ought to be the same. Transparency is particularly important within the context of charter school foundations and education management organizations.
- Given the high cost and low performance of cyber charter schools relative to the school districts where cyber charter students would otherwise be educated, we also recommend the state create stronger accountability mechanisms to monitor charter performance and create sanctions and incentives similar to what are in place for transitional public schools.
- Improve cyber charter data availability and reporting requirements. Given the rapid growth in cyber charter enrollments, there are various analyses we were unable to conduct given the ways current data are reported. For example, PDE does not report each district’s share of students enrolled in a respective charter school. That could be a helpful metric to understand who is being served by cyber charters (and charters, in general). Additionally, while there is a flag for charter schools in PDE data, to more easily disaggregate between brick-and-mortar and cyber charter schools, PDE should include a flag specifically for cyber charters. Another example relates to fiscal allocations. When charters work with private

Charter Management Organizations (CMO), itemized spending on the Annual Finance Report (AFR) can be gray. Public funds paid to that organization are not transparent in the same manner as the money spent by traditional public school districts. For example, monies allocated to lobbying and advertising are not accessible to the public. Cyber charter budgets do not need to be made public prior to adoption, whereas according to the PA School Code, traditional districts do have to publicize their draft budgets. Although charter schools are nonprofit entities, the ability of charter schools to hire a for-profit education management organization to run its operations should not be permitted because the traditional public schools cannot carry the high surplus balances carried by cyber charters (DeJarnett, 2013).

Conclusions

This study sought to investigate the financial impact of cyber charters in Pennsylvania, traditional rural school district and cyber leader responses to changing cyber enrollments, and parents' decision making about cyber enrollment to inform Commonwealth cyber charter policy. The data suggest that cyber enrollments (and associated costs to rural districts) have dramatically increased over time and cyber charter achievement data lags behind both brick-and-mortar charters and traditional public schools. According to the superintendents interviewed for this study, rural school leaders are experiencing increasing financial pressure of cyber charter enrollment that has reached crisis proportions. Not only are cyber charter tuition payments affecting the ability of the school district to provide needed instructional services and facility maintenance, but they are threatening the viability of the school district. Cyber charter leaders, on the other hand, describe their cyber charter schools as uniquely responsive to families and students in ways that is atypical in traditional public schools, a perspective confirmed by parent survey data. Parents see cyber charters fundamentally as an option that affords their children more individualized attention and flexibility, while providing them more curricular control. By understanding effects, responses, and gaps, this work can inform policymakers about the ways in which charter policy is being experienced by students, families, cyber directors, and rural school district leaders.

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Appendix 1: Survey Questionnaire and Frequency of Responses

Note: Frequencies are not reported for Q1-Q9 in order to protect survey participant privacy.

Q1. Which cyber charter(s) did your child(ren) attend during the 2021-22 school year?

- 21st Century Cyber CS
- Achievement House CS
- Agora Cyber CS
- ASPIRA Bilingual Cyber CS
- Central PA Digital Learning Foundation CS
- Commonwealth Charter Academy CS
- Esperanza Cyber CS
- Insight PA Cyber CS
- Pennsylvania Cyber CS
- Pennsylvania Distance Learning CS
- Pennsylvania Leadership CS
- Pennsylvania Virtual CS
- Reach Cyber CS
- Susq-Cyber CS
- Other _____
- None of my children attend a cyber charter

Q2. I am a decision maker about which school my child attends.*

- Yes
- No

**Required to complete the survey.*

Q3. What is your relationship to your child(ren)?

- Mother
- Father
- Grandparent
- Foster Parent
- Other _____

Q4. What school district do you currently live in?*

**Required to complete the survey.*

Q5. How many total years have you lived in this school district?

Q6. What is your highest level of education?

Q7. If your child(ren) were enrolled in the traditional public school, would they qualify for free or reduced-priced lunch?

- Yes
- No
- I don't know

Q8. How many of your children were enrolled in a cyber charter school in the 2021-22 school year?

Future items of this survey involve questions specific to each child. In order to provide you with a way to refer to your child and maintain confidentiality, please provide the age of each child enrolled in cyber charter school during the 2021-22 school year. If you have one child, answer for that child. Do not include the ages of children who did not attend a cyber charter school in the 2021-2022 school year.

Q9. Please complete the details for your oldest (or only) child attending a cyber charter school, who is ___ years old.

- Q9a. What was this child's grade during the 2021-22 school year?
- Q9b. Which of the following best describes the race/ethnicity of this child?
- Q9c. Which of the following best describes this child's gender?
- Q9d. Is your ___ year old child classified for Special Education (have an IEP)?
- Q9e. Did you enroll your ___ year old child in a cyber charter school before the COVID-19 pandemic [March 2020]?

Q10. How much do you agree or disagree with the following statements? 71

Responses

	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
My family has strong connections to the local area.	7%	8%	31%	31%	23%
In general, there is a good quality of life here.	4%	6%	16%	56%	19%
There are good opportunities here for my children's future.	17%	20%	26%	30%	7%
I feel like I belong here.	7%	7%	40%	34%	11%
I would move somewhere else if I could	6%	19%	34%	24%	17%
Our home school district is the center of this community	17%	20%	39%	20%	4%
Our home school district makes the community stronger.	21%	29%	36%	11%	3%
I feel like the teachers and administrators at our home school district care about my children.	29%	27%	24%	11%	9%
I feel like our home school district prepares kids for a good future.	34%	27%	19%	16%	4%

Q11. How much do you agree or disagree with the following statements? 69

Responses

	Strongly Disagree	Disagree		Neither Disagree nor Agree	Agree	Strongly Agree
Our home school district did its best to meet the academic needs of students during the COVID-19 pandemic.	26%	29%		19%	23%	3%
Our home school district did its best to provide social needs/activities for students during the COVID-19 pandemic.	34%	28%		19%	19%	--
Our home school district did its best to keep students physically safe during the COVID-19 pandemic.	17%	25%		32%	23%	3%
Our home school district did its best to keep students mentally safe during the COVID-19 pandemic.	30%	22%		22%	23%	3%
Our home school district did its best to listen to community concerns in responding to the COVID-19 pandemic.	32%	30%		20%	16%	1%
Our home school district's COVID-19 policies were too strict.	16%	23%		41%	7%	13%

Q12. Do you have any additional comments about how your home school district responded to COVID-19? 45 Responses (open-ended)

Q13. How important were the following reasons in making the decisions to enroll your ___ year old child in cyber charter school? 65 Responses

	Not at All Important	Slightly Important	Moderately Important	Very Important	Extremely Important
I had concerns about COVID-19 exposure.	48%	11%	12%	9%	20%
I disagreed with COVID-19 policies at our home school district.	37%	11%	18%	17%	17%
There is a lack of academic options at our home school district	15%	14%	12%	29%	29%
My child was not academically challenged and/or supported at our home school district.	17%	9%	19%	14%	41%
I disagreed with what is being taught at our home school district	32%	14%	26%	15%	12%
There are poor quality teachers at our home school district.	25%	12%	20%	20%	23%
There are poor quality administrators at our home school district (e.g., principal, school board, superintendent, etc.)	9%	6%	14%	20%	51%
Our home school district does not offer enough and/or quality extracurricular activities (e.g., sports, art, drama, band, clubs).	49%	12%	25%	6%	8%
Travel to and from our home school district was difficult.	75%	5%	14%	3%	3%

Q14. How important were the following reasons in making the decisions to enroll your ___ year old child in cyber charter school? 63 Responses

	Not at All Important	Slightly Important	Moderately Important	Very Important	Extremely Important
My child had difficulty making friends and/or fitting in at our home school district.	46%	14%	14%	8%	17%
Our home school district does not respect my thoughts/voice.	23%	13%	11%	23%	31%
My child has experienced bullying at our home school district.	48%	6%	10%	13%	23%
My child has experienced discrimination at our home school district.	72%	3%	11%	7%	7%
The values expressed at our home school district do not reflect my values. (e.g., personal, political, religious, etc.)	43%	5%	10%	16%	26%

Q15. Are there any other important reasons not mentioned above that affected your decision to enroll your ___ year old child, in a cyber school? 47 Responses (open-ended)

Q16. Now think about what makes your cyber charter school a better choice for your ___ year old child: 61 Responses

	Not at All Important	Slightly Important	Moderately Important	Very Important	Extremely Important
The cyber charter school offers better academics for my child.	--	--	11%	28%	61%
The cyber charter school offers more individual attention for my child's learning.	2%	3%	10%	23%	62%
Teachers at the cyber charter make a positive connection with my child.	3%	2%	15%	25%	55%
It's easy to communicate with teachers at this cyber charter.	2%	--	13%	18%	67%
The cyber charter is able to better accommodate the mental health needs of my child.	18%	5%	15%	16%	46%
The cyber charter is able to better accommodate the physical health needs of my child.	25%	15%	15%	15%	31%
The cyber charter school is a better fit for my child's social needs.	23%	10%	25%	15%	28%
The cyber charter respects my concerns.	3%	5%	8%	18%	65%
The cyber charter allows my child to complete assignments at their own pace and on their own time.	8%	3%	10%	21%	57%
The cyber charter school offers more flexibility to accommodate my child's interests/activities outside of school.	11%	3%	11%	11%	62%
The cyber charter provided broadband, an internet stipend, a computer, and/or other supplies.	26%	3%	13%	15%	39%
Family needs in the home make cyber charter a better option for us.	25%	3%	13%	15%	44%

Q17. Are there any other important reasons not mentioned above that affected your decision to enroll your ___ year old child, in a cyber charter school? 36 Responses (open ended)

Q18. Overall... 61 Responses

	Strongly Dissatisfied	Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Very Satisfied
Thinking back to before you enrolled your child in cyber charter school, how satisfied were you with your child's experience in your home school district?	33%	28%	20%	16%	3%
Thinking about your child's experiences now, how satisfied are you with your child's experiences in cyber charter school?	--	--	2%	26%	72%

Q19. How likely are you to continue to enroll your child(ren) in cyber charter school for the next two school years (or as long as eligible if less than two years)?

60 Responses:

- Very Unlikely.....5%
- Somewhat Unlikely.....0%
- Neither Likely nor Unlikely.... 5%
- Somewhat Likely..... 12%
- Very Likely.....78%

Q20. What characteristics of your cyber charter have most positively impacted your decision to stay in your cyber charter? 49 Responses (open-ended)

Q21. If you were to consider re-enrolling your child in your home school district, how important would each of the following factors be in that decision? 53 Responses

	Not at All Important	Slightly Important	Moderately Important	Very Important	Extremely Important
A return to pre-COVID-19 school conditions.	36%	--	21%	17%	26%
More academic options (e.g., languages, AP courses, etc.).	6%	2%	19%	23%	51%
Better academic quality.	4%	4%	9%	17%	66%
Improved school extracurriculars.	23%	2%	25%	19%	32%
Improved relations and/or communication with administrators.	4%	--	13%	17%	66%
Better quality administrators.	4%	2%	11%	15%	68%
Better school policies.	8%	2%	9%	13%	68%
Improved school environment.	6%	2%	13%	11%	68%

Q22. Are there any other reasons that might impact your decision to re-enroll your child in your home school district? 34 Responses (open-ended)

Q23. Is there anything you would like to add to help us understand your experiences and your decision to enroll your child in cyber charter school? 32 Responses (open-ended)

We're interested in speaking with some parents about these topics to get a sense of their children's experiences. If you are interested in being interviewed (by phone or on Zoom) please enter your name and email. We will not share your personal information but may follow up for a brief conversation.

Name: _____

Email: _____

The final report will be published on the Center for Rural Pennsylvania website. You can access the results at this link: <https://www.rural.pa.gov/publications/research-reports.cfm>.

Appendix 2: Survey Design and Data Collection

Survey Instrument. The research team developed the survey in consultation with the Survey Research Center (SRC) at Penn State University. All survey items were programmed in a manner that optimizes the user experience in terms of look and feel. For example, questions were displayed on separate pages, tables/charts were included, and response options varied depending on question type. Survey items were displayed in a format optimized for use on mobile phones in addition to tablet or computer. Survey responses included opportunities for participants to skip questions they do not feel comfortable with by either a) not requiring a forced response to move to the next question or b) providing a survey response option that states “I prefer not to answer.” SRC programmed survey content based on the materials and questions developed and provided by the study team.

Virtual Cyber Parent Group Recruitment. Participants were recruited from three locations: emails from cooperating rural school districts, emails from cooperating cyber charter schools, and one social media group with a large number of users who are parents/guardians of Pennsylvania cyber students. When users activated the invitation (touch/click), it directed respondents to a secure-link website to screen them for study eligibility through a brief questionnaire. Those who qualified for the study through the brief questionnaire were granted access to the first page of the survey which included information on: name/address of study team, research purpose, description of study procedures, and the informed consent.

Inclusion and Eligibility. The study team ensured that all participants met the inclusion and eligibility criteria. Prior to the start of the full survey, participants answered inclusion/exclusion questions to determine their ability to proceed with completion of the full study instrument. Screening criteria was stated via the online survey platform and those individuals who did not meet the criteria were automatically routed to a message thanking them for their time and indicating that they do not qualify. To ensure that individuals do not attempt to access the survey a second time and input different responses to screening criteria, the survey software was set up to allow only a single attempt per IP address.

Obtain Informed Consent. Informed consent materials were displayed electronically prior to the start of the survey, and all participants were prompted to agree in order to proceed.

Appendix 3: Interview Protocols

Parent Interview Protocol:

1. How long have you had a child (or children) in a cyber charter?
 - a. If after March 2020, can you explain any impacts that experience with virtual schooling at your traditional school during COVID had on your decision to enroll in cyber?
2. What do you most value about your child's cyber charter school?
 - a. *Follow up:* From your point of view, what stands in the way of the traditional school doing those things as well as the charter does?
3. Can you think of anything you miss about the traditional brick-and-mortar school?
4. When you think back to when you made the decision to enroll your child in a cyber charter, what was going on at school at the time?
 - a. *Follow up if needed:* Were you able to talk to teachers or administrations about your concerns? What was their response?
5. What would you want your traditional school to know about your decision to enroll in a cyber and how that has been for your family?

Superintendent Interview Protocol:

1. COVID-19 had many consequences for public education. For example, many districts across the state have seen drastic increases in cyber charter enrollment. Can you talk a little about how you understand the impact of COVID on your district's cyber charter enrollment?
 - a. If they *don't* mention enrollment changes, ask: Have you seen your cyber charter enrollments change in the past few years?
 - b. If they *do* mention there's been an increase in cyber charter enrollment, ask: What do you see as the primary reasons for increasing charter enrollments in your district?
2. How have state-level policies around cyber charter schools affected district functioning?
3. Has the district tried to get families to come back to the district?
 - a. If so, how?
 - b. *Follow up if needed:* Have you been able to try any strategies that worked or maybe didn't work to recoup some lost enrollments?
4. How has cyber charter enrollment changed your work in the district? How have the cyber charter numbers impacted the work you would want to do here?
5. How has being a rural district shaped the impact of cyber charter enrollment on your district?
6. Given where things are, moving forward, what is next for your district in terms of cyber charters?

7. From a policy point of view, what can be done to alleviate the impact of cyber charters on rural districts like yours?
- 8.

Intermediate Unit Director Protocol:

1. From your perspective, what can you say, broadly, about the impact of cyber charter schools on the rural districts in your IU?
2. What is your understanding about some of the most common reasons why parents opt into cyber charters?
 - a. What pushes them out of districts?
 - b. What pulls them to cybers?
3. I understand that some districts and IUs have partnered with cybers. How have those partnerships evolved and what do you see as the affordances and limitations of these kinds of arrangements?
 - a. Does the money flow the same between the IU cyber and districts?
4. What do you think can be done at the policy level to mitigate the strain of cyber charters on rural districts?
5. What would you want policymakers to know about the impact of rural cyber charters on rural districts in PA?

Cyber Director Interview Protocol:

1. What reasons do you hear from parents about why they have chosen your cyber charter?
2. What do you think are the particular strengths of your cyber charter?
3. Why do you think that more parents are choosing cyber charter schools?
4. If your enrollment is growing, how are you responding to that?
5. Given where things are, moving forward: What is next for your cyber charter?

Appendix 4: Summated Scale Construction

Community Attachment Survey Items:

- My family has strong connections to the local area.
- In general, there is a good quality of life here.
- There are good opportunities here for my child(ren)’s future.
- I feel like I belong here.
- I would move somewhere else if I could (reverse coded).

School Attachment Survey Items:

- The home school district is the center of this community.
- The home school district makes the community stronger.
- I feel like the teachers and administrator at the home school district care about my children.
- I feel like the home school district prepares kids for a good future.

School COVID Policy Approval Survey Items:

- The home school district did its best to meet the academic needs of students during the COVID-19 pandemic.
- The home school district did its best to meet the social needs/activities for students during the COVID-19 pandemic.
- The home school district did its best to keep students physically safe during the COVID-19 pandemic.
- The home school district did its best to keep students mentally safe during the COVID-19 pandemic.
- The home school district did its best to listen to community concerns during the COVID-19 pandemic.

Table 12. Summated Scale Descriptive Statistics

	Community Attachment	School Attachment	School Covid Policy Approval
Mean	3.3	2.5	2.4
Minimum	1	1	1
Maximum	5	4.8	4.8
Standard Deviation	.8	1	1.0
Skewness	-.180	.157	.340
Kurtosis	.376	-.661	-.895
Scale Alpha Value	.792	.849	.904

Note: Mean, minimum, and maximum values are standardized for a 5-point Likert scale. Skewness and kurtosis are measures of normality of a distribution. Values of between 1 and -1 indicate a normal distribution. Alpha value reflects the internal reliability of a summated scale constructed from multiple survey items. Values above .7 are typically considered indicative of a statistically reliable scale.

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