

















Virtual Charter School Accountability:

What We Can Do Now



The National Charter School Resource Center (NCSRC) is dedicated to supporting the development of high-quality charter schools. The NCSRC provides technical assistance to sector stakeholders and has a comprehensive collection of online resources addressing the challenges charter schools face. The website hosts reports, webinars, and newsletters focusing on facilities, funding opportunities, authorizing, English learners, special education, military families, board governance, and other topics. The NCSRC is funded by the U.S. Department of Education and led by education consulting firm Safal Partners.

National Charter School Resource Center (http://www.charterschoolcenter.ed.gov/)



Safal Partners is a mission-driven strategy consulting firm that supports education reform efforts at the federal, state, district and school levels.

Safal Partners (http://www.safalpartners.com/)



The National Association of Charter School Authorizers (NACSA, http://www.qualitycharters.org/) is an independent voice for effective charter school policy and thoughtful charter authorizing practices that lead to greater public schools.

Authors

Nelson Smith, Elisa Westapher

Acknowledgments

The authors wish to thank those involved in the production of this report: Stefan Huh and Soumya Sathya of the U.S. Department of Education for guidance and feedback; Mukta Pandit for her leadership as Project Director; Safal Partners for editing and design; Lyria Boast of Public Impact for her research and analysis; and members of the virtual charter school oversight working group¹, which provided valuable insights and perspectives.

This toolkit was produced under U.S. Department of Education Contract No. ED-OII-13-C-0065 with Safal Partners, Inc. Soumya Sathya served as the contracting officer's representative. The content of the publication does not necessarily reflect the views or policies of the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government. This toolkit is in the public domain. While permission to reprint this publication is not necessary, it should be cited as:

Smith, N. and Westapher, E. (2017). Virtual Charter School Accountability: What We Can Do Now.

TABLE OF CONTENTS

Introduction

"Virtual" Defined

A Sketch of the Virtual Sector

Evidence and Pushback on Performance

Developing a Common Language

Approving Virtual Charter Schools

Past Performance

Key Questions

Marketing

Key Questions

Enrollment and Student and Family Onboarding

Readiness to Open

Contracts

Primacy of Charter

Management Agreements

Key Questions

Monitoring and Oversight

Attendance, Engagement, and Instructional Time

Teacher-Student Rations and Contract Time

Accountability for Outcomes

Begin and Standard Metrics

Key Questions About Accountability Metrics

Graduation Rates/Cohorts

Key Questions About Graduation Rates

Testing Formats and Timing

Clarifying "Mobility"

Intervention, Renewal, and Revocation

New Skills Needed

Conclusion

Endnotes

INTRODUCTION

Virtual charter schools educate about 180,000 students in 23 states.2 That is a small sector within the charter movement, where students now number nearly three million, and a drop in the bucket compared to the 50 million students in K-12 schools countrywide. However, virtual charter school enrollments have been growing fast in some states. Many parents view the virtual option as a godsend—especially in cases where their children have failed to thrive in more traditional environments.

Yet virtual charter schools occupy a disproportionate share of education news, due mostly to a series of adverse reports on poor academic performance coupled with some distressing cases of fraud.

Charter authorizers—the bodies that grant and oversee charters and make high-stakes decisions about whether to renew them—have been struggling to work their way through this thicket of discouraging news. When authorizers apply to virtual charter schools the same level of accountability that similar performance would merit in other kinds of charter schools, they are often met by lawsuits and political pressure to keep the virtual schools open.

The National Association of Charter School Authorizers (NACSA) joined in 2016 with the National Alliance for Public Charter Schools (NAPCS) and the reform group 50CAN to issue a call for tougher oversight of virtual charter schools, including closure for those that chronically underperform, in response to reports by the Center for Research on Educational Outcomes (CREDO) at Stanford University, other research organizations, and state education agencies, all showing discouraging outcomes for students in virtual charter schools. Evidence shows that virtual charter schools enroll large numbers of students who are unlikely to benefit from self-directed online pedagogy, which led the three organizations to raise the possibility that states might continue to offer virtual schooling but not under the charter banner. This would enable the virtual schools to be more selective than is permissible under open-enrollment laws that govern public charter schools.

This paper, produced by NACSA for the National Charter School Resource Center, serves a more direct and limited purpose than the 2016 manifesto. This paper deals with the world as it is, and intends to give state education agencies (SEAs) and the authorizers in their states the tools and perspectives needed to provide better-informed and more effective oversight right now. SEAs and authorizers should hold virtual charter schools to the same high standards as other public schools; however, virtual charter schools do raise unique questions about accountability. This paper provides recommendations for the specific oversight of virtual charter schools.

This paper draws on research compiled for 2016 report, plus additional findings developed for this project by Public Impact. NACSA produced the report in consultation with a working group of SEA officials and charter authorizers, several of whom have personal experience in the virtual sector. Additionally, NACSA consulted with operators of virtual charter schools and held numerous conversations about virtual schooling at education reform conferences and in other informal venues.

"VIRTUAL" DEFINED

To be clear from the outset, this paper is not about all schools that use extensive technology, charters that use computers to encourage self-directed learning, or the so-called "blended" or "hybrid" charter models that combine online experiences with classroom-based, brick and mortar education. It is about full-time virtual schooling delivered under a charter contract granted by a state-endorsed authorizer. This is an

important distinction since the vast majority of students in full-time virtual schools are in charter schools.³ Most virtual or "distance learning" in other contexts is used for credit recovery, enrichment, or coursework not offered in a particular public-school setting.

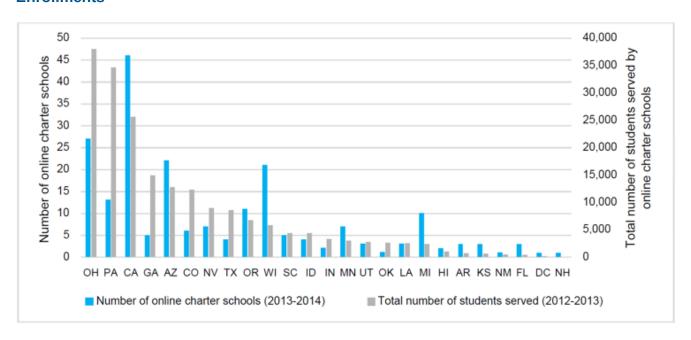
CREDO's national online charter school study provides a definition of an "online school" that fits well in this situation: "an online school is a school which provides the majority of classes (everything except PE, band, or a similar elective) to full-time students through a computer via the internet. Lessons may be synchronous or asynchronous. Lessons may consist of videos, live chat, bulletin boards, or any other common means of electronic communication. But the primary delivery method must be online." ⁴

A SKETCH OF THE VIRTUAL SECTOR

As the chart below indicates, enrollment in full-time virtual charter schools has risen sharply since the turn of the century. Because eight of the current 44 chartering jurisdictions (43 states and the District of Columbia) do not allow full-time virtual charter schools, there is an uneven distribution of that growth. Three states—Ohio, Pennsylvania, and California—now account for more than one-half of all virtual school enrollments.⁵

One reason for this concentration is the sheer size of some virtual charter schools. Although there are many smaller virtual charters serving students in certain districts, most states allow these schools to draw enrollment statewide. Two national companies, Connections and K12, manage high-enrollment charters in a number of states. K12's Ohio Virtual Academy currently enrolls just under 10,000 students and Commonwealth Connections Academy in Pennsylvania has over 9,000 students.⁶

Figure 1: Number of Online Charter Schools Operating by State, with Statewide Student Enrollments⁷



Only six states—Florida, Minnesota, New Mexico, North Carolina, Ohio, and Pennsylvania—require virtual charters to have a physical presence (a brick and mortar location), but that may simply mean administrative offices.⁸ Fourteen states have limits to growth on the books, but according to The Center on Reinventing Public Education (CRPE), restrictions on enrollment do not necessarily correspond to low enrollment

numbers." For-profit education management organizations (EMOs) operate about 70 percent of full-time virtual charters, compared to just 15 percent of all charters. ¹⁰ Even though virtual charter schools remain a relatively small sector of public schooling, their statewide scale produces the kind of revenues that make for a significant lobbying presence in state capitols. K12 alone spent \$1.25M lobbying in Pennsylvania between 2007 and 2015, nearly a third of what the state teachers' union spent in that period. ¹¹

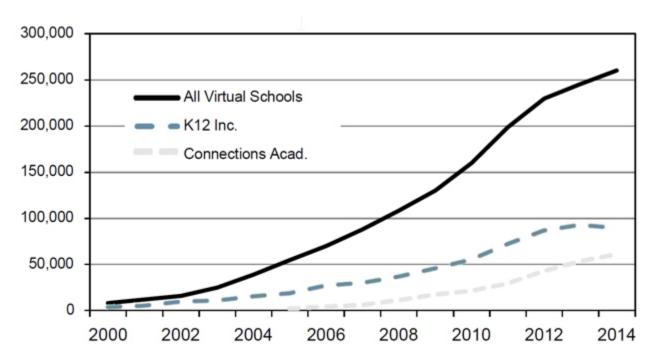


Figure 2: Enrollment in Full-Time Virtual Schools¹²

Virtual operators have been involved in a variety of legal skirmishes in recent years. After the Ohio Department of Education's (ODE's) early-2016 investigation revealed potential shortcomings in attendance and ODE asked for login records, ECOT went to court arguing that its original 2003 contract only called for documentation that students were provided the state-required 920 hours of "learning opportunities," not that students were actually engaged in learning during that time.¹³

However, a judge in Ohio, who noted that the 2003 contract applied only for the 2002 and 2003 funding reviews, rejected that argument. The judicial opinion further stated that "if the funding agreement were interpreted in the manner that ECOT suggests, to require the state to continue paying hundreds of millions of dollars per year without any ability to determine whether students are in fact participating in any curriculum at ECOT at all" would be a violation of public policy. ¹⁴ While Ohio's Supreme Court is set to hear the case in February 2018, ECOT closed its doors on January 19, 2018, citing financial distress after failing to reach an agreement with ODE, which has been deducting about \$4 million per month to recover overpayments to the school based on revised, but disputed, enrollment counts. ¹⁵

This is a textbook illustration of why precise language is important in determining what counts as evidence for critical metrics such as attendance and engagement. Authorizers and operators need a crystal-clear understanding of measurement and reporting requirements, particularly if state law is vague. (See "Monitoring and Oversight" below.)

EVIDENCE AND PUSHBACK ON PERFORMANCE

After more than a decade of largely unexamined growth, the virtual charter sector is now the subject of intense scrutiny by researchers and policymakers. It is hard to find good news about any virtual charter school in the recent spate of third-party evaluations.

Monitoring & Oversight

In July 2016, California attorney general Kamala Harris announced settlement of claims against California Virtual Academies (CAVA) and K12, the national virtual provider that manages its 14 affiliated schools. The attorney general stated that "K12 and the CAVA Schools it operates in California misled parents to induce them to enroll their children in K12 schools by publishing misleading advertisements about students' academic progress, parent satisfaction, their graduates' eligibility for University of California and California State University admission, class sizes, the individualized and flexible nature of their instruction, hidden costs, and the quality of the materials provided to students."¹⁶

Another point of contention was the alleged inflation of attendance counts. The settlement requires K12 to implement new procedures regarding student attendance and active participation. Teachers will be required to evaluate whether students are actually engaged in learning, not merely logging on. Further, "learning coaches"—often parents— will be required to submit logs for off-line activities including."¹⁷

Under the settlement, K12 agreed to provide approximately \$160M in debt relief to the schools. The attorney general contends that the firm had overloaded the schools with so-called "balanced budget credits" under the fee structure K12 uses in its contracts and will pay \$8.5M in settlement of all claims¹⁸ are a means of keeping the schools solvent. According to one authorizer, the firm explained that the company "provides services to the charter school, and then forgives the charges each year in the form of 'K12 Balanced Budget Credits.' The amount forgiven is equal to the school's spending deficit, allowing the school budget to zero out." 19

K12 CEO Stuart Udell said the credits are "the difference between K12's contractual price and what the schools can afford to pay" based on their state funding and that the settlement mischaracterizes payment as "debt relief." "While K12 has a contractual right to recover these balanced budget credits, in all the years that K12 has worked with the CAVA boards we have never sought to recover those amounts."²⁰

NACSA became directly engaged in this search for good news after the Georgia Charter Schools Commission sought national benchmarks of virtual charter performance, knowing that schools in their own portfolio were in danger of non-renewal based on unacceptable academic results. With funding from the Commission, NACSA and Public Impact conducted a literature search, which included two national studies published in 2015; evaluations by state agencies including Colorado, Wisconsin, Georgia, Minnesota, and Washington; university-based researchers at Georgia State, Stanford, Harvard's Kennedy School of Government, and the University of Arkansas; and reports published by news outlets. The report concluded that after looking at proficiency, growth, performance on state accountability measures, and graduation and dropout rates, virtual charter performance is "lackluster" and the researchers were unable to find any virtual school consistently producing strong academic results.²¹

Later in 2015, three major research organizations—CREDO, Mathematica, and CPRE—issued reports with the same bleak theme. Drawing on data from 17 states and the District of Columbia, and using a "virtual twin" approach that matches students with their counterparts in a traditional school on observable demographic measures and prior academic performance, CREDO produced the striking conclusion that on average, "online charter students have much weaker growth overall." Across all tested students in online charters, the typical academic gains for math are -0.25 standard deviations (equivalent to 180 fewer days of learning) and -0.10 (equivalent to 72 fewer days) for reading.²²

In August 2016, the Thomas B. Fordham Institute, using a different methodology, examined the performance of Ohio virtual charter schools and reported, "Across all grades and subjects, students who attend e-schools perform worse on state tests than otherwise-similar students who attend brick-and-mortar district schools, even accounting for prior achievement." ²³

Meanwhile, virtual charters are starting to run into state laws requiring mandatory closure for chronically poor performance on state accountability ratings. Indiana's statute requires authorizers to close charters scoring an F on the state accountability system for three consecutive years. In 2016, the Indiana State Board of Education questioned why Ball State University was arguing for renewal of Hoosier Academy Virtual after five consecutive F grades, but delayed judgment pending another year of results.²⁴ The school's board subsequently voted to close the school at the end of the 2017-18 school year rather than apply for renewal.²⁵

It will come as no surprise that operators of virtual charters are challenging this barrage of bad news. Those interested in the technical arguments made by operators and researchers can find online the statements by K12, CREDO²⁶, the National Education Policy Center²⁷, and other groups that participated in recent colloquies.²⁸ A brief summary of operator contentions includes the following:

- Performance has improved since CREDO and others collected data for their reports. Operators cite
 the strong growth results in Ohio's 2016 state grades, which improved dramatically after the state
 decided to base the calculation only on two years of consecutive tests in the same virtual school—
 that is, not including a student's first year after transferring to the virtual school in the calculation.
- The negative CREDO results are based on a methodology that does not take into account students who enroll late (even up to a week before testing), or the unquantified factors for which parents choose to enroll their children into online charter schools. However, it should be noted that CREDO did directly address mobility and found that mobility rates are lower before students enter virtual schooling, and higher after they leave.²⁹
- Operators have taken steps to improve. K12 notes that it now publishes detailed annual reports on academic progress and is implementing parent-training programs. Likewise, Connections reports that it has rewritten its math curriculum in response to the fact that overall math performance is an issue, and has started to see improvements in student performance.
- Four-year graduation cohorts are meaningless when students enroll throughout high school and are often significantly credit-deficient.

For SEAs and authorizers, arguments about accountability metrics raise more questions than they settle. For example:

- If states have determined that the key metrics for school accountability are annual reading and math scores, why should these not apply equally to virtuals?
- Are there additional valid and reliable measures that make sense for these schools?

- Should authorizers consider the range of parent motivations for enrolling students in virtual charters?
- How should the type and duration of student mobility affect the accountability equation? Or, is the
 "mobility" of a star athlete who studies virtually during the season the same as the "mobility" of a
 student whose impoverished family has been evicted twice in the past year?
- Should schools be excused from accountability when they enroll high numbers of students experiencing difficulty in other classroom settings, or should the elements of accountability be different for them?
- Should authorizers create separate performance frameworks for virtual charter schools?
- How much should states and authorizers think carefully about "input" measures, such as attendance and engagement, in self-paced models oriented to mastery of content instead of seat-time?

DEVELOPING A COMMON LANGUAGE

Too much of the dialogue between authorizers and operators regarding these questions often happens after the fact. Virtual charters are falling far short on available, observable measures of performance. When authorizers call them to task for poor performance, operators contend that the required metrics are wrong, and their students have unique challenges. When authorizers ask for documentation of these challenges, operators have difficulty producing the kind of hard evidence required for high-stakes decisions.

This conversation needs to start with an agreed-upon set of metrics, both conventional and non-standard, that authorizers can use to evaluate performance. Agreement about metrics should take place within the initial charter approval process, during the early goal-setting stages of the charter, and at every subsequent renewal—not after the authorizer has already called the charter status into question.

NACSA encourages authorizers to create performance frameworks for all charter schools that spell out metrics and goals in three areas: academics, finance, and organizational compliance. As important as these framework metrics and goals are for schools with traditional learning models, they are crucially important for schools with non-traditional models, such as "alternative" schools that serve former dropouts, students with a history of substance abuse, or chronic truants.

Virtual Charter School Applicants

The Georgia State Charter School Commission developed a required addendum for all virtual charter school applicants that includes questions designed to address some of the key differences in the program model. Such questions include:

- 1. Describe the level of participation in instructional activities students will be required to meet to receive credit for successfully completing a course and receive a satisfactory grade for that course. The level of participation may include the amount of time students will be engaged in both online and other instructional activities in order to receive credit for a course.
- 2. Describe how cooperative and group learning activities will be integrated in the instructional program.
- 3. Describe how virtual instruction and activities will be geared to develop and nurture social needs of students.

- 4. Describe any extracurricular activities that will be offered to develop and nurture the social needs of students.
- 5. Describe how the charter school will identify students with special needs in the virtual environment and how the charter school will provide services to all enrolled students with special needs regardless of where the student resides.
- 6. Describe the charter school's procedures for ensuring that students with disabilities in the virtual program are identified and receive all services needed to comply with the Individuals with Disabilities Education Act (IDEA), the Rehabilitation Act, and the Americans with Disabilities Act (ADA) and related state and federal laws and regulations.
- 7. Describe the charter school's procedures for Individual Education Plan (IEP) meetings for students with disabilities in the virtual program, including determining where such meetings will occur.
- 8. Describe how the charter school will implement ADA and Rehabilitation Act standards for accessibility to web-based curricula.
- 9. Explain how the charter school will accommodate English Learners (ELs) for students in the virtual program and address their unique needs in online and offline instruction and activities.
- 10. Describe the charter school's plan for the administration of all required state assessments (e.g., Georgia Milestones) and other assessments set forth in the school's charter for students in the virtual program. The plan should address, among other things, test taking location(s), who will administer the tests, and test security procedures.
- 11. Describe procedures to ensure compliance with providing instruction for the equivalent of 180 days in the virtual instructional program.
- 12. Describe the charter school's policies regarding truancy, absence, and withdrawal.

In these cases, a framework can vary both the metrics themselves (such as a technical certification in lieu of an SAT test) and the way they are weighted (giving additional emphasis to growth scores on state tests).

Similarly, adapting performance frameworks with additional metrics fitted to virtual schooling can create a "common language" for clear accountability that lays the groundwork for renewal. Without compromising on high standards for student success, such a framework allows authorizers to take a holistic view—through a lens of hard data—instead of being asked to look the other way when performance is wanting.

This is a particularly opportune time for states and authorizers to do the work of creating or revising existing performance frameworks to include program-specific metrics that make sense in the virtual context. The federal Every Student Succeeds Act (ESSA), which takes effect in the 2017-18 school year, allows states greater latitude to incorporate non-traditional measures in their accountability systems, and to use other metrics such as an extended graduation cohort, for schools that serve students who may not complete high school in four consecutive years.

Many states are also changing state tests and causing gaps in the data used for accountability purposes. It is up to authorizers and state leaders to decide whether this means a delay in high stakes decisions (for all

charters), or whether an accumulation of evidence other than state tests can be brought to bear in accountability decisions.

APPROVING VIRTUAL CHARTER SCHOOLS

A rigorous application and review process will cover most "virtual charter" concerns, even if originally created for brick and mortar schools. However, certain areas of the application merit a more detailed examination of the intentions and plans for virtual charters. A growing number of authorizers are now including virtual-specific addenda in their charter application packets. Such areas include past performance, school marketing, the enrollment and onboarding processes, and other matters specific to the virtual school model.

PAST PERFORMANCE

When an applicant proposes working with a third-party management company that already operates schools, the authorizer should conduct due diligence and carefully examine, as part of its application process, the operator's past performance. Since EMOs, including large companies with national scope, operate most virtual charters, this is an especially important step.

KEY QUESTIONS

- How are the operator's existing schools performing academically?
- Are the operator's existing schools in good financial health?
- Have any schools been closed or non-renewed?
- Have authorizers found their schools out of compliance with applicable laws or the terms of their charters?
- Have previous authorizers raised questions about the strength and independence of governing boards?
- Has the operator been involved in litigation?

MARKETING

There has been increasing concern over the "fit" between virtual charters and the students they serve. Self-paced programs that place a high premium on parent oversight and engagement may not be the right setting for every student. In fact, under the California settlement K12 will be required to post videos on the CAVA website "to reflect the potential advantages and challenges that parents and students might face in a virtual school environment." In its Policy Framework for Online Charter Schools, CRPE went further, suggesting that "State policies could eliminate open enrollment requirements and require schools to establish criteria for admission in order to ensure quality and effectiveness." ³¹

But current charter laws avoid such criteria in an effort to be inclusive, and virtual charters are subject to the same requirement for open admissions as all other charters. So, a school's marketing strategy must balance the obligation of broad outreach with the responsibility to give parents the information they need to make a well-informed choice. Authorizers should look closely at both questions in reviewing virtual applications and in monitoring approved schools' progress.

KEY QUESTIONS

- Do advertising, presentations, and materials clearly explain the program the operator promises?
- Is the marketing campaign clear about the work required for success?
- Does the operator clearly define parent responsibilities?
- Do parents have easy access to sponsor evaluations or annual reports, state report cards, or other academic information?
- Does advertising for the school reach a diverse audience? Is it presented in multiple languages and in all types of neighborhoods?
- Does the school engage in high-pressure salesmanship ("We're almost at maximum enrollment, better sign up now!")? What incentives are there for marketers to boost enrollment?
- Is there any evidence of deceptive practices—for example, promising more frequent teacher contact than is actually delivered?

Since many virtual charters can recruit statewide, there may be a serious question about the capacity of a local authorizer to evaluate these questions. Because some large virtual charters are authorized by small local districts with minimal staff, the authorizer may not know all the media markets and distant neighborhoods the marketing plan will reach. This is a question worth monitoring, and SEAs might consider developing guidelines or recommendations for authorizer evaluation of virtual-charter school marketing. They might also consider doing spot checks to ensure that marketing practices comply with applicable laws.

ENROLLMENT AND STUDENT AND FAMILY ONBOARDING

Every state requires charter schools to offer enrollment open to all prospective students, up to the number of students prescribed in the charter. If there are more applicants than spaces, a lottery process determines admission. A few exemptions exist, depending on state law. For example, charter schools can usually admit children of school founders or siblings of current students outside the lottery process.

Public schools usually complete and count enrollment by the first or second month of the school year. Although some virtual charter schools encourage students to begin classwork on a traditional school calendar, most virtual charters allow enrollment throughout the year. Authorizers should review the school's policies and processes to assure equity and transparency in enrollment practices that may take place throughout the year.

It is important to distinguish between the operator's practices before and after a parent decides to enroll their child. Prior to the parent's enrollment decision, the operator can host information sessions providing detailed information about the program and, especially, the role parents play in their child's education.

Once a parent decides to enroll a child, the process can and should become more personalized. Authorizers should scrutinize the plan for "onboarding" students and families, which is especially important for students who arrive throughout the school year and those with special needs. Schools should determine the new student's academic status and assess personal or family issues that may have prompted their interest in virtual learning in the first place, including any that may affect day-to-day learning. Here, the school should hone in on the "fit" question: What curriculum offerings make sense? What kind of support is needed? What kind of interaction with the teaching staff will work best? How will a student's special needs, or need for English language acquisition, be addressed in the virtual context, and with what additional resources?

In short, the post-enrollment process should determine how the student experience will be personalized to ensure a smooth transition into virtual learning and the best chance of success in the new environment, without in any way suggesting an intent to "counsel out" the student.

READINESS TO OPEN

Virtual schools may not have a conventional annual calendar, but they do begin operations by a defined date. How should authorizers ascertain whether the schools are ready to receive students?

Many charter authorizers do visits, document reviews, and other surveillance to determine whether traditional charters are ready to open. Some elements are moot in the virtual setting, but others remain pertinent.

KEY QUESTIONS

Some questions that authorizers should ask following charter approval and before the virtual charter school starts operation include:

- Are enough teachers hired to staff the school's instructional model? Does the staffing model match the numbers included in the application?
- Does the plan for testing reflect the plan noted in the application?
- Will state tests be administered at a school-managed site or somewhere else?
- If there is a physical facility, whether for academic, social, or administrative purposes, does it have a certificate of occupancy? If students will visit the physical facility, does it meet applicable health and safety standards?
- If the school is required to provide students with computers, Wi-Fi, or other technology assistance, have these services been provided?

CONTRACTS

PRIMACY OF CHARTER

A carefully crafted charter contract should embody performance expectations and spell out a set of metrics to measure the school's performance. The first order of business for an authorizer is to ensure that each virtual charter contract details the level of academic, financial, and organizational performance required for renewal of the charter. In addition, to the extent the authorizer needs access to data from the school, the charter contract should identify this data and the school's responsibility to provide it to the authorizer.

This point is especially worth stressing in the virtual context. If factors such as mobility rates and student characteristics shape performance expectations, these factors must be included in the contract along with agreed-upon sources of quantifiable evidence. It is not enough for an operator to claim, or for an authorizer to accept without evidence, that "a lot of our kids have issues." Federal law and state accountability systems require schools to maintain high standards for all students. Therefore, the charter contract should say whether and how certain populations impact performance expectations.

The charter contract should incorporate, directly or by reference, a performance framework addressing each indicator of academic, organizational, and financial performance, with measures and metrics specifying goals for each. (See "Accountability for Outcomes" below.)

Contracts must be clear about the school's obligation to share data, and note that refusal to share can be grounds for termination, especially if related to agreed-upon performance expectations. SEAs may have a role in facilitating data exchange by making sure that operator, authorizer, and state data systems communicate effectively.

MANAGEMENT AGREEMENTS

EMOs, which are for-profit companies, operate most virtual charter schools. In addition to the charter contract between the authorizer and the charter school board, the presence of a management company requires a separate agreement between the charter school board and the EMO. It is critical that the authorizer have the opportunity to review the draft agreement as part of the application. Authorizers should condition award of the charter upon its review and approval of the final management agreement.

Among other issues, the management agreement should: preserve the independence and authority of the charter school's governing board; describe in detail the services of the management company and corresponding fees; outline the criteria used to evaluate the EMO; explain under what circumstances the parties can terminate the agreement; and provide a contingency plan for subsequent operation of the school post-termination. While there is often no physical facility for virtual charter schools, the management agreement should clearly spell out which entity is responsible for technology costs; what is included in those costs; and who owns the technology if the agreement is terminated.

Over the past decade, questions have been raised about the independence of charter school boards that contract with EMOs. In some cases, EMOs have chosen board members and essentially supervised their work, or at least functioned as a watchdog on their every move. In the case of virtual charters that enroll hundreds or thousands of students, the prospect of major disruption in the lives of children and families poses an additional threat to board autonomy. If the EMO terminates the contract and the board is unable to self-manage or switch management companies due to restrictive provisions in a management agreement, student learning can be put at risk. While EMOs may have more leverage than charter school boards under many existing agreements, it does not mitigate the board's obligation to make its own decisions about whether a particular operator has met the terms of its contract. This reaffirms the importance of authorizer review and approval of the management agreement at the outset.

For these reasons and more, charter school boards should have strong onboarding and periodic re-training on their legal, ethical, and fiduciary responsibilities. State laws in Ohio, Minnesota, and Florida now require charter school board members to receive training, which is a requirement other states may want to consider.

Finally, to ensure their own independence, the charter school board should retain its own legal counsel to negotiate the management agreement and the charter contract.

KEY QUESTIONS

- Does the charter contract and any associated performance framework set out clear standards for renewal of the charter and any interim goals that the school must meet?
- Does the charter contract spell out what data and documents the school is obligated to provide to the authorizer as evidence that the school is meeting performance goals?
- Does the management agreement clearly give the school's governing board the authority it needs to
 oversee the EMO's performance and, if necessary, terminate the agreement without disrupting
 students' education?

- Does the school's governing board have independent counsel (i.e., not retained or paid for by the virtual operator)?
- Does the school's governing board conduct regular review of the EMO's performance?

MONITORING AND OVERSIGHT

Even though outcomes are the main focus of accountability, states and charter authorizers need to look at key process metrics—not only because they affect the amount of public revenue the school will receive, but also because they help protect student and public interest by pointing to compliance issues and sources of stress in the operation. Certain process metrics take on a different or heightened importance for virtual charter schools.

ATTENDANCE, ENGAGEMENT, AND INSTRUCTIONAL TIME

How do we know students are "attending" a school they access online? Although there is growing support for basing accountability and funding on "mastery" or "competency" rather than seat-time, most states still require confirmation that students are actually "in school." How to do this in the virtual context is a perennial problem, and in one notable Ohio case discussed earlier, the subject of litigation.

There should also be some well-defined threshold of non-attendance. When is a virtual student merely "absent?" When does the student become "truant?" When does a student's affiliation with the school actually end? Interviews with authorizers of virtual charter schools in seven states and the District of Columbia disclosed a variety of methods for addressing these questions:

- Enrollment status: All students currently meeting enrollment requirements are counted toward attendance calculations.
 - In Ohio, all students currently enrolled in virtual charter schools are counted toward daily attendance. Students must log in to school at least once every 105 consecutive hours to stay enrolled and be included in daily attendance counts.
 - North Carolina state policy counts all students who have shown any "student activity"—as
 defined by the school—in the past 10 consecutive days toward daily attendance counts.³²
- Login time: Students are counted toward attendance on a specific day or week based on time that
 they log in to the school system. Specific time requirements range from one minute to a set number
 of hours per day or week.
 - In Idaho, one option for calculating attendance includes all time that a student logs between 8 a.m. and 10 p.m. Monday through Friday.
 - The Pennsylvania Virtual Charter School considers students absent every day they fail to log into the school system for any period of time.
 - Arizona state law requires that virtual schools report attendance based on "logged time," or time students spend completing online coursework.
- Student participation and engagement: Students must show evidence of class participation or work that may include teacher contact, submitting assignments, participating in webinars or discussion, or attending tutoring sessions.
 - Colorado State Board of Education guidance allows virtual charter schools to track attendance based on student participation and completion of required tasks. Colorado virtual

schools may also choose to calculate attendance based on login time or on completion requirements.³³

- Parent or learning coach report: Parents or learning coaches report or verify attendance or participation hours. Many virtual charter schools use this method in combination with other approaches.
 - South Carolina law requires parents to verify the number of hours of educational activities completed by the student each year and to have at least bi-weekly parent-teacher conferences in person or by telephone.
- Performance or class completion: Students must show progress toward specific weekly performance targets. For example, if a student achieves only 60 percent of their weekly learning goals, he would be counted as attending school for only three of the five weekdays.
 - In Idaho, attendance can be submitted as a percentage of the instructional program completed over a timetable set by the school.

Many virtual charter schools use a combination of approaches. For example, Kansas Connections Academy requires both reports by a learning coach and completion rates for required tasks. Oklahoma Virtual Academy calculates attendance based on online lessons completed, live class connects, and home-school communications. In addition, "a student will be withdrawn for non-attendance if they miss 10 consecutive school days."³⁴

In some cases, schools simply report attendance according to their own methods, with no direction or standardization by public authorities. Given that attendance numbers often determine the amount of public funds received by a school, states and authorizers should establish a uniform approach or method for calculating attendance. While no one method is foolproof, using multiple measures found consensus among members of the working group. Documentation of student login is a good start, but not enough; students may spend a few minutes logged in, do work offline, and then log in again to "send." Additional methods might include parent confirmation of work, evidence of participation and engagement with the material, a record of student contact with the teacher, and/or evidence of unit completion. States and authorizers should settle on what combination of elements from this "menu" will be used to document attendance and engagement.

TEACHER-STUDENT RATIOS AND CONTACT

Virtual charter schools generally provide some amount of direct contact with live teachers, either in person, via Skype, by email or text, or through other modalities. While some virtual teachers may juggle a huge cohort of students, numbering in the hundreds, these cases appear to be the exception. The research organization Mathematica found that, "Online charter schools reported median class sizes of 25 students in 4th grade in both math and English/Language Arts (ELA) (Figure 3) (these data exclude schools that rely entirely on individualized, self-paced courses for which class size has no clear meaning). Similarly, in 7th grade, median class sizes were also reported to be 25 students in both math and ELA. Median reported class sizes rise to 30 students in both subjects in high school." Mathematica also found that in middle and high school, classes of 50 or more are common, and that larger class sizes are more common in larger online schools.³⁵

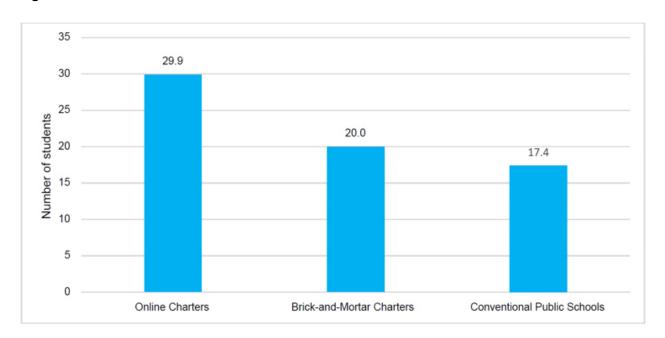


Figure 3: Students Per Full-Time Teacher³⁶

There is no "magic number," however. Disputes about class size are common in the politics of brick and mortar schools, but the dynamics of virtual schooling are different, and the importance of "class size" per se may be most when students experience the academic program by themselves.

A more pertinent question is how much actual contact teachers have with students, and how well the time is used to further the academic program. Mathematica's findings are striking: "Students in the typical online charter school have less synchronous instructional time in a week than students in a brick and mortar school have in a day." That is, they spend much less time directly interacting with teachers—about four hours in Grade 4, and about three hours in Grade 7 and high school.

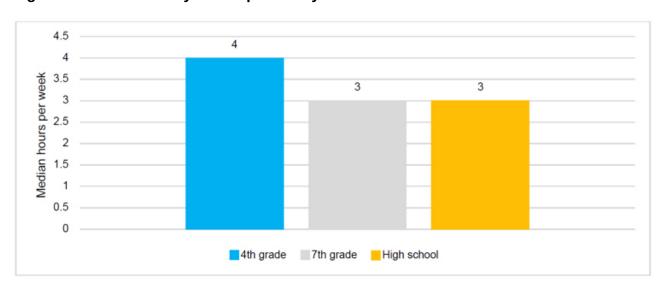


Figure 4: Median Weekly Time Spent in Synchronous Instruction³⁷

Advocates of virtual schooling say that comparing these numbers to total classroom time in a conventional school can be deceptive. How much time, they ask, does a given teacher spend directly interacting with a

given student in the course of a week in a brick and mortar school? The four hours a virtual instructor spends weekly with a fourth-grader may involve dozens of brief check-ins directly with that student.

The bottom line is that this "input" measure plays out differently in traditional and virtual settings. The critical question is whether the time allocated is enough to achieve the goals of the academic model, and whether the interaction between teacher and student is productive.

ACCOUNTABILITY FOR OUTCOMES

BEGIN WITH STANDARD METRICS

Virtual Charter Accountability

While some virtual charters incorporate physical facilities, which should be subject to inspection like all other school buildings, the program is really delivered online, in homes. It is unrealistic to visit students' houses, but an authorizer can, and should, see the program in real time by doing electronic site visits.

Authorizers do this in various ways. At Buckeye Community Hope Foundation, a nonprofit authorizer in Ohio, staff members get a login from the school and actually observe teaching in real time. In Oregon's Santiam Canyon School District, the student information system in its virtual charter communicates directly with district systems so that, for example, the authorizer can validate special education compliance. In Colorado's Falcon 49 district, the virtual charter schools also have drop-in centers that the superintendent/authorizer visits. Authorizers should have the ability to log in at any time to make unscheduled checks, especially for schools that warrant frequent monitoring—for example, those on probation.

The discussion of how to measure accountability must begin with the premise that as public schools, virtual charter schools are subject to the same standards as all other public schools. The burden of proving the need for modification to this rule is on the school, not the authorizer. Leading states and authorizers are already using conventional metrics in more sophisticated and telling ways than was possible a decade ago.

NACSA has long advocated that authorizers should create *performance frameworks* for setting comprehensive and consistent expectations about charter school performance. Performance frameworks, or the setting of transparent performance expectations, are important for any charter school, but are essential for schools that have a distinct mission or student characteristics whose impact may not be fully captured by standard accountability measures.

Proficiency. The foundation of most state accountability systems is student proficiency data on reading and math tests. It is hard to argue that any public school is doing its job if its students cannot read and do math.

Some states and authorizers have developed strategies to ensure that proficiency is not considered in a vacuum or used as a single measure of performance. The Illinois State Charter School Commission, for example, compares both proficiency and growth scores not only against state standards and averages, but also against schools with comparable populations and the aggregated scores of sending schools. This requires some finesse and a strong statewide data system, but such comparisons are especially valuable for schools that serve nontraditional populations. They can provide a well-rounded view of performance that

"proficiency" scores on their own cannot, especially for schools that welcome students significantly below grade-level.

Growth. Under the Every Student Succeeds Act (ESSA), states are required to measure student academic growth, which many states were already doing under NCLB waivers. Currently, there are serious impediments to measuring growth accurately, due to changes in state standards and tests.

Looking at growth is imperative for virtual charter schools with mobile populations whose students may not be present for the annual sequence of spring tests. For these schools, authorizers are justified in asking for interim assessment data to document growth, ideally using nationally normed measures administered several times during the year so that most students are included for accountability purposes.

Value-Added. One way of probing more deeply into standard test data is found in the value-added impact analysis developed by the Georgia Charter Schools Commission in response to calls for "alternative accountability" for schools with unique populations. In addition to the usual controls (race, gender, free/reduced lunch status, disability status, ELL, and so on), it also takes into account a host of additional variables including number of schools attended in the current year, number of disciplinary incidents in the prior year, being overage in grade, prior-year test scores, and previous withdrawals due to certain risk factors such as hardship, incarceration, or pregnancy. It also notes students who enter school more than two weeks after the school year starts, which helps identify test takers who have not had a full year's learning.

Broader adoption of such analyses would help clarify grounds for accountability in virtual charters. But it may take some doing: not <u>every</u> state has data systems capable of generating these tabulations, and not every authorizer can get access to some of the items mentioned here.

KEY QUESTIONS ABOUT ACCOUNTABILITY METRICS

- What additional measures, if any, would the school like to include in the performance framework or add to the authorizer's established academic performance expectations? Why has the school selected these measures and what are these measures tracking that the existing framework does not?
- What will be the standard for meeting each measure? What type of evidence will be used to demonstrate this?
- How will standard and non-standard measures be weighted to determine whether the school has met its academic performance obligations?
- Have other authorizers used these non-standard measures with success? For example, if one metric
 is a student efficacy survey, where else has it been used, what outcome is it associated with, and
 what evidence can the school provide to support this connection?
- Are authorizers using charter renewal to create strong frameworks, or to review and update existing ones?

GRADUATION RATES/COHORTS

Determination of the four-year graduation rate is a required accountability element in all states, but there is a growing realization that many students do not enter and exit high school on a four-year timetable. Under their NCLB waivers, some states introduced extended graduation cohorts, with Ohio the most adventurous, permitting up to eight years for dropout-recovery schools. Now, under the new federal law, all states may

use extended cohorts. But states must decide how to assign credit for students who take longer than four years. Schools can still expect to be pushed toward the standard cohort length with diminishing credit for subsequent years.

Virtual charter schools will welcome a longer graduation cohort, since many of their high school students arrive overage and under-credit.

Authorizers and virtual charter schools need to have hard conversations about what they will count and how they will interpret results at a more granular level than is usually the case. What is happening, for example, when the under-credit share of one class is substantially higher than that for the school as a whole? Does it mean that more under-credit students have enrolled in that class or that those who have stayed on are falling further behind?

Since the goal of schooling is not seat time but mastery of the curriculum, authorizers should have flexibility to allow unconventional paths toward a diploma, so long as state law gives them the needed latitude. However, authorizers also need to distinguish between students who are otherwise performing well and have no serious impediments to graduating on time and those who arrive seriously behind, or who unavoidably miss school, and need more time.

According to the Mathematica study, 90 percent of online charter schools surveyed said they serve "a general population of students," with just 10 percent serving a "specific population"—most often dropouts or overage/under-credited students.

Given that statistic, accountability requires a serious and frank discussion of student data and performance expectations between the virtual charter school and authorizer. It does not make sense to argue in broad terms that "all students must graduate in four years" or that "our students can't be expected to graduate in four years" when virtual-charter student bodies encompass such a broad spectrum of achievement levels and personal circumstances. The numbers cited above again suggest that virtual charter schools need to explain any requested variance to conventional rule.

Certain states and authorizers are approaching this challenge in constructive ways, informed in part by recent experiences in trying to create equitable measures for alternative charter schools—those that serve former dropouts and other student groups with persistent challenges to academic success:

- The South Carolina Public Charter School District is developing a modified graduation rate accountability metric that gives credit to schools for out-of-cohort students who successfully graduate. The authorizer will calculate this modified rate for all charter schools, not only alternative or virtual schools.
- The Oklahoma Statewide Virtual Charter School Board adopted a performance framework for the
 virtual charter schools it oversees. While the framework examines reading and math scores for all
 students, it also looks at reading and math scores for students enrolled in the school for two and
 three or more consecutive years. Regarding graduation rates, the framework analyzes both the fouryear graduation rate, the extended-year adjusted graduation rate, and the graduation rate for eligible
 seniors for the most recent year.³⁸

KEY QUESTIONS ABOUT GRADUATION RATES

• What portion of the student body does the virtual charter school expect will graduate in four years? What information informs this estimate?

- How does this compare to the authorizer's estimate based on prior experience and incoming student data?
- How will the virtual charter school keep track of students who enter and leave and may not be part
 of an identifiable graduation cohort? How are diploma expectations calculated for these students?
- What is the relationship between attrition and graduation rates?

TESTING FORMATS AND TIMING

Some virtual charter schools contend that the desk-bound nature of state tests, and the travel often involved, may affect performance. Virtual charter schools also note that their own internal metrics show better results than state tests, perhaps because state assessments may take place months after students have finished curriculum units. Of course, this problem also applies to brick and mortar charter schools, but may be more of a challenge in self-paced learning environments.

Testing site requirements vary by state, and while virtual charters bear the primary obligation for addressing test formats and timing, authorizers and SEAs can work with virtual charter schools on these issues by helping to arrange test sites closer to students' homes—for example, in nearby district facilities.

CLARIFYING "MOBILITY"

According to Mathematica: "Online charter schools reported that the average length of stay for a typical student is a little more than two years, which is consistent with what CREDO found in student records data (Woodworth et al. 2015). Nonetheless, the average virtual charter school reported that nearly 40 percent of its students who took the state assessments at the school in the spring of 2014 had not been enrolled in the school for the entire school year." ³⁹

Some types of mobility are more predictable than others, and some have stronger effects on learning. For example, the virtual option may be ideal for a student-athlete during the season, or for a student who performs in a traveling show choir and wants to keep in touch with her studies on the road. If such students are getting straight A's, there is no reason to think that their type of mobility should impact their academic performance. By contrast, a student who arrives at the virtual charter school after a history of hopping from school to school because of family chaos or behavioral problems is likely to experience more serious learning challenges.

The familiar "mobility effect" that depresses achievement when a student first arrives at a new school is likely to be amplified in a virtual setting. The virtual charter school must understand where the student is starting academically and tailor their program to the student's individual needs to give the student the best chance of success in the new environment, for the potentially short period of time they are enrolled.

Apart from disruption of learning, mobility rates affect the number of students eligible for accountability measures. Some students simply are not accounted for in any school results, and these gaps can cast a shadow on critical outcome measures. Year-to-year calculations of student growth, for example, may seem impressive until it becomes clear that a very small number of students is actually captured in the data point.

Currently, very few virtual charter schools and authorizers document causes and trends in mobility, or use specific accountability measures to address the performance of mobile students. This may be changing. The virtual provider K12, for example, has made a point of trying to reduce student mobility and increase persistence, a point stressed in their recent academic reports.⁴⁰ Clearly, this is one area where an up-front agreement between authorizers and virtual charter schools is essential. They should work together to:

- Document expectations for duration of attendance and incorporate such rates into performance frameworks.
- Use data over time to set year-over-year goals for retention.
- Track, analyze, and act on reasons why students enter and exit the school.
- Flag highly mobile students and report their performance in context.
- Require short-term metrics (interim assessments; NWEA MAP tests) that can demonstrate progress for mobile students.
- Ensure that virtual charter schools provide a strong onboarding program (for both students and parents) that is available whenever students arrive to explain performance expectations and fine-tune academic offerings to get mobile students up to speed.

INTERVENTION, RENEWAL, AND REVOCATION

Despite ongoing concern about their performance, authorizers have closed very few virtual charter schools for any reason—just 11 between 2008 and 2013, according to NAPCS data. Whatever the merits of individual cases, there are powerful incentives not to take action even when performance is faltering, especially when virtual charters enroll hundreds or thousands of students. The most urgent question is where will all those students to go school? It asks a lot of districts and other charters to absorb those students, especially those who live in remote areas or who have already been unsuccessful in traditional settings. Also, authorizers may encounter EMO lobbyists and lawyers deployed to fight school closures. And state laws often provide for authorizers to collect per-student fees. Given the scale of some virtual charters, these can introduce another perverse incentive to keep a failing school open.

The three-party report issued in 2016 made several suggestions to address these problems, including limiting overall virtual enrollment per charter and capping the fees an authorizer might receive from a virtual charter. While these ideas would require changes in law, it appears that authorizers are using existing powers to take stronger stands against virtual operators that fail to fulfill their responsibilities. Nowhere is this more apparent than in Florida. Authorizers have closed schools affiliated with K12 in Broward, Palm Beach, and Hillsborough counties in the past two years. Pinellas County moved to terminate its charter with Florida Virtual Academy, also a K12 affiliate, but the school is appealing the decision.

Virtual charter schools are subject to essentially the same processes as other charters when authorizers discover shortcomings. Failures of compliance may result in a notice of concern and demand for remedy, or if more serious, a notice of probation. Some state laws provide only for probation prior to the beginning of revocation proceedings while others give authorizers more leeway to create tiered interventions, with the gravity of responses tied to the nature of the infraction and/or the failure to address it when previously notified.

A few states require authorizers to provide "support," which generally should be limited to performance feedback rather than direction about how to fix a given problem. Any interventions should be grounded firmly in charter provisions and statutory reference, and, of course, a revocation order must follow whatever state law says about giving the school an opportunity to make its case and/or appeal the decision.

In one recent case, a Florida authorizer began revocation proceedings with a "90-day letter" as required by statute. Even though the state's default closure provisions didn't apply (due to a hiatus in applying state A-F grades for accountability decisions), the authorizer moved to shut down the school by alleging a host of

operational and compliance violations ranging from inaccurate and incomplete reporting of grades, to failure to document IEPs and provide special education services, to the board's failure to conduct public meetings. Each of these would also be subject to sanctions in any non-virtual setting.

Intervention and closure processes for virtual charters may require a tweak in the area of public notice. When there is a material violation of the charter, the authorizer should ensure that parents and the public are aware of the matter, especially if the violation is sufficiently grave so as to put renewal in question. Since it may be difficult for parents to travel across the state for an authorizer or school board meeting, the school should have in place a mechanism for giving parents notice and providing them a means of input.

When a school enrolls thousands of students, they and their parents can create a powerful voice when the authorizer holds a public hearing on a revocation decision. It is important that they be heard, but equally important that the authorizer not be swayed by the volume when giving the most careful consideration to the interests of students and the performance of the school against the terms of its charter.

NEW SKILLS NEEDED

Getting virtual charter accountability right will make new demands on authorizers and SEAs as well as the schools themselves. For **authorizers**, painting by numbers does not work. Authorizers who default to the state system for accountability, or accept whatever information virtual charter schools send to them, cannot accomplish the steps called for by this paper. Strong oversight of virtual charters calls for:

- Sophistication about data analysis and measurement.
- Ability to negotiate contracts tailored to certain unique aspects of the virtual school model.
- Skill at creating performance frameworks that incorporate non-standard elements, including additional subgroup analysis, addressing factors that might affect student performance in a virtual setting.
- Ability to review management agreements and assure that charter school governing boards are overseeing EMOs adequately.
- Greater sophistication about financial oversight and willingness to raise hard questions.
- Ability to translate routine oversight into terms that make sense for virtuals, for example, understanding how to evaluate special education compliance in an online setting.
- Willingness to try new approaches that adapt monitoring to the virtual environment.

SEAs also have an expanded portfolio of responsibilities, including the following:

- Ensuring that state accountability systems allow schools and authorizers not only to see standard summaries of student achievement and growth, but also to make comparisons to schools with similar populations and those from which students have transferred.
- Helping to navigate virtual charter-authorizer relationships, especially where a single virtual charter school may be able to enroll students from around the state.
- Monitoring the form and timing of district referrals to virtual charters to ensure that difficult students are not "counseled out" in order to increase test performance.
- Getting a better handle on data that should be readily available, including credit deficiency, bullying, flagging highly mobile students, and reporting of mental health issues.

- Ensuring timely transfer of student records both ways—between virtual charter schools and sending/receiving schools—or seeing that every student arrives with a "data backpack."
- Perhaps most important, creating effective systems of authorizer accountability that take into account
 portfolio outcomes, including those of virtual charters; quality and effectiveness of compliance
 oversight; and skill with which the authorizer has accomplished the translations needed to adapt
 charter accountability to the virtual context.

CONCLUSION

It is not surprising that some authorizers have felt overwhelmed by the challenge of overseeing virtual charter schools. There are so many students. The schools defy the usual logic of enrollment and attendance cycles. Virtual advocates say conventional assessment techniques are unsuited to the student population. Families seem eager to sign their children up even when there is little indication that they will thrive in a self-directed environment, and as charters are public schools with open-enrollment rules, their decisions must be respected.

Clearly, some innovation and flexibility are needed to get the best possible results from these evolving arrangements—and to preserve the benefits that many students and families do find in virtual schooling. SEAs can help by encouraging authorizers to try new approaches.

What cannot be forgotten is that solid, high-quality authorizing already addresses most of the basics. An authorizer may use an addendum for certain critical details, but rigorous application packages combined with serious due-diligence are still the keys to determining whether an authorizer should grant a new virtual charter. Additional metrics might be required, but authorizers who know how to create strong, clear renewal standards will be on firm ground in making those high-stakes decisions.

If there is one message the working group and this paper hope to impart, it is that authorizers and virtual schools need to have clear communication before a charter is granted, and at each renewal, about how performance will be documented and measured. Retrospective argument about what should have been taken into account must stop. The conversation should not be about how to excuse failure, but rather about additional ways to demonstrate success against high expectations for all students, whatever their learning environment.

ENDNOTES

¹ Members of the virtual charter school oversight working group included: Kimberly Carrubba, Nevada Department of Education (formerly with); Adam Emerson, Florida Department of Education; Patrick Gavin, Nevada State Public Charter School Authority, Peter Hilts, Colorado District 49; Jenna Hodgens, Hillsborough County Public Schools; Bonnie Holliday, Georgia State Charter School Commission; Renee Martinez, Colorado Department of Education; Todd Miller, Santiam Canyon School District; Kate Pattison, Oregon Department of Education; Jennifer Robison, Buckeye Community Hope Foundation; and Aarti Sharma, Georgia Department of Education (formerly with).

- ² National Alliance for Public Charter Schools, National Association of Charter School Authorizers, and 50CAN. *A Call to Action to Improve the Quality of Full-Time Virtual Charter Public Schools*. June 2016
- ³ Miron, Gary and Charisse Gulosino. *Virtual Schools Report 2016: Directory and Performance Review*, 4th ed., National Education Policy Center. April 2016. pg. 12.
- ⁴ Woodworth, James, Margaret Raymond, Kurt Chirbas, Maribel Gonzalez, Yohannes Negassi, Will Snow, and Christine Van Donge. *Online Charter School Study*. Stanford University, Center for Research on Education Outcomes. October 2015. pg. vii-viii.
- ⁵ Pazhouh, Rosa, Robin Lake, and Larry Miller. *The Policy Framework for Online Charter Schools*. Center for Reinventing Public Education. October 2015.
- ⁶ Molnar, A., Miron, G., Gulosino, C., Shank, C., Davidson, C., Barbour, M.K., Huerta, L., Shafter, S.R., Rice, J.K., & Nitkin, D. *Virtual Schools Report 2017*. Boulder, CO: National Education Policy Center. Appendix B1.
- ⁷ Gill, Brian, Lucas Walsh, Claire Smither Wulsin, Holly Matulewicz, Veronica Severn, Eric Grau, Amanda Lee, and Tess Kerwin. *Inside Online Charter Schools*. Mathematica Policy Research. October 2015. pg. xxii.
- ⁸ Pazhouh, Rosa, Robin Lake, and Larry Miller. *The Policy Framework for Online Charter Schools*. Center for Reinventing Public Education. October 2015.
- ⁹ Ibid, pg. 5.
- ¹⁰ National Alliance for Public Charter Schools, National Association of Charter School Authorizers, and 50CAN. *A Call to Action to Improve the Quality of Full-Time Virtual Charter Public Schools*. June 2016.
- ¹¹ Pennsylvania Lobbying Directory. Pennsylvania Department of State. July 31, 2015.
- ¹² Miron, Gary and Charisse Gulosino. *Virtual Schools Report 2016: Directory and Performance Review*, 4th ed., National Education Policy Center. April 2016. pg. 11.
- ¹³ Siegel, Jim and Catherine Candisky. *ECOT* sues state to block effort to track log-ins of students. The Columbus Dispatch. July 8, 2016.
- ¹⁴ ECOT could lose millions after judge rules against eschool in attendance records case. The Columbus Dispatch. September 30, 2016.
- ¹⁵ ECOT closure doesn't block recovery of \$80 million, state superintendent says: Ohio has "other options." Cleveland.com. January 30, 2018
- ¹⁶ Attorney General Kamala D. Harris Announces \$168.5 Million Settlement with K12 Inc., a For-Profit Online Charter School Operator. State of California, Department of Justice, Press Release. July 8, 2016.
- ¹⁷ California v. K12 Inc., Stipulation for Entry of Final Judgement, Case No. BC626392. Superior Court of the State of California County of Los Angeles. July 8, 2016.
- ¹⁸ K12 Inc. Reaches \$2.5 Million Settlement with State of California with Resolution of All Claims, No Admission of Liability or Wrongdoing, No Fines or Penalties, K12 Newsroom, Press Release, July 8, 2016
- ¹⁹ Factual Findings: Renewal Petition from San Francisco Flex Academy. San Francisco Public Schools, Memorandum. October 28, 2014.
- ²⁰ K12 education company settles case with Calif. The Atlanta Journal-Constitution, July 28, 2016.
- ²¹ National Association of Charter School Authorizers and Public Impact. *Study of Virtual School Performance and Impact*. State Charter Schools Commission of Georgia. February 2015. pg. 17.
- Woodworth, James, Margaret Raymond, Kurt Chirbas, Maribel Gonzalez, Yohannes Negassi, Will Snow, and Christine Van Donge. Online Charter School Study. Stanford University, Center for Research on Education Outcomes. October 2015. pg. 23
 Ahn, June. Enrollment and Achievement in Ohio's Virtual Charter Schools. Thomas B. Fordham Institute. August 2016
- ²⁴ Ullmann, Kylie. Ball State U's Virtual Charter School Faces Uncertain Future. Education News. September 13, 2016.
- ²⁵ Cavazos, Shaina. After years of failing grades, Hoosier Academy Virtual will close in June. Chalkbeat. September 27, 2017.
- ²⁶ Woodworth, James, Margaret Raymond, Kurt Chirbas, Maribel Gonzalez, Yohannes Negassi, Will Snow, and Christine Van Donge. *Online Charter School Study*. Stanford University, Center for Research on Education Outcomes. October 2015.
- ²⁷ Miron, Gary and Charisse Gulosino. *Virtual Schools Report 2016: Directory and Performance Review*, 4th ed., National Education Policy Center. April 2016.
- ²⁸ Connections Education. Connections Education statement regarding the report: "A Call to Action: To Improve the Quality of Full-Time Virtual Charter Public Schools", June 16, 2016.

²⁹ Woodworth, James, Margaret Raymond, Kurt Chirbas, Maribel Gonzalez, Yohannes Negassi, Will Snow, and Christine Van Donge. *Online Charter School Study*. Stanford University, Center for Research on Education Outcomes. October 2015. pg. 18.

³⁰ California v. K12 Inc., Final Judgement, Case No. BC626392. Superior Court of the State of California County of Los Angeles. July 8, 2016.

³¹ Pazhouh, Rosa, Robin Lake, and Larry Miller. *The Policy Framework for Online Charter Schools*. Center for Reinventing Public Education. October 2015. pg. 16.

³² North Carolina State Board of Education. *Virtual Charter Schools Attendance and Membership Policy*, Policy ID: CHTR-018. August 20, 2015.

³³ Calculating and Reporting Attendance and Truancy in Online Schools. Colorado Department of Education. Undated. pg. 1.

³⁴ Enrollment and Attendance FAQs. Oklahoma Virtual Charter Academy. K12 Inc. 2015.

³⁵ Gill, Brian, Lucas Walsh, Claire Smither Wulsin, Holly Matulewicz, Veronica Severn, Eric Grau, Amanda Lee, and Tess Kerwin. *Inside Online Charter Schools*. Mathematica Policy Research. October 2015. pg. xv.

³⁶ Ibid, pg. 15.

³⁷ Ibid, pg. xiv.

³⁸ Virtual Charter School Authorization and Oversight Process. Oklahoma Statewide Virtual Charter School Board. November 2017. pgs. 48-49.

³⁹ Ibid, pg. 7.

⁴⁰ K12 Inc. 2016 K12 Academic Report. November 2016.