# Costly Failure:

## California Is Overpaying for Online Charter Schools That Are Failing Students

By Gordon Lafer, Clare Crawford, Larissa Petrucci, and Jennifer Smith
In the Public Interest

FEBRUARY 2021

## About This Report

With California's two-year moratorium on authorizing new nonclassroom-based charter schools ending at the close of 2021, state legislators will need to use the 2021 legislative session to develop a more permanent solution to the sector's enduring problems. This report finds that nonclassroom-based charter schools – and those delivering education primarily online, in particular – provide an inferior quality of education. Adding insult to injury, the state is wasting hundreds of millions of dollars a year by funding these schools at a level far above their costs. Additionally, analysis shows that the state's school system is already oversaturated with nonclassroom-based charter schools. The report concludes by identifying the most promising policy solutions to these problems that have been proposed nationwide.

## About the Author

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## About In the Public Interest

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*We would also like to thank Sarah L. Sutherland of Dannis Woliver Kelley (DWK) for her help and Terry Lutz for designing this report.*

*Any errors or omissions in this report are the sole responsibility of In the Public Interest.*

## Executive Summary

**In 2018-19, nearly 175,000 California students were enrolled in nonclassroom-based charter schools,** representing 27 percent of all charter school students in the state.[1] This number reflects the rapid expansion of such schools over the past decade: In 2014, just 18 percent of newly approved charter schools were nonclassroom-based; by 2019 that figure had reached 43 percent.[2] But this sector has also been plagued with repeated scandals and poor educational performance. In the late 1990s, a series of scandals that included one charter school illegally distributing public funds to a network of private religious schools and another paying exorbitant "management fees" to a private company owned by the school's executives led legislators to adopt new regulations governing these schools' funding.[3] Unfortunately, the new law has not led to significant improvement in either the quality of education or the prevalence of corruption in these schools. Following a new set of scandals that saw one of the largest charter school chains charged with defrauding the state of nearly $50 million, legislators imposed a two-year moratorium on authorizing new nonclassroom-based charter schools, intending to use this period to craft stricter regulations.[4] The moratorium expires at the end of 2021, and legislators will need to use the 2021 session to develop a more permanent solution to this problem. This report provides legislators the first comprehensive assessment of California's nonclassroom-based charter schools, in order to determine what policies can best safeguard both taxpayer dollars and educational quality.

## *Defining "Nonclassroom-Based" Charter Schools*

By law, any charter school in which less than 80 percent of student learning occurs in a physical classroom is classified as "nonclassroom-based" (NCB). Within this category, schools offer several different teaching models. The majority of NCB charter school students are enrolled in schools whose education is delivered primarily online, whether under the direction of a teacher or through self-guided programs. Others rely on more traditional forms of instruction, including local arts or enrichment classes, paper packets, textbooks, and parental instruction at home.

While this report examines all types of NCB charter schools, it focuses primarily on those whose education is delivered primarily online. Online education represents a new pedagogy developed over the past 20 years, and has been touted as a revolutionary innovation with the potential to radically improve education. In 2011, for instance, former California Board of Education president Reed Hastings and former U.S. Secretary of Education Arne Duncan announced a federal initiative to support the development of online teaching programs, declaring their goal of "advanc[ing] breakthrough technologies that transform teaching and learning." Hastings and Duncan projected that "technology could personalize and accelerate instruction for students of all education levels" and "provide equitable access to a world-class education for millions of students stuck attending substandard schools."[5] The programs that Hastings and Duncan promote don't merely replace printed with digital textbooks. To a large degree, they replace the role of human teachers. Digital education products are designed to track each assignment a student performs, recording correct and incorrect answers, and on that basis steering students to the next set of readings, videos, or exercises. To a large degree, these programs are meant to serve as a complete, self-contained curriculum – combining textbook, homework, and evaluations all in one software product. This model of education has been most enthusiastically embraced in NCB charter schools, and because its pedagogy is so different from that of traditional homeschooling, we thought it was important to evaluate these schools as a category of their own.[6]

The business model and cost structure of online charter schools present unique problems for policy makers. In most jurisdictions, online charter schools receive the same per-pupil funding as traditional brick-and-mortar public schools, despite having fewer costs. Indeed, it is this gap between per-pupil funding and actual operating costs that has made digital education such a booming and profitable industry. In 2019, the global education technology market was valued at just over $76 billion, with projections for the industry to grow by 18 percent per year from 2020 to 2027.[7] But if excess profits represent a boon for investors, for the public they represent a waste of badly needed school resources. Since online charter schools operate with a unique cost structure, we thought it important to analyze this group of schools separately, with a special focus on the two largest chains of online charter schools, Connections Academy and K12 Inc.

It is important to note that the online education discussed in this report is very different from the "Distance Learning" that students in traditional public schools have experienced

during the COVID-19 crisis. Distance Learning is conducted by a certified teacher from the student's neighborhood school together with their normal classmates. Students are required to be engaged in school activities for 3-4 hours per day, with all classes including "daily live interaction" with the teacher and fellow students, and all pre-recorded or asynchronous assignments created by the student's own teacher.[8] None of these requirements apply to online charter schools. Thus, this report is not an examination of online education as a whole, but specifically of the type of learning offered in online charter schools.

## *The Quality of Education in Online Charter Schools Is Significantly Worse Than That in Traditional Public Schools – for Every Type of Student*

Despite the promises made about digital education, the track record of online charter schools has been uniformly negative for every demographic subgroup of students. For the first time, this report presents data from the California School Dashboard for the year 2018-19, measuring how online charter schools performed relative to the state average. Out of a total of 313 NCB schools, we identified 156 charter schools that deliver their educational program primarily online, representing 49 percent of all NCB schools and two-thirds of NCB students. (See Methodological Appendix for detailed explanation of how this universe of schools was identified and how performance measures were calculated). As shown in Table A, the educational outcomes of online charter schools are significantly below the state average, by every measure.[9]

**Table A**

**Academic Performance, Online Charter Schools, and Statewide Average**

| | California statewide average | Online charter schools |
|---|---|---|
| **Distance from Standard, English/Language Arts** | -2.5 | -29.3 |
| ***ELA Percentile Rank*** | | 33.0% |
| **Distance from Standard, Math** | -33.5 | -104.5 |
| ***Math Percentile Rank*** | | 11.5% |
| **Career & College Readiness** | 44.1 | 12.6 |
| ***Career/College Percentile Rank*** | | 34.9% |
| **Graduation Rate** | 85.9 | 72.7 |
| ***Graduation Rate Percentile Rank*** | | 22.8% |

Dashboard English and Math scores are measured as the distance between the average score of a given school's student body and the score defined as the "standard met" threshold using the Smarter Balanced Summative Assessment (SBAC) annual tests.[10] Thus, the data show that the average English/Language Arts score for all students in the state was 2.5 points below the level deemed to have met the SBAC standards for each grade. By

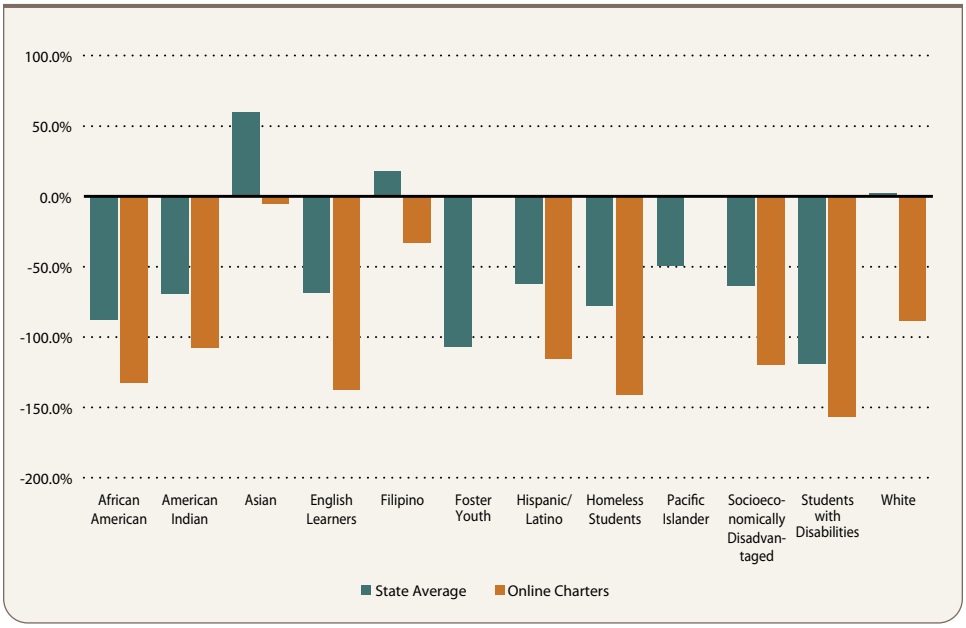
comparison, students in online charter schools averaged 29.3 points below that standard. Putting that outcome in context, the score for online charter schools as a whole would rank in the 33rd percentile of all California schools. In Math, online charter schools are further below the state average, equivalent to ranking in the 12th percentile of all California schools. These schools' graduation rate was 13 points below the state average, and only 12.6 percent of graduating students in online charter schools were deemed ready for either college or a career.[11]

This poor performance record cannot be attributed to serving a more needy population. On the contrary, the students in online charter schools are less needy than in an average school in two important ways: there are significantly fewer low-income students, and less than one-third as many English learners.

Finally, the impact of online charter schools is uniformly negative across all subgroups of students. Every single demographic group measured by the Department of Education performs better in traditional public schools than in online charter schools. Figure 1 below shows Math scores in the two types of schools – measured as positive or negative distance from the state standard – for each demographic group.[12] In every racial, ethnic, language, economic, and disability category, the same group of students performs better in a typical public school than in an online charter school. English learners do particularly poorly in online charter schools.

**Figure 1**

**Math Scores, 2018–19**




The poor education of online charter schools may be less surprising when one considers the software programs that serve as these schools' core curriculum. Nearly every digital education product claims that it embodies "research-based" best practices and provides

"proven results." But the truth is that, in almost all cases, there is no statistical evidence whatsoever showing that these applications improve students' education. Indeed, almost none of the curricular products used in online charter schools have ever been subject to an independent, statistically meaningful evaluation. And most of those that have been evaluated turn out to have no effect whatsoever on student learning. The premier organization that conducts rigorous and independent evaluations of online education programs is the U.S. Department of Education's What Works Clearinghouse. As of April 2020, this office had reviewed 10,654 studies of education technology products. Only 188 of them – or less than 2 percent – concluded that the product had any impact on student performance.[13]

When digital curriculum products are subject to rigorous evaluation, they come up badly wanting. Table B below shows a selection of programs used by online charter schools in California, all of which have been found to have little to no effect on student performance. In traditional public schools, textbooks are only one of many tools teachers draw on. But digital applications play a much more central role in online charter schools, particularly because there is no requirement for students to regularly attend live classes. No matter how much talent and dedication teachers may bring to their work, they are working uphill against ineffective programs that out of necessity form the core of student education.

**Table B**

**Evaluations of Curriculum Products Used by California Online Charter Schools**

| Product/Platform | Findings | Schools Using Product | Excaluated By |
|---|---|---|---|
| **Fuel Ed/K12, Inc, MS Math** | Does not meet expectations. | California Virtual Academies, Inspire, Insight | EdReports |
| **Pearson HS English** | Partiallly meets expectations for 10th grade. Does not meet expectations for 9th, 11th, or 12th grade. | Connections Academy | EdReports |
| **Pearson HS Math** | Does not meet expectations. | Connections Academy | EdReports |
| **Edgenuity** | No significant effects. | Altus, Delta, Inspire | Johns Hopkins University |
| **Edgenuity K-8 Math** | Does not meet expectations. | Altus, Delta, Inspire | EdReports |
| **Odyssey Math** | No significant impact. | Inspire | Johns Hopkins University |
| **Odyssey Math** | 1 study finds positive impact. 2 studies find no impact. | Inspire | U.S. Department of Education |
| **Plato/Edmentum – Math** | No significant impacts. | Inspire, Connecting Waters, Pivot, Learn4Life, Opportunities for Learning | U.S. Department of Education |
| **DreamBox Learning (for K-1)** | "no significant positive outcomes." | EPIC | Johns Hopkins University |
| **DreamBox Learning** | "potentially positive" effects based on "small evidence" | EPIC | U.S. Department of Education |

The poor performance of California's current online charter schools is reinforced by almost twenty years of research findings both in state and nationally. Nearly twenty years ago, a study of California charter schools carried out by the RAND corporation reported that students in nonclassroom-based charter schools had significantly lower scores on the

state's Academic Performance Index than those in either brick-and-mortar charter schools or traditional public schools.[14] These findings have been repeatedly confirmed in a series of studies over the past decade. The most comprehensive research has been carried out by a team of scholars at the National Education Policy Center (NEPC). Beginning in 2013, NEPC has published an annual report on online schools' student demographics and academic performance.[15] Over the past seven years, these reports have consistently found that online charter schools serve fewer students of color, fewer low-income students, and far fewer English learners than traditional public schools, but perform significantly worse.

The largest studies of online charter schools have been conducted by Stanford University's Center for Research on Education Outcomes (CREDO). CREDO is generally supportive of charter schools, and its methodology has been criticized for selection bias that results in overly positive assessments of charter schools.[16] Yet even CREDO has repeatedly criticized the poor performance of online charter schools. In 2015, CREDO conducted a national study, examining the records of 65,000 students across 18 different states, controlling for demographics, economic status, and mobility.[17] The authors found that online charter schools have an "overwhelming negative impact" on students' achievement. Compared with traditional public schools, students at online high schools lost the equivalent of 72 school days in reading skills, and 180 days in math.[18] Commenting on the math scores, CREDO's director remarked that "it is literally as if the student didn't go to school for the entire year."[19]

## *Overpaying for an Inferior Product*

It is common sense that the cost of operating an online charter school must be less than that of running a brick-and-mortar school. Yet California's online charter schools, with very few exceptions, receive the same dollars per pupil as a physically existing school with classrooms, buses, a cafeteria, and maintenance and security staff. To the extent that funding for online charter schools exceeds the actual cost of operation, the government is wasting many millions of tax dollars that are desperately needed in school districts across the state.

Data from the National Center for Education shows that, on average, brick-and-mortar schools spend 24 percent of their budgets on facilities, transportation, maintenance, and operation – all costs absent from online charters – and therefore concludes that NCB charter schools should be funded at three-quarters of normal levels.[20] But this calculus understates the gap between online charter schools' funding and costs. The 24 percent figure assumes that, because both online and traditional schools have teachers, those costs – typically the single largest cost item in school budgets – must be identical. In reality, this is one of the places where online charters cut costs most dramatically. In 2018-19, for instance, the average California teacher's salary was $83,059, but the average salary for teachers at the largest Connections Academy school in California was less than $53,000.[21]

One of the simplest ways to gauge the excess profits of online charter schools is to compare California's per-pupil funding with fees charged for the same products in other jurisdictions. The two largest online charter chains in the U.S. are K12 Inc. and Connections Academy.

Connections Academy, which operates six schools serving 6,500 students in California, is a subsidiary of Pearson, a UK-based multinational corporation that is the largest testing and curriculum company.[22]

Alongside its Connections Academy schools, Pearson also operates an online private school – the Pearson Online Academy – for Americans stationed abroad who want their children to earn an American diploma, or for those in states that do not allow charter schools.[23] The curriculum for Pearson Online Academy and California Connections Academy schools are the same – both the list of courses and the description of each course's content are virtually identical in both schools (see Appendix B and C).[24] Indeed, when asked if the two schools' classes are sufficiently similar that a student in the Pearson Online Academy could seamlessly transfer between one and the other in the middle of a school year, a company representative stated that "the private side (Pearson) writes the curriculum for the Connections side," and as a result "transferring credits is no problem."[25]

But while the product may be the same, the cost for these courses is dramatically different. California taxpayers pay approximately $10,300 for every student who attends a Connections Academy school.[26] By contrast, the tuition for enrolling in the Pearson Online Academy is just $4,800 for Elementary School students, $5,880 for Middle School, and $6,880 for high school.[27] Pearson Online Academy is a private school run by a for-profit multinational corporation, so presumably the company is earning a profit or it would shutter operations. It seems, then, that even at the highest rate of high school students, California taxpayers are paying a markup of at least 35 percent – approximately $3,500 per student – above all costs including reasonable profit.[28] Across all the schools in this chain, then, California taxpayers are now wasting over $22 million per year.[29] In other words, if the state of California simply paid all Connections Academy students to attend Pearson's private online school, taxpayers would save over $22 million per year.

Without stronger transparency laws, it is impossible to calculate the exact amount of overpayment at other charter schools.[30] But if other NCB charters operate on a cost basis similar to that of Connections Academy, this means that Californians are overpaying NCB charter schools to the tune of over $600 million per year.

## *The Worst of All Choices? Public Funds for Private Homeschooling.*

Perhaps the most extreme abuse of tax dollars – and the most complete evasion of education standards – comes from a subset of NCB charter schools that function as "homeschool" charter schools. By law, parents who want to homeschool their children must have their homes designated as private schools – and no public funding is available for this purpose. But the charter industry has found a way around this law: enrolling students in NCB charter schools that offer parents between $2,000-$3,000 per student to spend on the curricular products of their choice, with the parent serving as their child's primary teacher. These schools skirt multiple laws in their operation, and the gap between their actual educational costs and the per-pupil funding they receive appears even more extreme than that of the NCB charter sector as a whole.

## *California is Already Oversaturated with Nonclassroom-Based Charter Schools*

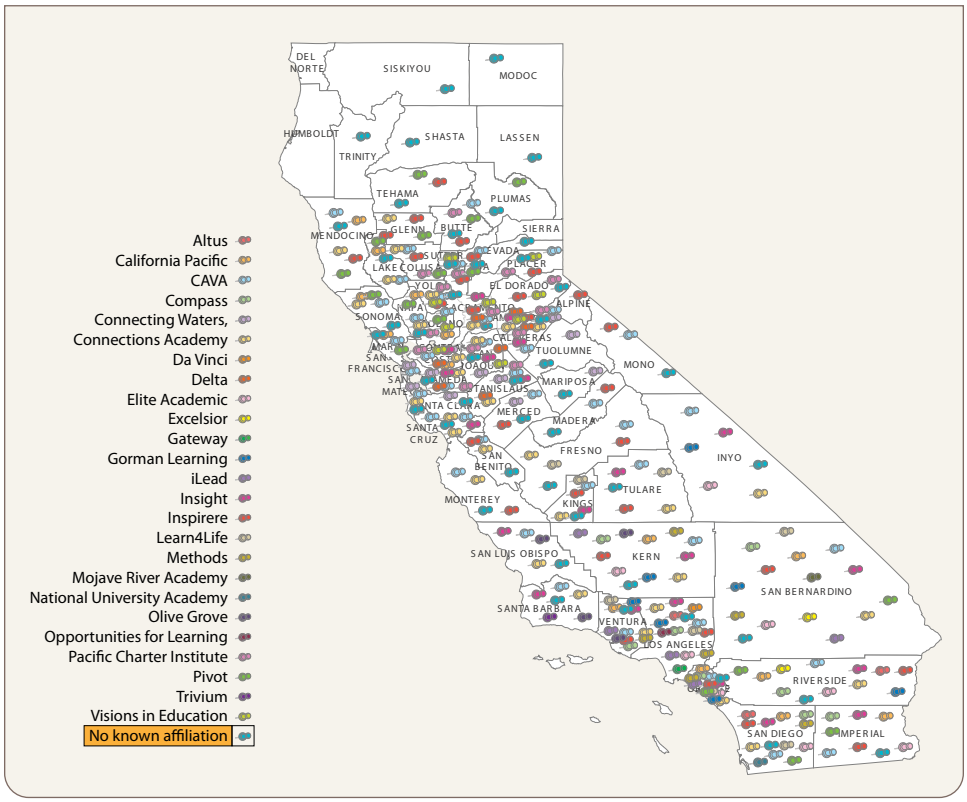
Some number of online schools are necessary in order to serve those students whose needs cannot be met in brick-and-mortar schools. But the geographic distribution of currently existing online schools shows clearly that there is no need for additional online charters. To the contrary, the state is already oversaturated with options for online education.

To start, in 2018-19 there were over 100 online schools operated by public school districts.[31] Most of the state's counties have up to five different online schools run by public school districts; in Los Angeles, San Bernardino, Riverside and Orange counties there are more than ten in each county.

In addition, privately run online charter schools have expanded to the point that in most counties, there are at least six different online charters to choose from. In the southernmost counties – Kern, Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego – there are more than 15 online charter schools operating in each county. And all of this is in addition to the district-operated online schools in the same counties. There is clearly no need for further expansion of this sector. Charter chains may seek to expand for their own reasons. But as a matter of public policy, the state is already oversaturated by the number of such schools.

**Map A**

**Online Charter School Chains by County**



## *Conclusion and Policy Recommendations*

The data presented in this report show that online charter schools provide an inferior quality of education; that the state is wasting hundreds of millions of dollars by funding these schools at a level far above their costs; and that the school system is already oversaturated with such schools. This set of challenges has been faced by other states, and our report concludes by identifying some of the most promising policy solutions proposed over the past decade. These include limiting the growth of NCB charter schools; adjusting per-pupil funding in line with schools' actual operating costs; ensuring that California taxpayers are not paying higher prices for the same education technology products sold in other jurisdictions; and requiring that charter school chains and their parent or affiliated corporations be subject to the same transparency and ethics standards that apply in public school districts.

When charter schools of any kind expand, they impose a cost on traditional public school students in their home districts.[32] In the case of NCB charter schools, the calculus is even more lopsided, with smaller benefits and higher costs than for brick-and-mortar charter schools. When school districts everywhere face the heartbreak of knowing we can't provide all the services our students need and deserve, it is critical that lawmakers act as conservative stewards of the state's tax dollars by focusing funding on the schools where it can do the greatest good for the greatest number of students.

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# Introduction

In 2018-19, nearly 175,000 California students were enrolled in nonclassroom-based charter schools, representing 27 percent of all charter students in the state.[33] This number reflects the rapid expansion of such schools over the past decade – in 2014, just 18 percent of newly-approved charter schools were nonclassroom-based; by 2019, that figure had reached 43 percent.[34] But nonclassroom-based charter schools also constitute a sector that has been plagued with repeated scandals and poor educational performance. In the late 1990s, a series of scandals included one charter school illegally distributing public funds to a network of private religious schools and another paying exorbitant "management fees" to a private company owned by the schools' executives. This led legislators to adopt new regulations governing these schools' funding.[35] Unfortunately, the new law has not led to significant improvement in either the quality of education or the prevalence of corruption in these schools. In 2019, a new set of scandals culminated in one of the largest charter school chains being charged with defrauding the state of nearly $50 million. Legislators then imposed a two-year moratorium on authorizing any new nonclassroom-based charter schools, intending to use this period to craft stricter regulations.[36] This moratorium expires at the end of 2021 however, and legislators will need to use the 2021 session to fashion a more permanent solution to this problem. This report provides legislators the first comprehensive assessment of California's nonclassroom-based charter schools in order to inform what policies can best safeguard both taxpayer dollars and the quality of students' education.

## *Defining "Nonclassroom-Based" Charter Schools*

By law, any California charter school in which less than 80 percent of students' learning occurs in a physical classroom is classified as "nonclassroom-based" (NCB).[37] Within this category, schools offer several different teaching models. The majority of NCB charter students are enrolled in schools in which education is delivered primarily online, whether under the direction of a teacher, a parent or through self-guided programs. Others rely on more traditional forms of instruction, including local arts or enrichment classes, paper packets, textbooks and parental instruction at home.

While this report examines all types of NCB charter schools, its main focus is on those whose education is delivered primarily online. Online education represents a new pedagogy developed over the past 20 years and has been touted as a revolutionary innovation with the potential to radically improve education. In 2011, for instance, former California Board of Education president Reed Hastings and former U.S. Secretary of Education Arne Duncan announced a federal initiative to support the development of online teaching programs, declaring their goal of "advanc[ing] breakthrough technologies that transform teaching and learning." Hastings and Duncan declared that "technology could personalize and accelerate instruction for students of all education levels" and "provide equitable access to a world-class education for millions of students stuck attending substandard schools."[38] The programs promoted by Hastings and Duncan don't merely replace printed textbooks

with digital ones however; in many cases, they replace much of the role of teachers. Many digital education products are designed to track each assignment a student performs – recording correct and incorrect answers – and, on that basis, steering the student to the next set of readings, videos, or exercises they need to move forward. To a great degree, these programs are meant to serve as a complete, self-contained curriculum – combining textbook, homework, and much of the evaluation of students all into one software product. This model of education has been most enthusiastically embraced in NCB charter schools, and because its pedagogy is so different from that of traditional homeschooling, it is appropriate and important to evaluate these schools as a category of their own.[39]

So too, the business model and cost structure of online charter schools present unique problems for policy makers. In most jurisdictions, online charter schools receive the same per-pupil funding as traditional brick-and-mortar public schools despite having fewer costs. Indeed, it is this gap between per-pupil funding and actual operating costs that has made digital education such a booming and profitable industry. In 2019, the global education technology market was valued at just over $76 billion, with projections for the industry to grow by 18 percent per year from 2020 to 2027.[40]

While excess profits represent a boon for investors however, they represent a waste of badly needed school resources for the public. Since online charter schools operate on a unique cost structure, we thought it important to analyze this group of schools separately, with a special focus on the two largest chains of online charter schools, Connections Academy and K12 Inc.

It is important to note that the online education discussed in this report is very different from the "distance learning" that students in traditional public schools have experienced during the COVID-19 crisis. Distance learning is conducted by a credentialed teacher through the student's neighborhood school where students are with their usual classmates. Students are required to engage school activities three to four hours per day; all classes include "daily live interaction" with the teacher and fellow students; and all pre-recorded or asynchronous assignments are created by the students' own teacher.[41] None of these requirements apply to online charter schools. Thus, this report is not an examination of online education as a whole, but specifically of the type of learning offered in online charter schools.

## *Plan of This Report*

This report provides the first comprehensive review of California's nonclassroom-based (NCB) charter schools and presents the first analysis of School Dashboard data comparing the performances of online charter schools and traditional public schools when serving students of similar demographics. The report is designed to address three central questions. First, what is the quality of education provided by these schools? Second, given that the cost of operating NCB charter schools is significantly less than that of brick-and-mortar schools, how should funding for these schools be determined, so as to ensure that limited education resources are focused where they can have the greatest impact? Finally, how

does the current number and geographic reach of NCB charter schools compare with the population of California students who need an alternative to brick-and-mortar schooling? In this report's concluding section, we offer recommendations for how legislators can reduce the number of students enrolled in low-performing online charter schools and ensure that limited educational funding is focused on the places it can have the most impact for California students.

## Measuring the Educational Achievement of California's Nonclassroom-Based Charter Schools

The most important question for lawmakers to ask about online charter schools is: "Are these schools good for students?" To assess the effectiveness of California's NCB charter schools, we analyzed data from the California School Dashboard for the year 2018-19, in order to measure how NCB schools performed relative to the state average. Out of a total of 313 NCB schools, we identified 156 charter schools that delivered their educational program primarily online with 114,964 students, comprising 49 percent of all NCB schools and two-thirds of NCB students. This is the universe of schools that serves as the primary focus of this study. To assess a school's performance, we analyzed both the demographic makeup and performance data for each school, compared with other schools in the state; 136 of our 156 schools had sufficient data to include in this analysis. (See Methodological Appendix for detailed explanation of how this universe of schools was identified and how performance measures were calculated.) We then measured the performance of these online charter schools against both the state's academic standards and the state's average performance. Since nearly 90 percent of California's schools are traditional public schools, statewide averages primarily reflect the performance of traditional public schools and may serve as a rough proxy for these schools' outcomes.[42]

As shown in Table A, the educational outcomes of online charter schools were significantly below the state average by every measure.[43]

**Table A**

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This poor performance record cannot be attributed to serving a more disadvantaged population. On the contrary, as shown in Table B below, online charter schools serve fewer students with needs than average schools in two important ways: they have significantly fewer low-income students, and they have less than one-third as many English learners.

**Table B**

**Student Demographics, Online Charter Schools, and California Statewide Average**

| | California statewide average | Online charter schools |
|---|---|---|
| African American students | 5.4% | 7.1% |
| American Indian students | 0.5% | 0.9% |
| Asian students | 9.3% | 3.0% |
| English Learners | 19.3% | 5.8% |
| Filipino students | 2.4% | 1.2% |
| Foster youth | 0.5% | 0.6% |
| Hispanic/Latino students | 54.6% | 36.3% |
| Homeless students | 3.4% | 2.2% |
| Students of two or more races | 3.6% | 7.0% |
| Pacific Islander students | 0.5% | 6.0% |
| Socioeconomically Disadvantaged students | 60.9% | 53.1% |
| Students with disabilities | 11.7% | 11.4% |
| White students | 22.9% | 40.5% |

Finally, the impact of online charter schools was uniformly negative across all subgroups of students. Every single demographic group measured by the Department of Education performed worse in online charter schools than the state average performance for all public schools. Figures 1 and 2 below show English and math scores in the two types of schools, measured as a positive or negative distance from the state standard, for each demographic group.[46] In every racial, ethnic, language, economic, and disability category, equivalent groups of students performed better in the average public school than in an online charter school. English learners performed particularly poorly in online charter schools.

**Figure 1**

**ELA Scores, 2018–19**

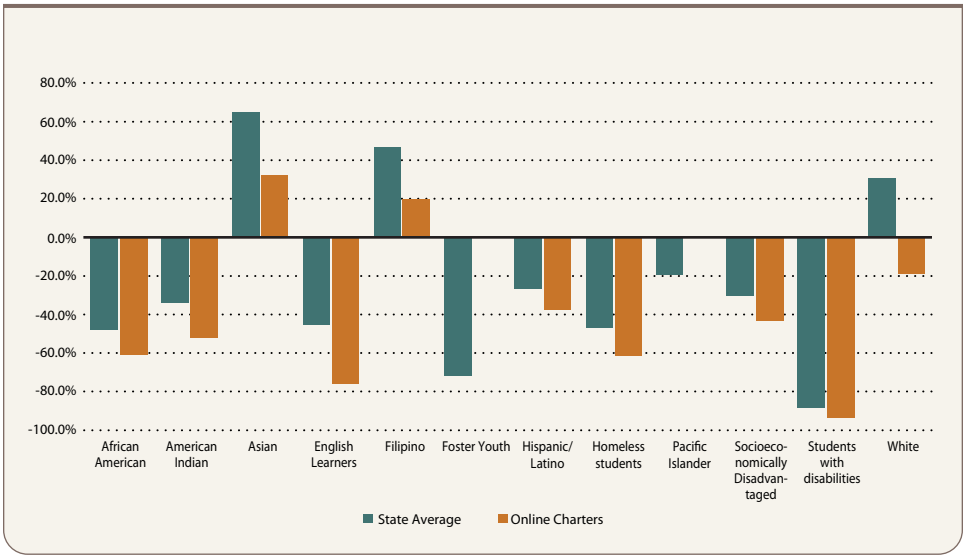
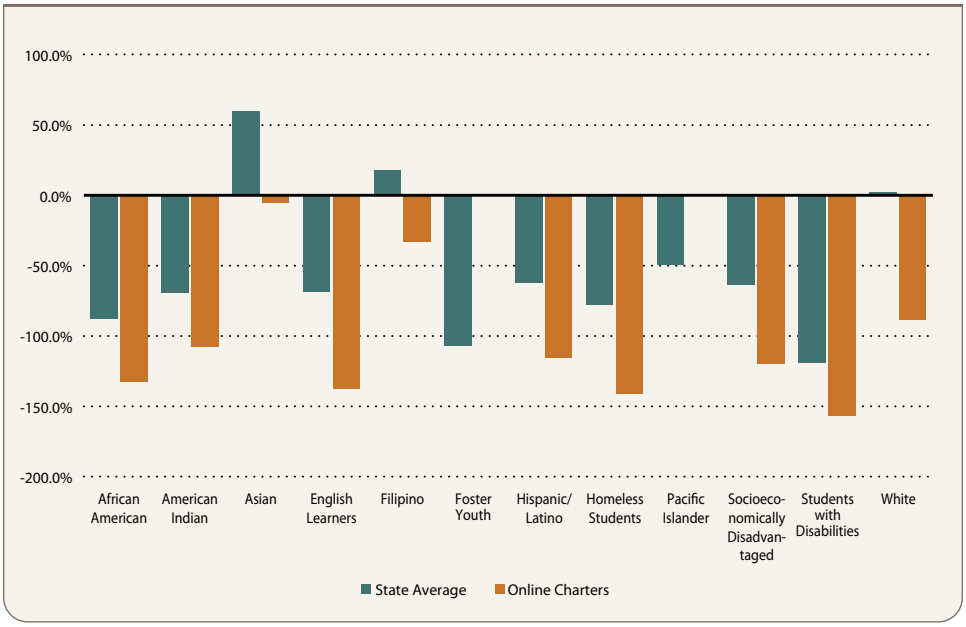



**Figure 2**

**Math Scores, 2018–19**




There is one subset of online charter schools that enrolls primarily high-risk students, who typically score lower on state exams, and it may be assumed that the poor performance records of the online charter school sector as a whole is simply a reflection of including these schools' test scores; but the data shows this is not the case. This subset is comprised of a number of online charter schools designated with Dashboard Alternative School Status (DASS) and serve as alternative schools for students with greater challenges.

In recognition of their more at-risk population, these schools are held to more lenient standards for calculating graduation rates and college or career readiness.[47] Charter schools may be eligible for DASS status if at least 70 percent of their students fall into one of twelve categories, including students who are significantly behind on credits needed to graduate, students who have been suspended or have dropped out of high school, and homeless or foster youth. (These schools are distinct from the DASS schools mandated by the state to serve specific student populations, such as those involved in the juvenile justice system.) Though these students typically score lower on state exams, the poor outcomes of online charter schools as a whole cannot be accounted for by the inclusion of alternative schools alone. When DASS schools are removed from the analysis, the performance of non-alternative online charter schools compared with the state average for non-alternative public schools still reveals that online charter schools significantly underperform the average California school. (Unfortunately, it is not possible to compare alternative online charter schools with other alternative schools because, where most alternative schools enroll exclusively disadvantaged students, charter schools are permitted to recruit up to 30 percent of their students from the general population, making a direct comparison impossible.[48])

**Table C**

**Academic Performance, Online Charter Schools, and Statewide Average, Except Alternative Schools**

| | California statewide average (excluding DASS alternative schools) | Online charter schools (excluding DASS alternative schools) |
|---|---|---|
| **Distance from Standard, English Language Arts/Literacy** | -2 | -17.3 |
| ***ELA Percentile Rank*** | | 43.5% |
| **Distance from Standard, Math** | -30.4 | -78.4 |
| ***Math Percentile Rank*** | | 20.9% |
| **Career & College Readiness** | 45.5 | 18.2 |
| ***Career/College Percentile Rank*** | | 37.7% |
| **Graduation Rate** | 88.5 | 73.1 |
| ***Graduation Rate Percentile Rank*** | | 23.2% |

Thus, by any measure, online charter schools perform significantly worse than traditional public schools, and this negative impact carries across every demographic of students. So while online schools are indeed needed for students whose requirements cannot be met by brick-and-mortar schools, it's clear that the quality of education offered by online charter schools is significantly below the state average. As public policy, legislators should be looking to limit the number of students in online charter schools and should resist calls to expand this sector.

## Could Online Charter Schools Be Even Worse Than Their Reported Outcomes Suggest?

While the numbers presented above are striking, there is reason to believe these may actually overstate the accomplishments of online charter schools. Online charter schools have significantly fewer students with disabilities than public schools. By law, public schools must accept any student who applies, regardless of their level of need; but NCB charter schools are skirting this requirement. The Education Code provides students with special needs may only be educated through independent study if the student's Individualized Educational Plan (IEP) specifically calls for it.[49] As a result of limiting their educational program to NCB instruction, these schools enroll fewer students with disabilities than the state average, and dramatically fewer students with more severe disabilities and significant needs. When that number is further broken down into categories of more and less severe needs, the difference becomes more telling. The Public Policy Institute of California has defined "severe" disabilities as including autism, visual impairment, deafness, deaf-blindness, orthopedic impairment, emotional disturbance, intellectual disability, traumatic brain injury, and students with multiple disabilities.[50] Based on these classifications, 27 percent of students with special needs in traditional public schools face severe disabilities, compared to only 17 percent of those enrolled in online charter schools.[51] Furthermore, in half the categories of severe need – students who are hard of hearing; are deaf; have visual impairments; are both deaf and blind; or have suffered traumatic brain injury – no online charter school serves even a single student. To the extent that the screening out of high-need students has produced artificially inflated Dashboard scores, the true performance of online charter schools may be even poorer than that presented above.

## The Poor Quality of California's NCB Charter Schools Is Confirmed by Two Decades of National Research

Unfortunately, the poor performance ratings of NCB charter schools in California have been strongly confirmed by the findings of other academic and policy researchers. Over the past two decades, research has consistently found that online charter schools perform significantly worse than traditional public schools, despite educating less needy students. A study of California charter schools conducted by the RAND corporation nearly 20 years ago reported that students in nonclassroom-based charter schools had significantly lower scores on the state's Academic Performance Index than those in either brick-and-mortar charter schools or traditional public schools.[52] These findings have been repeatedly confirmed in a series of studies over the past decade.

The most comprehensive research has been carried out by a team of scholars at the National Education Policy Center (NEPC). In 2012, NEPC published a study that focused exclusively on the nation's largest operator of online charter schools, K12 Inc. (In California, K12 Inc. operates the California Virtual Academy, Inspire, and iQ schools.) The report found that K12 Inc. enrolled significantly fewer students of color, low-income students, English learners, and students with special needs.[53] Yet despite serving a more privileged population, K12 Inc. schools produced below average math and reading scores and a graduation rate of 49.1 percent, compared to a 79.4 percent average in the states included in the study.[54] Across the country, just 27 percent of K12 Inc. schools achieved Adequate Yearly Progress, significantly below the national average of 52 percent.[55]

Beginning in 2013, NEPC has published an annual report on online schools' student demographics and academic performance.[56] Over the past seven years, these reports have consistently found that online charter schools serve fewer students of color, fewer low-income students, and far fewer English learners than traditional public schools, yet perform significantly worse. Furthermore, repeated studies show that these schools even perform worse than online schools operated by public school districts. In its most recent report, NEPC found that 56.7 percent of online schools run by school districts had "acceptable" performance according to their state's standards, compared with 40.8 percent for online charter schools and just 29.8 percent for online charter schools operated by for-profit corporations, such as K12 Inc. and Connections Academy.[57]

NEPC's national data has been echoed in a series of state-specific reports in Colorado, Iowa, Ohio, Minnesota, and New Mexico – all of which found that online charter school students performed significantly worse than students in traditional public schools.[58] The Colorado study, conducted by its state Auditor General, further reported that online charter school students were more likely to repeat a grade or drop out of high school.[59]

The New Mexico study is particularly relevant for California since the operators for New Mexico's three online charter schools (K12 Inc. and Connections Academy) also oversee large charter school chains in California. Because these schools use a standard curriculum and teaching method throughout the country, evaluations of their performance in any state should be informative for California policymakers. In this case, the New Mexico authors found that students in these schools lost the equivalent of 170 days in reading and 91 days in math compared with demographically similar students in traditional public schools.[60]

The largest studies of online charter schools have been conducted by Stanford University's Center for Research on Education Outcomes (CREDO). This organization is generally supportive of charter schools and has received funding from foundations, including the Chan-Zuckerberg and Walton Family foundations, that are strong proponents of both charter schools and online education.[61] CREDO's methodology has been criticized on multiple occasions for selection bias that skews results toward overstating charter schools' performance.[62] Yet even CREDO has repeatedly criticized the poor performance of online charter schools. In 2015, CREDO conducted a national study, examining the records of 65,000 students across 18 different states.[63] Controlling for students' demographics,

economic status, and mobility, the authors found that online charter schools have an "overwhelming negative impact" on students' achievement. Compared with traditional public schools, students at online high schools lost the equivalent of 72 school days in reading skills and 180 days in math.[64] Commenting on the math scores, CREDO's director remarked that "it is literally as if the student didn't go to school for the entire year."[65] In 2019, CREDO produced a series of follow-up studies focused on specific states.[66] In every case, the studies found "remarkably weaker growth in both reading and math among online charter students relative to the average traditional public school student."

Competing chains of charter schools sometimes claim that, while other online charter schools may be doing a poor job, they have developed a unique formula for student success. To test this thesis, CREDO in 2017 conducted a study that separated performance by specific charter school chains, including some of the national chains that operate in California. (Again, because national chains such as K12 Inc. or Connections Academy provide the same educational program and curriculum in every state across the country, evaluations of these schools' performances in other states provide relevant information for California lawmakers.)As shown below, students in every online charter school chain performed significantly worse than their peers in traditional public schools.[67]

**Table D**

**Impact of attending select online charter school chains**

*Center for Research in Education Outcomes, 2017*

*National averages, all figures significant at 99% confidence interval*

| | Days of Math Learning Achieved, Compared with Similar Students in Traditional Public Schools | Days of Reading Learning Achieved, Compared with Similar Students in Traditional Public Schools |
|---|---|---|
| **Altus Institute** | -91.2 | -79.8 |
| **California Pacific** | -165.3 | -91.2 |
| **Connections Academy** | -108.3 | -39.9 |
| **K12, Inc. (includes California Virtual Academies, iQ and Insight schools)** | -125.4 | -62.7 |
| **National University Academy** | -79.8 | -34.2 |
| **Pivot** | -239.4 | -131.1 |
| **SIA Tech** | -153.9 | -96.9 |

Finally, several recent studies have followed students who switched from traditional public schools to online charter schools, comparing their educational performance with that of peers who remained at their original school. A Georgia study that tracked these students over a 10-year period concluded that attending an online charter school, with all other things being equal, had a significant negative impact on language arts, math, science, and social studies achievement test scores and a 10 percent reduction in the odds of ever graduating high school.[68] Similar results were found in a 2020 study examining Indiana's online charter schools (which include schools run by both K12 Inc. and Connections Academy). Researchers tracked students who moved from a traditional public school to an

online charter school over a period of seven years, comparing their education with that of demographically similar students who remained in traditional public schools. The authors concluded that "the impact of attending an online charter school on student achievement is uniformly and profoundly negative."[69]

Charter school operators have sometimes suggested that these studies provide an unfairly negative picture of their educational outcomes because they don't sufficiently account for the impact of student mobility – that is, students who change schools in the middle of the school year. Online charter schools have higher than average rates of student turnover, and student mobility is known to negatively impact educational performance. Therefore, some advocates argue, studies that don't account for mobility give a false account of online charter schools' true value, and to correct for this, they should be compared to traditional public schools with the highest turnover.[70] But there are two problems with this. First, mobility has different meanings in a brick-and-mortar school than in an online school. In traditional public schools, most students switching schools are doing so because of disruptions in their family life leading to physical dislocation – divorce, change or loss of a job, or low income – forcing families to move by economic necessity.[71] Such transitions often involve trauma in students' home lives, changing neighborhoods, leaving old friends, and landing in a new social landscape. By contrast, there is no evidence that students moving into or out of an online charter school are doing so as a result of family trauma or dislocation.[72] Thus, comparing online charter school students with the highest-mobility students in traditional public schools is not an apples-to-apples comparison. Furthermore, research suggests that student mobility is not the cause of poor educational outcomes in online charter schools, but possibly the reverse – that high student turnover is a reflection of a lower-quality education that fails to sufficiently engage students. CREDO's national study, which paid special attention to measuring mobility, noted that:

> *Some online charter school operators state that their students come to them with additional academic deficits beyond the typical student. Often they cite the students' history of mobility as a cause for these deficits. If [this] were true… we would expect to find online students experience higher mobility before switching to the online school than the comparison students. In fact, students who switched to online schools have a pre-online school mobility rate of nine percent compared to eight percent of the comparison students. These findings place doubt on the argument that higher pre-online mobility creates widespread, systematic academic deficits for students who eventually switch to online charter schools.*[73]

Indeed, a 2020 study of students who moved to an online charter school and then back to a traditional public school found that academic achievements declined significantly upon the move to an online school, but then recovered after returning to a traditional brick-and-mortar school.[74] This again suggests that it is not the fact of changing schools *per se*, but rather the quality of education in online charter schools that produces poor academic outcomes.

## Where Do Education Applications Come From?

At the heart of online charter schools' educational offerings is the reliance on a pre-programmed digital curriculum. There are hundreds of digital applications – owned by private, for-profit companies – that serve this function; and each online charter school operator contracts with the provider of their choice. In some ways, this is similar to schools that choose whether to buy their high school history books from one textbook company or another. But digital education applications serve a much more central role than do textbooks. Different operators may depend on these applications to greater or lesser degrees, but many digital platforms aim to function as complete, self-contained curricula – they provide material for a student to read or watch, exercises for them to complete, and tests or assignments to assess what they've learned and what they're missing. The applications may then determine what each student should be studying or working on next, relying on algorithms to create a "personalized" learning experience by recording each task a student gets right or wrong and then feeding them the appropriate assignment they need to move forward. Furthermore, the applications are often combined with "educational management" software which summarizes students' successes and failures for their teachers, sometimes even assigning grades based on students' tests and homework. In this way, these programs are designed not only to replace textbooks, but also to replace much of what teachers do; this is why some online charter schools have so much less student-teacher contact than brick-and-mortar public schools: the technology is supposed to do much of the teaching. Some charter schools purchase a variety of digital education applications from different companies. Others buy all their curricular products from their own parent corporation. In all cases, while good teachers may be able to make a bad product better, the quality of education in an online charter school is largely dependent on the quality of its underlying curricular product. But do these programs actually work?

Online education is a large and growing industry and has attracted a wide range of investors from the technology, finance, and venture capital industries. Nearly every product claims that it embodies "research-based" best practices or provides "proven results." But the truth is that, in almost all cases, there is no statistical evidence whatsoever showing that these applications improve students' education. Indeed, almost none of the curricular products used in online schools have ever been subject to an independent, statistically meaningful evaluation. And most of those that have been evaluated turn out to have no effect whatsoever on student learning. The premier organization that conducts rigorous and independent evaluations of online education programs is the U.S. Department of Education's What Works Clearinghouse. As of April 2020, this office had reviewed 10,654 studies of education technology products. Only 188 of them – or less than 2 percent of these studies – concluded that the product had any impact on student performance.[75]

School officials are used to reading curriculum reviews written by independent scholars who have no financial interest in the product. But in the case of claims made by education technology producers, it is critical to remember that, while these companies hope their products will help students, their primary mission is not turning children into competent

and confident adults, but simply turning a profit. At K12 Inc., for instance, executives receive performance-based bonuses based solely on their financial performance and are in no way dependent on student achievements.[76]

Almost every program in the marketplace touts itself as an "evidence-based" curriculum. Yet of those programs that have been subject to rigorous evaluation, the vast majority were found to have little to no impact on education (see Table E below for a selection of these programs used by online charter schools in California). What explains this discrepancy? Unfortunately, the contradiction is resolved when one realizes that these are for-profit corporations engaged in marketing campaigns. Unlike teams of teachers or education scholars, they are not held to any particular academic standard and are allowed by law to trumpet exaggerated or misleading claims. Thus, it is common for education technology companies to knowingly misrepresent their product's track record. To give just a few examples:

- The DreamBox math program – used in the EPIC charter school – claims that "Harvard University studies show students using DreamBox for just an hour a week improve math scores nearly 60%."[77] In reality, Harvard's two-year study found that DreamBox had no impact whatsoever in the first year, and in the second year saw a 2-percentile point increase in test scores.[78]
- Edgenuity – used in the Altus, Delta, and Inspire schools – touts one case study as showing that 10th graders using its software "demonstrated more than an eightfold increase in pass rates on state math tests." When impartial reviewers examined the data, it actually showed that Edgenuity users in 9th grade experienced no impact, 10th graders saw a modest increase, and 11th graders declined in pass rates.[79]
- After a five-year study of Pearson's SuccessMaker reading program found that "in most cases, there is a statistically significant negative impact." Pearson paid for its own study and declared that it demonstrated positive results. When independent researchers at Johns Hopkins University reviewed the data, they concluded that SuccessMaker had no impact on reading. Pearson contested these results and Johns Hopkins ran a new evaluation but reached the same results.[80] Nevertheless, as this report is being written, SuccessMaker continues to promote its product as if these studies had never taken place: "How do you define success? With Measurable results! SuccessMaker has over 50 years of measurable, statistically significant results. No other digital intervention program compares. When schools use SuccessMaker with fidelity, student achievement improves."[81]

Thus, the claims made on behalf of digital education applications often are closer to claims that a toothpaste will give us "one shade whiter teeth in one week"[82] or that a fortifying shampoo will make our hair "ten times stronger"[83] than they are to impartial academic evaluations. It is easy to understand why both parents and school district officials are misled by such advertising; online charter companies spend heavily on advertising – K12 Inc. alone spent $37 million on advertising in 2018-19.[84] But the impact of this deception is devastating. As noted by the CEO of the International Society for Technology in Education after completing a study of digital curriculum acquisitions, "You have schools and districts that are paying a lot of money for a product that actually isn't teaching the kids."[85]

**Table E**

**Evaluations of Curriculum Products Used by California Online Charter Schools**

| Product/Platform | Findings | Schools Using Product | Evaluated By |
|---|---|---|---|
| **Fuel Ed/K12, Inc. MS Math** | Does not meet expectations. | California Virtual Academies, Inspire, Insight | EdReports |
| **Pearson HS English** | Partially meets expectations for 10th grade. Does not meet expectations for 9th, 11th or 12th grade. | Connections Academy | EdReports |
| **Pearson HS Math** | Does not meet expectations. | Connections Academy | EdReports |
| **Edgenuity** | No significant effects. | Altus, Delta, Inspire | Johns Hopkins University |
| **Edgenuity K-8 Math** | Does not meet expectations. | Altus, Delta, Inspire | EdReports |
| **Odyssey Math** | No significant impact. | Inspire | Johns Hopkins University |
| **Odyssey Math** | 1 study finds positive impact. 2 studies find no impact. | Inspire | U.S. Department of Education |
| **Plato/Edmentum — Math** | No evidence of impacts | Inspire, Connecting Waters, Pivot, Learn4Life, Opportunities for Learning | U.S. Department of Education |
| **DreamBox Learning (for K-1)** | "no significant positive outcomes." | EPIC | Johns Hopkins University |
| **DreamBox Learning** | "potentially positive" effects based on "small evidence" | EPIC | U.S. Department of Education |

## "Shockingly Easy" to Cheat Online Courses

It's possible that the true impact of these software programs used by online charter schools is even less than that ascribed by these studies, given widespread accounts of how "shockingly easy" it is to cheat these programs' internal quizzes and tests.[86] At the simplest level, students are taking the software programs' tests unmonitored in their own homes, with nothing preventing them from texting friends, reviewing old notes, or searching the web for answers to questions. For instance, a Mississippi teacher using the Edgenuity programs (currently in use in California in the Altus, Delta, and Inspire schools) recounts how, when both he and his student were stumped by a quiz, "the student went online, found the answer on a website that offered solutions to Edgenuity questions, and pasted it in… [The student] told [the teacher] that his grade in Edgenuity was perfect because he was cheating the whole time."[87] Indeed, a Google search of "Edgenuity cheat" produces multiple suggestions for cheating strategies. One student, for instance, counsels others to download the transcript for each video taught in a class, noting that whatever is on the tests will have been taught in the videos – so students can simply search keywords to find the answers. Another student actually reported, "My teachers told us to take advantage of this [technique]".[88] So too, Connections Academy students in the fall of 2020 were using sites, such as Jishka Homework Help, to swap answer keys for school exams, including verbatim transcripts of test questions and answers.[89]

Because online education platforms increasingly have essays graded by computer algorithm rather than human teachers, cheating has become possible even in essay assignments.[90] Some students, for instance, have learned they can earn high scores by writing one good paragraph and then copying it verbatim four times

over to construct a five-paragraph essay. Others have discovered that they earn better grades by padding essays with long quotes from the text they're supposed to analyze or simply by inserting the phrase "in conclusion" before their final sentence.[91] To the extent that these strategies are successful, even the modest impacts reported for these programs may primarily reflect the ease of creating inflated scores rather than the efficacy of the program itself.

## How Have Other States Judged California's Online Charter School Chains?

In order to examine the performance of online charter school chains that operate in California, this report examines the performance of the charter companies that also operate online charter schools elsewhere in the country, focusing specifically on the chains operated by Connections Academy and K12 Inc. These are not only the two largest online charter school chains in the country, but both have sizable networks in California – with six Connections Academy schools in California, and a total of 12 schools affiliated with K12 Inc. in the California Virtual Academy, Insight, and iQ charter school chains. These two chains are also uniquely virtually integrated, meaning that the charter school operators and the company that supplies their curriculum and technology are both affiliated with the same parent corporation. Connections Academy is a division of Pearson, a UK-based multinational corporation that is the world's largest testing and curriculum company; and K12 Inc. is the largest for-profit charter school operator in the U.S. Because these chains' curriculum, educational methods, and teacher training are standardized across the country, their results in other states are directly relevant for any evaluation of these schools' program in California. Unfortunately, while some of these schools have been successful, these chains' history is checkered by repeated instances of shortcoming and failure.

Ohio is one of the earliest states to have authorized online charter schools, and one of the earliest to experience disappointment. In 2013, the Ohio Department of Education announced that all six of the state's largest online charter schools were given a grade of F on their state report cards.[92] Under Ohio's system, a score between -1 and +1 means students have achieved roughly one year of academic growth, while any score below -2 is a flunking grade. On this scale, Ohio's Connections Academy school received a score of -11.3 in Reading and -15.7 in Math; the school run by K12 Inc. scored -16.3 in Reading and -26.9 in Math.[93]

**Figure 3**

**Ohio Schools Report Card 2013**

**FAILING GRADES**

Cyber K–12 schools across the U.S. have struggled with academic performance. Here's a look at the new state report cards for the six biggest online schools in Ohio.

| Electronic Classroom of Tomorrow (ECOT) | Ohio Virtual Academy (OHVA) | Ohio Connections Academy | Alternative Education Academy (OHDELA) | Buckeye On-Line School for Success | Virtual Community School of Ohio |
|---|---|---|---|---|---|
| **13,836** *Enrollment* | **12,616** *Enrollment* | **3,123** *Enrollment* | **2,100** *Enrollment* | **1,235** *Enrollment* | **1,415** *Enrollment* |
| **$88.4 million** *Public funding* | **$81.5 million** *Public funding* | **$19.2 million** *Public funding* | **$13.5 million** *Public funding* | **$7.9 million** *Public funding* | **$7.9 million** *Public funding* |
| **F** Progress grade ***Value added*** Reading: **–6.7** Math: **–18.3** All tests: **–15.7** | **F** Progress grade ***Value added*** Reading: **–16.3** Math: **–26.9** All tests: **–27.3** | **F** Progress grade ***Value added*** Reading: **–11.3** Math: **–15.7** All tests: **–17.2** | **F** Progress grade ***Value added*** Reading: **–6.7** Math: **–13.7** All tests: **–12.8** | **F** Progress grade ***Value added*** Reading: **–5.0** Math: **–8.6** All tests: **–8.6** | **F** Progress grade ***Value added*** Reading: **–3.2** Math: **–6.2** All tests: **–5.9** |

The progress grade looks at how much students learn in an academic year. Value added scores of –1 to +1 mean that students have made roughly a year of academic growth. Scores below –1 mean they have not. The state considers any score below –2 a flunking grade. This graphic does not include data on alternative cyber schools for at-risk students, which are graded differently.

SOURCE: OHIO DEPARTMENT OF EDUCATION

Similarly, North Carolina in 2015 authorized a four-year pilot program to test the viability of online charter schools and authorized Connections Academy and K12 Inc. to each run one state-wide school. In each of the next three years, both schools received D grades, and by 2019 both were on the state's list of "continually low-performing schools."[94] The next year, even under new management, both schools earned their fourth consecutive D rating.[95]

In Georgia, the State Board of Education voted in 2019 to end its relationship with K12 Inc. after the company's Georgia Cyber Academy failed to meet the academic targets established in its charter school program for 12 consecutive years.[96]

In New Mexico, the State Board of Education and Public Education Secretary voted in 2018 to close a Connections Academy school after it had earned two consecutive years of F ratings and seen its math proficiency drop to 11 percent.[97]

Indiana capped enrollment at its K12 Inc. charter school and threatened to close the school completely after it received an F grade for six years running; Indiana Connections Academy was treated less harshly after it raised its school grade from F to D. [98]

In Nevada, the Public Charter School Authority issued a "notice of intent to terminate" to Nevada Virtual Academy (a K12 Inc. school) in 2018 after its elementary school wing had fallen into the state's lowest category of performance.[99] The school was given a year to improve its performance, but when it again earned the lowest possible rating in Nevada's performance metric, the elementary school was closed, with enrollment capped in K12 Inc's middle and high schools.[100] In 2020, the Charter School Authority voted 4-1 to terminate Connections Academy's charter school after its own elementary school received the state's lowest academic rating for three years running and Connections Academy was ranked the fourth worst school in Nevada.[101] After the company filed suit, the state agreed to give Connections' high school a conditional extension while closing its elementary and middle schools.[102]

As the online charter school industry has grown and established a consistent track record, it has elicited a growing chorus of critics among legislators and school officials. In just the past three years, Connections Academy or K12 Inc. schools have been closed, received failing grades, or targeted for intervention in Massachusetts, Illinois, Oklahoma, Oregon, and Idaho.[103] Failure in one state does not foreclose the possibility of success in another; but the record of sanctions against the nation's two leading online charter school chains should at least lead officials to conduct careful investigations before further replicating these models.

## Lessons from the Pandemic

When online education became the norm during the COVID-19 crisis, the programs used by online charter schools came under wider scrutiny, revealing problems with biased content as well as concerns over pedagogy. In September 2020, for example, Edgenuity (used in the Altus, Delta, and Inspire schools) was found to be teaching Bible stories as social studies and was forced to remove this content.[104] That same month, Wisconsin parents protested that Edgenuity included racist content regarding Native Americans. The district superintendent denounced the material as "unacceptable," and the company again pulled a curricular unit that had long been in use, promising a thorough review of potential bias in its curriculum.[105]

Even more troubling concerns have been raised about the Acellus program, currently used in California in the Inspire and Connecting Waters chains of schools. Acellus is owned by Roger Billings, who was profiled by the *Los Angeles Times* as having endorsed polygamy, been excommunicated from the Mormon Church, and led a breakaway sect in which he deemed himself a prophet. Billings created a graduate school that he runs out of an underground mine, and from which he and some of Acellus's teaching staff have been awarded doctorate degrees.[106] Billings offers a generous scholarship to any Acellus students who agree to watch a weekly video in which Billings presents his own life experience and worldviews.[107]

In the summer of 2020, a group of Hawaii parents petitioned their state's Department of Education to cancel its contract with Acellus due to anti-Black and anti-Muslim content as well as telling a history of Hawaii that erased the role of native Hawaiians.[108] A September 2020 story in *Fast Company* explained that the racist content was only "part of the story. Parents whose schools are using Acellus describe a sloppily built platform with technical issues, unprofessional content, and lessons that seem out of touch with standard curricula."[109] A review of the Acellus curriculum in Hawaii confirmed the concerns over discriminatory content, and in addition found that the program failed to meet state requirements for "academic program, standards, and curriculum."[110] In October 2020, the Hawaii Board of Education voted to terminate its use of Acellus.[111] The concerns raised by Hawaii parents prompted closer examination of Acellus's product across the country.[112]

Early in the 2020-21 school year, the California Department of Education issued a statement titled "Concerns Regarding Acellus Online Learning Program," notifying local districts of the problems identified. The Chico, Alameda, and La Mesa-Spring Valley school districts

all stopped using Acellus, with Alameda Superintendent adding that, upon examination, Acellus's curriculum had been deemed "lackluster."[113]

These experiences reveal the lack of oversight that has been exercised in this industry until now. As legislators consider how to regulate this industry, they would do well to create procedures for catching these types of problems before they are encountered by students across the state.

## Overpaying for an Inferior Product

Online charter schools have long been a profitable industry; in 2018-19, the country's largest online charter school chain K12 Inc. saw its revenue grow above $1 billion for the first time in its history.[114] That year, the company's top five executives received combined compensation of almost $28 million, or over $5 million apiece on average.[115] That running charter schools can be such a profitable enterprise reflects the simple fact that NCB charter schools receive significantly more money from the public than their operations require.

It is common sense that the cost of operating an online charter school must be less than that of running a traditional brick-and-mortar school. Yet California's online charter schools, with very few exceptions, receive the same dollars per pupil as a physically existing school with classrooms, buses, a cafeteria, and maintenance and security staff. Following a series of corruption scandals in NCB charter schools, the California legislature in 2001 adopted a new funding process for these schools, in which the State Board of Education reviews each NCB school every five years in order to determine its appropriate level of funding. When legislators created this system, they intended that most NCB charter schools would be funded at 70 percent of the per-pupil funding provided to brick-and-mortar schools, with higher rates of up to 100 percent available only in exceptional circumstances.[116] In reality, of the nearly 1,000 NCB funding determinations made in the past decade, over 96 percent have awarded online charter schools per-pupil funding fully equal to that of traditional public schools.[117] To the extent that funding for online charter schools exceeds the actual cost of operation, the government is wasting many millions of tax dollars desperately needed in school districts across the state.

Overpayment for online charter schools is dramatically illustrated in the case of Connections Academy and its parent corporation Pearson. Alongside the Connections Academy schools, Pearson also operates an online private school, the Pearson Online Academy, for Americans stationed abroad who want their children to get an American education or for those in states that do not allow charter schools.[118] The curriculum for Pearson Online Academy and California Connections Academy schools are the same – both the list of courses and the description of each course's content are virtually identical in both schools (see Appendix B and C).[119] Indeed, when asked if the two schools' classes are sufficiently similar so that a student could seamlessly transfer between one and the other in the middle of a school year, a Pearson company representative stated that the courses line up "apples to apples – so close it's ridiculous."[120] Another Pearson representative explained that "the private side

[Pearson Online Academy] writes the curriculum for the Connections side," and as a result "transferring credits is no problem."[121]

But while the product may be the same, the costs for these courses are dramatically different. California taxpayers pay approximately $10,300 for every student who attends a Connections Academy school.[122] By contrast, the tuition for enrolling in the Pearson Online Academy is just $4,800 for an elementary school student, $5,880 for middle school, and $6,880 for high school.[123] It seems then that California taxpayers are paying a markup of at least 35 percent (approximately $3,500 per student) above all costs, including reasonable profit.[124] So across all the schools in this chain, California taxpayers are wasting over $22 million per year.[125] In other words, if the state of California simply paid all Connections Academy students to attend Pearson's private online school, taxpayers would save over $22 million per year.

**Table F**

**Same Product, Different Costs**

| Private School | Online Charter School |
|---|---|
| **Acellus Academy** – $2,490 per year | **Connecting Waters Charter School** (uses Acellus as primary curriculum) – $10,235 per year |
| **Edgenuity** – $3,700-$5,300 per year | **Altus Schools** (uses Edgenuity as primary curriculum) – $13,000 per year |
| **Pearson Online Academy** – $4,800-$6,880 per year | **California Connections Academy** – $10,300 per year |

Without stronger transparency laws, it is impossible to calculate the exact amount of overpayment at other charter schools.[126] But if other NCB schools operate on a cost basis similar to that of Connections Academy, this means that Californians are overpaying NCB charter schools over $600 million per year.

Most states operate similarly to California – with NCB charter schools receiving the same funding as brick-and-mortar schools – in large part due to decades of lobbying by the education technology industry.[127] These states' efforts to realign NCB charter schools' funding based on actual operating costs provide possible precedents for California lawmakers. In 2017-18, seventeen bills were introduced in state legislatures aiming at limiting or reducing per-pupil funding for online charter schools, with lawmakers in Louisiana, Oklahoma, New Mexico, and Michigan all calling for a 20-25 percent reduction in per-pupil funding rates.[128]

These legislative proposals represent a growing consensus among school finance analysts. Data from the National Center for Education shows that, on average, brick-and-mortar schools spent 10 percent of their budget on facilities, 9.4 percent on maintenance and operation, and 4.4 percent on transportation, adding up to a total of 23.8 percent. The Commission thus concluded that "virtual schools should cost approximately 23.8 percent less to deliver a quality education than brick-and-mortar schools."[129] Other studies have also coalesced around the 25 percent figure as a minimum estimate of overpayments to online charter schools:

- A 2012 investigation by Pennsylvania's Auditor General concluded that per-student costs at the state's online charter schools were just 75 percent those at brick-and-mortar schools, and recommended that funding be adjusted accordingly.[130]

- Also in 2012, a study by Education Finance scholar Bruce Baker estimated the cost of online schooling as 70 percent that of brick-and-mortar schools.[131]
- A 2017 study by the New Mexico legislature determined that online schools should cost about 24 percent less than brick-and-mortar schools based on their decreased facilities, maintenance, and transportation costs.[132]
- The Education Commission on the States suggests that states might do well to follow Georgia's funding model, under which per-pupil funding for online charter schools is approximately 72.5 percent of that provided brick-and-mortar schools.[133]

The conclusion that the costs of online charter schools are 25 percent lower than those of brick-and-mortar schools is based on easily identifiable costs – cafeterias, gymnasiums, athletic fields, heating systems, and buses – that don't exist in online schools. But there are also less visible cost categories where online charter schools operate on a lower cost basis. The 25 percent figure assumes that, because both online and traditional schools have teachers, those costs – typically the single largest cost item in school budgets – must be identical. In reality, this is one of the areas where online charter schools cut their costs most dramatically. In 2018-19, for instance, the average California teacher's salary was $83,059, but the average salary for teachers at the largest Connections Academy school in California was less than $53,000.[134] Thus it is likely that the 35-40 percent excess profit rate found in the case of Connections Academy is a more accurate measure of overpayment than the minimal 25 percent rate found in these studies.

The category of instructional services poses a particularly difficult challenge for distinguishing legitimate from illegitimate charges in NCB schools. The core business model of the education technology industry rests on the fact that, as Netflix CEO and charter booster Reed Hastings boasts, "You can produce once and consume many times."[135] Thus it is logical to assume that, after initial development costs are recouped, payments for each additional student's access to online materials far exceed their true costs.

In California, NCB schools are required to spend at least 80 percent of total revenue on instruction.[136] But if the price of a software product is arbitrarily raised from $50 to $100, does this really mean the school has purchased an additional $50 of "instruction," or simply that it is adding to the profits of an affiliated curriculum company? This problem is particularly difficult because many charter schools purchase their curriculum from related for-profit corporations. For instance, in 2018-19 the Pearson-founded Connections Academy schools paid Pearson-owned Connections Education $1,075 per high school student for instructional materials, $600 per student to access the data management system that records students' performance, and $275 per student for access to technical support and an online resource center.[137] We know that the Connections Academy schools are a successful division of the Pearson Corporation.[138] But how much of the fees charged by Pearson to its schools represents reasonable costs and how much represents excess profit? Because the schools claim that Connections Education is an unrelated vendor, its financial records are not subject to public records laws. But evidence suggest that charter schools are paying far above costs for the use of digital platforms owned by their parent corporations. For instance, California's largest Connections Academy school, located in San Juan Capistrano,

paid Connections Education $1,515 per student for "tangible and intangible instructional materials" in the 2019-20 school year.[139] By comparison, the budget for nearby San Diego Unified School District allocated less than one-third this amount, just $443, for all "books and supplies."[140]

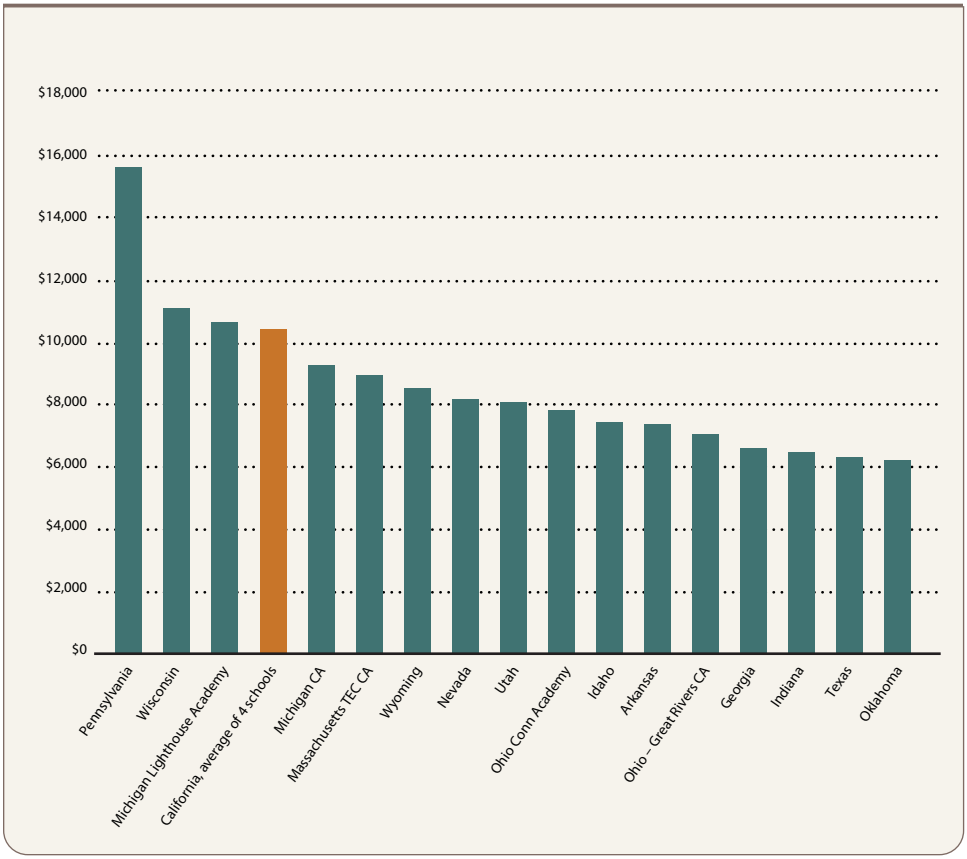
The gap between true costs and prices charged is also evident in the differences between fees a given company charges different customers for the same product. For instance, the Acellus company operates its own private school through which students in states without charter schools can access its curriculum. The annual tuition for the Acellus Academy – including the cost of teachers, administrators, and all materials and technology – is just $2,490 per year.[141] However, the Connecting Waters charter schools, which use Acellus as their primary curriculum provider, receive $10,235 per student (based on Average Daily Attendance) in state and local tax dollars.[142] Similarly, during the COVID-19 crisis, Edgenuity offered school districts a complete turn-key package of Edgenuity programs, teachers, administration, and all associated costs for a price between $3,700 and $5,300 per student.[143] Yet California taxpayers are paying over $13,000 per student to the Altus chain of charter schools, which uses Edgenuity for its core curriculum.[144]

Because the Altus and Connecting Waters schools use a variety of curriculum providers rather than relying exclusively on one company, it is difficult to make an exact comparison between their per-pupil funding and the tuition charged elsewhere by their curriculum providers. But assuming that their other providers operate on a cost basis roughly similar to that of Acellus and Edgenuity, it appears likely that Californians are overpaying online charter schools by thousands of dollars per student each year.

A clearer comparison is possible in the case of national chains such as Connections Academy across different states. Even without the comparison to Pearson's private online school, Connections Academy schools charge very different amounts for the same services, based on state funding rates rather than Connections' actual costs. As shown in Figure 3 below, Californians pay significantly more per-pupil than some other states. Some portion of this difference may reflect differential pay rates for school staff. But the gap between California and other states' funding rates cannot be wholly attributed to teachers' salaries. For instance, each Connections Academy school pays 11-11.5 percent of its total revenue to Connections Education in return for treasury, marketing, and school administration services, with these payments sent to Pearson's corporate offices in Maryland.[145] However, even though administrative or treasury services performed in Maryland should cost the same no matter which school they are serving, schools based in different states pay very different rates for these services. In Oklahoma, Connections Academy pays $720 per pupil for these services; in California, Connections Academies pay $1,143 for the same services.[146]

**Figure 3**

**Per Pupil Funding for Connections Academy schools, 2018-2019**




## *A Funding Formula That Invites Corruption*

As many news reports and repeated studies have documented, the charter school industry as a whole has been fraught with corruption.[147] But with lax oversight, low-cost operations, and no physical schools to inspect, online charter schools have been particularly prone to scandal.[148] In 2014, Altus Institute president Mary Bixby was discovered to be simultaneously serving as a full-time employee of one Altus school, an "on-loan" employee for two other Altus schools, and a member of the Altus school board – a combination of roles that would be illegal for an employee in any traditional public school. That year, Bixby was paid $370,000 for overseeing roughly 3,000 students – more than the superintendent of nearby San Diego is paid for running a system 40 times that size.[149] In 2016, the former superintendent of the Mountain Empire School District pleaded guilty to authorizing 13 different charter schools in his rural district (including online schools in the Compass and Elite Academic chains) in return for being personally paid 5 percent of the district's oversight fee and for having his personal consulting firm hired to provide back-office services.[150] And in 2019, a vice president receiving $300,000 annual pay at the Learn4Life chain was also found to be owner of a for-profit company that loaned more than $6 million to Learn4Life schools while also renting space to the chain for its central offices.[151]

While there is some level of corruption in all industries, the excessive funding of NCB charter schools makes this sector particularly ripe for fraud; and the scale of corruption among NCB charter school chains highlights, above all, the failure of lawmakers to adjust NCB funds in line with true operating costs.

What sets corruption in the NCB charter school industry apart is the sheer size of the embezzlement schemes that have beset this sector, both in California and across the country. The budgets of traditional public schools are based on the actual costs of running those schools, with these costs mostly in concrete, visible forms – buildings, buses, cafeterias, teachers, and administrators. Thus, while there is certainly corruption in the public sector, its scale is relatively limited. For instance, a former superintendent and several school district trustees in San Diego County's Sweetwater Union High School District were among 18 defendants who pleaded guilty in a corruption investigation where they were accused of accepting "thousands of dollars in lavish gifts in return for building contracts" from 2008 to 2011, including restaurant meals, Lakers' playoff tickets, Rose Bowl tickets, and a trip to Napa.[152] Separately the largest public school corruption cases in recent years include a superintendent of Poway schools and a high school clerk in Orange County embezzling $345,000 and $710,000 respectively over the course of five years.[153]

By contrast, operators of the A3 chain of NCB charter schools were charged in 2019 with stealing more than $50 million in public funds over a period of just two and a half years.[154] Similarly, the Inspire chain, which started in 2014 and grew to 35,000 students within five years, was accused that same year of operating an extensive network of self-dealing and financial malfeasance, including tens of millions of dollars in loans between various Inspire network entities, and $93 million in loans overall at interest rates up to 47 percent.[155] Both these scandals came on the heels of a $165 million settlement paid by K12 Inc. in 2016 following charges of defrauding the state by submitting inflated attendance records.[156]

In other parts of the country as well, the online charter school industry has stood out for its unprecedented scale of corruption. Consider Lincoln Learning Solutions, for example, an online curriculum company that provides content to schools around the country (and is used by Inspire and Compass charter schools in California).[157] In 2018, its founder was sentenced to 20 months in prison for diverting $8 million of public funding for a Pennsylvania charter school into privately owned companies.[158] While no further charges have yet been filed, the state's Auditor General called for reforms to Pennsylvania charter school law after discovering the school maintained a fund balance of nearly $82 million.[159]

Similarly, in 2016 the Ohio state auditor charged the state's largest online charter school, the Electronic Classroom of Tomorrow, with submitting $60 million worth of attendance records for students it could not prove existed. While the school appealed its case, the auditor found that the school continued overstating its attendance, collecting an additional $19 million in 2016-17 for students whose existence it could not document.[160] In August 2018, the Ohio Supreme Court ruled in support of the State Department of Education demanding repayment of a total $80 million in fraudulent enrollment claims.[161]

Oklahoma's largest online charter school, EPIC, has apparently engaged in both self-enrichment and possible attendance fraud. In 2018-19, EPIC reported enrollment of over 21,000 students and received $113 million in state funding. But a State Bureau of Investigation affidavit alleged that many of these were "ghost students," who were being homeschooled or attending private schools and had been convinced to enroll in EPIC despite receiving no services from the school.[162] At the same time, the school's co-founders created their own for-profit company and paid it 10 percent of total school revenues for management services. The company received more than $45 million to manage EPIC over a six-year period; yet the company had zero employees during the first four years, and only three employees in the latter two.[163]

Finally, an online charter school in Arizona signed a contract to pay $150 per student per class, plus 22 percent of gross revenues in technology and administrative fees to a company wholly owned by the school's founder, who also continued to serve as the school's CEO. In 2017, the school received $44 million in public funding and paid this company $25 million. That same year, the school's CEO took an $8.8 million "shareholder distribution" from his company.[164] (This company, now renamed StrongMind, currently sells content to the Inspire, Compass, Olive Grove, and Elite Academic chains.)

Human nature is the same in public school districts, classroom-based charter schools, and NCB charter schools. The fact that corruption occurs on such a grand scale in the nonclassroom-based industry is not because it's run by craftier crooks, but because funding NCB charter schools at levels significantly above their operating costs creates unprecedented opportunities for both investor profits and self-enrichment.

## *The Problem with Attendance*

The importance of uncovering the true cost of operating NCB schools is further reinforced by the failure of school attendance records to serve as a reliable metric for NCB school funding. Traditional public schools are funded on the basis of their average daily attendance (the number of students who show up at school each day), which determines how many buses, classrooms, teachers, nurses, books, lunches, microscopes, and basketballs the school needs to serve its student body. For in-person education, attendance is a reasonable gauge of a school's costs. But in NCB charter schools, few of these costs exist.

Furthermore, it's hard to know what "attendance" means in an online context. For comparison, in distance learning classes conducted by traditional public schools during the COVID-19 pandemic, students are statutorily required to be engaged in school activities for three to four hours per day, including daily live interaction with their teacher and classmates.[165] But there are no such legal requirements for NCB schools (indeed, most NCB learning happens without any teacher present). Yet under current law, online charter schools are still funded on the basis of average daily attendance. And because the state formally requires online students to "attend" school for the same number of days as students taught in person, the funding formula creates a perverse set of incentives for online school operators to artificially inflate their attendance numbers, which the history of online charter schools is replete with instances of.

Under California law, NCB charter schools are classified as "independent study" programs and must operate by the same principles as independent study programs offered in traditional public schools.[166] In reality, however, charter schools are exempt from the normal standards of accountability. Brick-and-mortar schools are required to provide students a minimum number of instructional minutes per week, so teachers overseeing an independent study student (for instance, if someone is out sick for an extended period of time) must judge whether the work done by this student is equivalent to the number of instructional minutes they would be getting in person.[167] But NCB charter schools are not required to provide any minimum number of instructional minutes per day. Instead, each charter school or each individual teacher is free to establish their own definition of what type of work merits being counted as "present" for a day.[168]

Furthermore, because laws governing independent study were in place prior to the Charter Schools Act, it did not anticipate or contemplate NCB charter schools or LEAs offering exclusively nonclassroom-based educational programming; as a result, legal standards governing these schools are often unclear or contradictory, leaving many schools operating in a legal grey area.[169] For instance, given that attendance is based entirely on the amount of work performed by students, it would seem particularly important for charter school teachers of those students to evaluate all work completed after providing the full complement of assignments for their students to perform. In reality, however, much of the work done by NCB charter school students is never seen by their supervising teacher; students at NCB charter schools may be required to turn in as little as one "sample" work product per semester, with students or their parents trusted to self-report that other assignments were completed.[170] By law, if a student fails to do the required work and is not succeeding in an NCB charter school, they must be transferred back to a brick-and-mortar school, with the NCB charter school foregoing the funding attached to that student. Thus, these charter schools have a self-interest in avoiding close inspection of students' work records. Finally, there is no public body charged with auditing an NCB charter school's attendance records beyond the school's authorizer. In the case of small districts authorizing larger charter schools (which is common in California), the district may lack the capacity to exercise effective oversight, and the fees provided by the charter schools may serve as an important revenue source, creating a disincentive for the authorizer to rigorously inspect charter attendance records. Certainly, many charter operators conduct their schools in an ethical matter; but the incentives created by current law all encourage misleading or fraudulent attendance records.

Attendance scandals clearly raise a substantive concern about the quality of education students are receiving in online charter schools. But above all, this type of fraud reflects a failed funding model. In some states, legislators have sought to tighten standards for defining "attendance" by requiring increased reporting and oversight. [171]But ultimately, attendance in online charter schools is a fiction – pretending that online education works in a fundamentally similar manner to in-person education. The core mistake in state regulations is not that there are loopholes in defining attendance, but that funding for online charter schools is based on the spending formula of brick-and-mortar schools, for

which attendance serves as a measure. If online charter schools were funded on the basis of their own actual costs, the public would save hundreds of millions of dollars per year, and we wouldn't have to struggle with enforcing attendance policies in a setting where they have no meaning.

## What Is the State Paying for When It Funds "Homeschool" Charter Schools?

Perhaps the most extreme abuse of tax dollars – and the most complete evasion of education standards – comes from a subset of NCB charters that function as "homeschool" charter schools, paying for parents to choose their own curriculum and serve as their child's primary teacher.[172] In theory, parents cannot be paid to homeschool their children in California. State law mandates that homeschooling is only permitted if a parent creates their own private school, or the parent is themselves a credential teacher – and in either case, there is no public funding allowed for homeschooling.[173] But the charter school industry has found a way around this law.

NCB charter schools have pioneered a funding mechanism that has made California the single most generous state for homeschooling families.[174] These schools provide each family with an "instructional funding" budget – typically $2,000 to $3,000 per student – which parents may spend on the curricular materials and extracurricular activities of their choice.[175] While parents are restricted to spending this money on school-approved vendors, NCB charter schools commonly offer hundreds of approved vendors, including textbooks, private tutors and online applications as well as activities such as ceramics, Tae Kwon Do, and horseback riding. For example, the Horizon Charter Schools – operating in six counties surrounding Sacramento – advertise themselves as an opportunity for parents to "get more from your home schooling experience." The school stresses that parents may "choose your curricula… teach your kids at home.. [and] take advantage of parent-driven enrichment classes and our extensive vendor list," all at a "free publicly-funded charter school" that provides "student funds" of $2,600 for each elementary student and $2,800 for each high school student.[176]

Not only do parents choose the curricula at these schools, but they also serve as their child's primary teacher. Take South Sutter charter school for example (part of the Innovative Education Management chain of schools), which describes itself as a "parent driven" school. South Sutter families are designated $2,700 for each elementary school student and $3,000 for each high school student, which they may use to purchase the products of their choice from a list of nearly 1,500 approved vendors.[177] When a student first enrolls, the family has an intake meeting with an Education Specialist (ES) who helps them select an appropriate course of study. The student and parent then meet with their ES (online or in person) once every 20 days, but the choice of curriculum is up to the parent and "the parent/guardian serves as the day to day teacher."[178]

California law requires that students' education be provided by a credentialed teacher. While "homeschool" charter schools argue that their ESs serve this function, their actual practices reveal something quite different. In many NCB "homeschool" charters, students are not required to turn in all their work, but merely to provide their supervising teachers a work "sample" once per month – or in some schools, only once per term. ESs are legally responsible for determining whether students completed their required classwork, whether the work they performed is the equivalent of attending school full-time, and what grade they deserve. Indeed, these "supervising teachers" are required by law to ensure broad quality standards. NCB charter schools are defined as "independent study" under state law. All independent study schools must provide students with the equivalent content, standards, rigor, quality, and minutes of instruction as they would receive in a traditional public school within their home district.[179] It is difficult to imagine these judgments being made on the basis of one work sample submitted per term. Furthermore, because "independent study" high school teachers are only required to hold a general teaching credential -- and not a credential in the specific subject matter they are teaching – it may be difficult or impossible for them to make such academic judgments.[180] If a teacher lacks content expertise in physics, French, calculus, or Chinese history, how will they determine whether a given work product is the equivalent of one week's or one month's attendance – or judge whether students are meeting state standards? In traditional public schools where independent study classes are relatively rare exceptions, an individual teacher may find a way to work around this problem; but in an NCB charter school school where every student in every class is engaged in "independent study," the lack of subject-matter credentials poses a more daunting problem. In all these ways, NCB 'homeschool' charter schools raise serious questions both about their educational quality and their adherence to state law.

In addition, the gap between the per-pupil funding received and the actual educational costs expended appears to be even more extreme for "homeschool" charters than for NCB charter schools as a whole. In most of the country, parents receive little if any public funding for homeschooling their children. Unsurprisingly, the $2,000-$3,000 per pupil discretionary funding offered to parents is viewed by many families as the primary educational value of "homeschool" charter schools. When the California Homeschool Network advises prospective parents on the most important questions families should ask before choosing a charter school, the top questions revolve around these discretionary funding accounts.[181] Likewise, when NCB "homeschool" parents were asked to describe their experience for other families considering following in their footsteps, their responses focused overwhelmingly on these funds:[182]

- "We are … with Ocean Grove... We now get $2,200 per elementary student. We have to meet with an (Educational Specialist) once a month and turn in 4 samples (History, LA, Math, Science)."
- "Valley View Charter Prep: $2,500 a year per student. Meet Educational Specialist once a month to sign attendance forms (just scribble initials on a calendar). Turn in 2 samples for each subject in fall and in spring. Testing in reading/math online in fall and spring — doesn't mean much, they just want to see that the numbers

improve each time they take it... One thing I really like about VVCP is that they reimburse you, so you are not restricted to just using vendors."

- "We use Inspire and do not use their enrichment academies. Funding this year was $2,850 per child."
- "We use Inspire with two full days of extracurricular activities a week. We also get $500 to spend on school related things. We already have a curriculum so we opted for zoo passes, sea world passes, gymnastics classes and Tae Kwon Do classes."

When the A3 and Inspire scandals broke, public criticism focused on families who used instructional funding to buy multi-day Disneyland passes, or tickets to see the dolphins at Sea World.[183] Indeed, the rapid expansion of the Inspire chain – gaining 35,000 students in just six years – was driven in part by advertisements that parents could use their discretionary funds for Costco, Amazon, Disneyland, private ice skating coaches, Guitar Center, or Big Air Trampoline Park.[184] This practice skirts the legal prohibition on schools providing "things of value" to parents or students as incentive for enrollment.[185] But even if instructional funds were restricted to traditional forms of instruction, this system still poses a radical challenge for state lawmakers: If the primary value of "homeschool" charter schools lies in providing grants of less than $3,000 to participating families, why is the state paying them $10,000 for every enrolled student?

(In 2018-19 the Inspire, Ocean Grove, South Sutter, and EPIC schools all received between $9,500 and $10,500 per pupil from the state.)

Furthermore, even the amount of funding allocated to families is significantly higher than what is typically spent on homeschooling. Mike Smith, president of the Home School Legal Defense Association – a national group that advocates for homeschooling families – reports that families not enrolled in charter schools normally don't have to spend more than $700 per year for homeschool curriculum and books.[186] In states where there is no funding for homeschooling, a variety of homeschool curricula are sold for a fraction of the ADA funding that California pays to NCB charter schools. Discovery K12, for instance, is a private company that provides a complete K-12 curriculum for homeschooling parents at the cost of $99 per family.[187] Similarly Calvert Education offers a basic package of 40 online courses in language arts, math, science, history, and geography, at a cost of $400 per student per year.[188] Those interested in a more comprehensive and accredited degree may enroll in the Calvert Academy, which offers a four-course bundle for elementary school students at $1,832 per year and a six-course bundle for high school at $2,792 per year.[189]

A representative of the Homeschool Association of California confirms that NCB charter schools "don't have as many fixed costs as a school that would have a large campus, paying for heat, and custodians and all of that. But yet, they get the same amount of money per student from the state."[190] "That's why some of the problems have occurred," explains Smith. "There's so much money in it... It's just ripe for the kind of things that are going on."[191]

The limitations of public records laws make it difficult to track exactly how money is being spent within NCB charter school networks, but from all available evidence it appears that

the degree of overpayment in per-pupil funding is even more extreme in "homeschool" charter schools than in the NCB charter school sector as a whole.

## Schools for Students or for Profit?

One of the difficulties in knowing exactly how NCB charter schools spend their tax dollars is the fact that so many schools contract with for-profit partners to provide some of the school's central functions, and those companies' records are not subject to public records laws. In 2018, the California legislature made it illegal for charter schools to be operated by for-profit corporations.[192] The goal of the legislation was to ensure that public tax dollars are used solely for the benefit of students and not to enrich private corporations.[193] Assemblyman Kevin McCarty, author of the bill, explained that the need for change was driven home by the exposure of K12 Inc. having defrauded the state of millions of dollars through inflated attendance reports.[194] At the time, legislative staff had identified 35 charter schools that were deemed to be managed or controlled by for-profit corporations, including California Virtual Academies by K12 Inc. and Connections Academy by Pearson.[195] Yet even as the bill was being signed, a representative of K12 Inc. voiced confidence that the law's language was loose enough that the company would not have to make substantial changes.[196] Indeed, two years later it appears that this new law has failed to affect the changes its authors intended.

The 2018 law defines corporate control of a charter school in narrow terms, including hiring and firing school staff or overriding budgetary decisions of the school board. In the months leading up to the law taking effect, many charter school chains instituted superficial reorganizations in order to comply with the law. Rather than having schools directly managed by for-profit corporations, they created new non-profit organizations to legally serve as their charter school management organization, which, in turn, would contract with the same for-profit corporation to provide the school's educational program and administrative oversight.

Connections Academy, for instance, created a new non-profit organization which legally serves as the charter maintenance organization for its schools. That organization – California Online Public Schools (CalOPS) – in turn contracts with the for-profit Pearson subsidiary Connections Education LLC. In this way, Connections Academy is declared to be an independent entity, despite the fact that the Pearson corporation includes the Academy's revenues in the Pearson annual reports and refers to Connections Academy as "our K12 online school business."[197] And while every school contracts with vendors for some products or services, the Connections Education contract covers almost every aspect of the Academy's school operations:[198]

- Providing the entire curriculum, together with instruction and intervention resources, teacher-directed extended learning activities, and video tutorials.
- Providing, operating, and controlling the educational management IT system, which records all student personal and academic information and provides teachers with feedback on student performance.

- Personnel management, including recruiting, training, supporting, and evaluating school staff; evaluating lead school administrator; preparing policies and reports needed for state law and oversight authorities; developing the employee and school handbooks; and administrating all payroll, benefits, and background checks.
- Administering all testing and assessments of students.
- Maintaining the school's website and computer technology.
- Providing accounting services and producing audit reports and financial reports for state, local, and federal authorities.
- Creating the school's public information campaign, including recruiting "community coordinators" to perform public outreach.
- Comprehensive logistics services.

Furthermore, the terms of this no-bid contract are written into the charter applications submitted by Connections Academy schools. Thus, the commitment to a related for-profit corporation is cemented into the school's very authorization. In New Mexico, the Attorney General found that nonprofit online charter schools are, in fact, controlled by for-profit corporations when schools "select curriculum providers before authorizers approve charters" and "subvert procurement statutes by awarding large sole source contracts to curriculum providers." This "places a school in a position of dependency regarding issues of regular operation and control."[199]

California law makes it illegal for a private corporation to "provid[e] services to a charter school before the governing body of the charter school has approved the contract for those services."[200] But to the extent that legislators intended to force charter schools to first establish themselves as independent organizations and then negotiate contracts with potential vendors, this goal has been completely subverted. The Connections Academy schools are bound to the for-profit Pearson corporation before the school's charter is even approved. In addition, while it is possible for the school to terminate its relationship with Pearson, the contract requires an extensive process of negotiation and mediation, likely ending in litigation, before a contract may be terminated – even for cause.[201]

Such a scenario played out in 2019 when the North Carolina Connections Academy school decided to end its relationship with Pearson. The school's Board chair determined that Pearson's curriculum was not aligned with state standards and that, by switching to an alternative curriculum provider, the school would save $5 million per year (Pearson was being paid more than $8 million out of the school's $17.2 million annual budget, or 48 percent, at the time[202]). Rather than respect the school's independence, Pearson fought bitterly to block the disaffiliation, charging that the school was doing poorly because the Board hadn't carried out the Connections model with sufficient fidelity, and demanded to assume more complete control, including becoming the employer of all school staff. Ultimately, the State Board of Education allowed the school to end its relationship with Pearson.[203] But the company's response had the air of not a vendor that's been dropped by its client, but of an owner incensed at losing control of its operation.

It would be inconceivable that a for-profit corporation could exercise this level of control over a traditional public school, just as it would be inconceivable that tens of millions of dollars designated for student funding in a traditional public school could be siphoned off to self-enrichment schemes – whether legal or illegal. California's current ban on for-profit schools is meaningless in reality. The best way to make it meaningful is not by playing legal cat-and-mouse games with charter operators, but by aligning per-pupil funding with these schools' true operating costs, so as to eliminate the excess profits that have proven so powerfully attractive to local scammers and multinational investors alike.

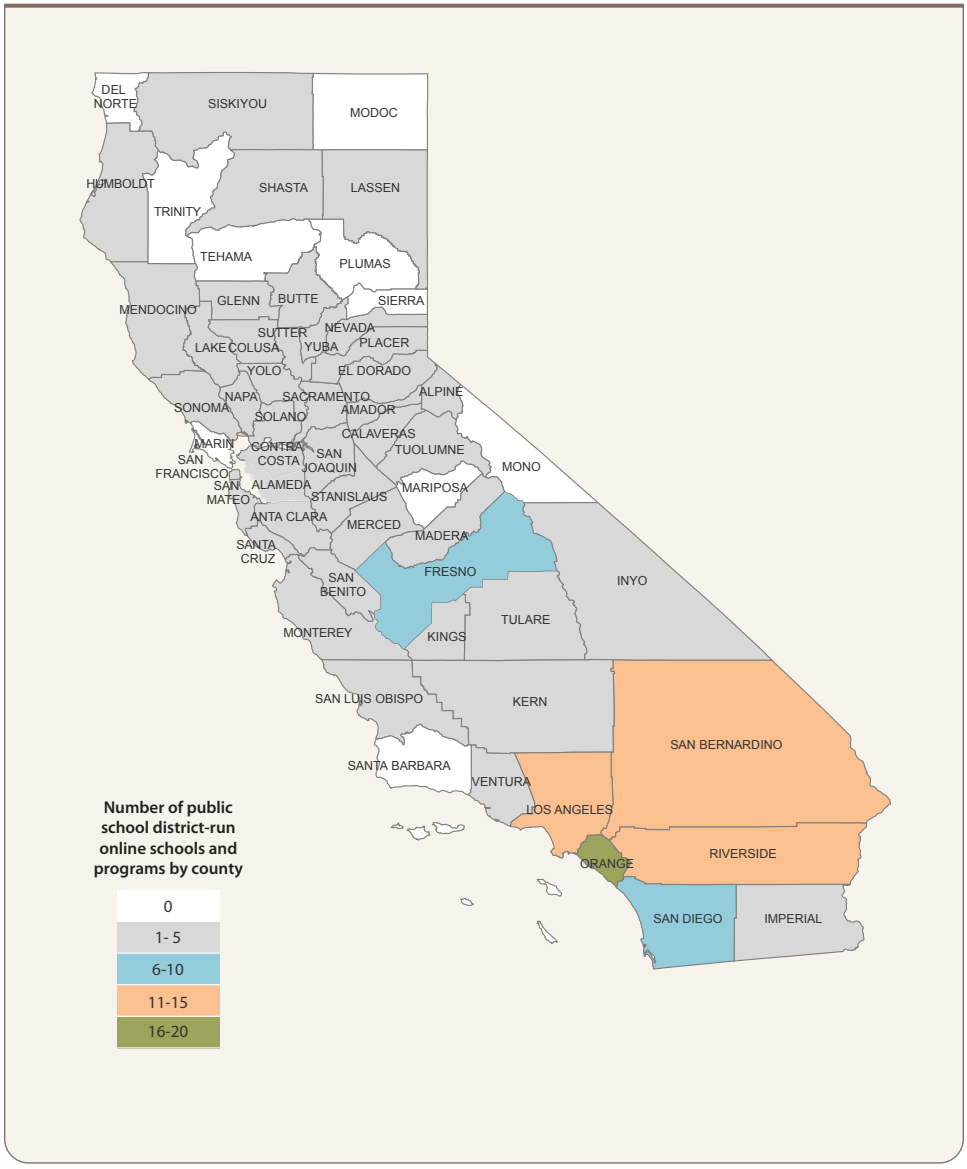
## California Is Already Oversaturated with Nonclassroom-Based Schools

The geographic distribution of currently existing online schools clearly shows that there is no need for additional online charter schools; on the contrary, the state is already oversaturated with online education options. Given the poor quality of education at online charter schools, it would make sense for the state to limit the number of them to those strictly necessary in providing an alternative option for students whose needs can't be met in brick-and-mortar schools.

In 2018-19, there were over 100 online schools operated by public school districts.[204] This number almost certainly underestimates the extent of online education options within public school districts for two reasons. First, the 100 figure only includes stand-alone *schools*, without accounting for the many districts that offer online *programs* as part of existing schools. Second, the number of district-run online programs has grown without a doubt during the COVID-19 crisis. Nevertheless, even using this low estimate, more than 80 percent of the state's counties have district-run online schools or programs. As shown in Map A below, most of the counties have up to five different online schools run by public school districts; Los Angeles, San Bernardino, Riverside, and Orange counties have more than 10 in each county.

**Map A**

**District-Run Online Schools**




With the number and reach of online schools and programs already operated by school districts, there should be no need for online charter schools. However, a series of charter school chains have opened online charter schools in almost every corner of the state, overlaying a dense network of their programs on top of the already-existing infrastructure of district-run online options. Map B illustrates the locations of those online charter schools included in our study.[205]

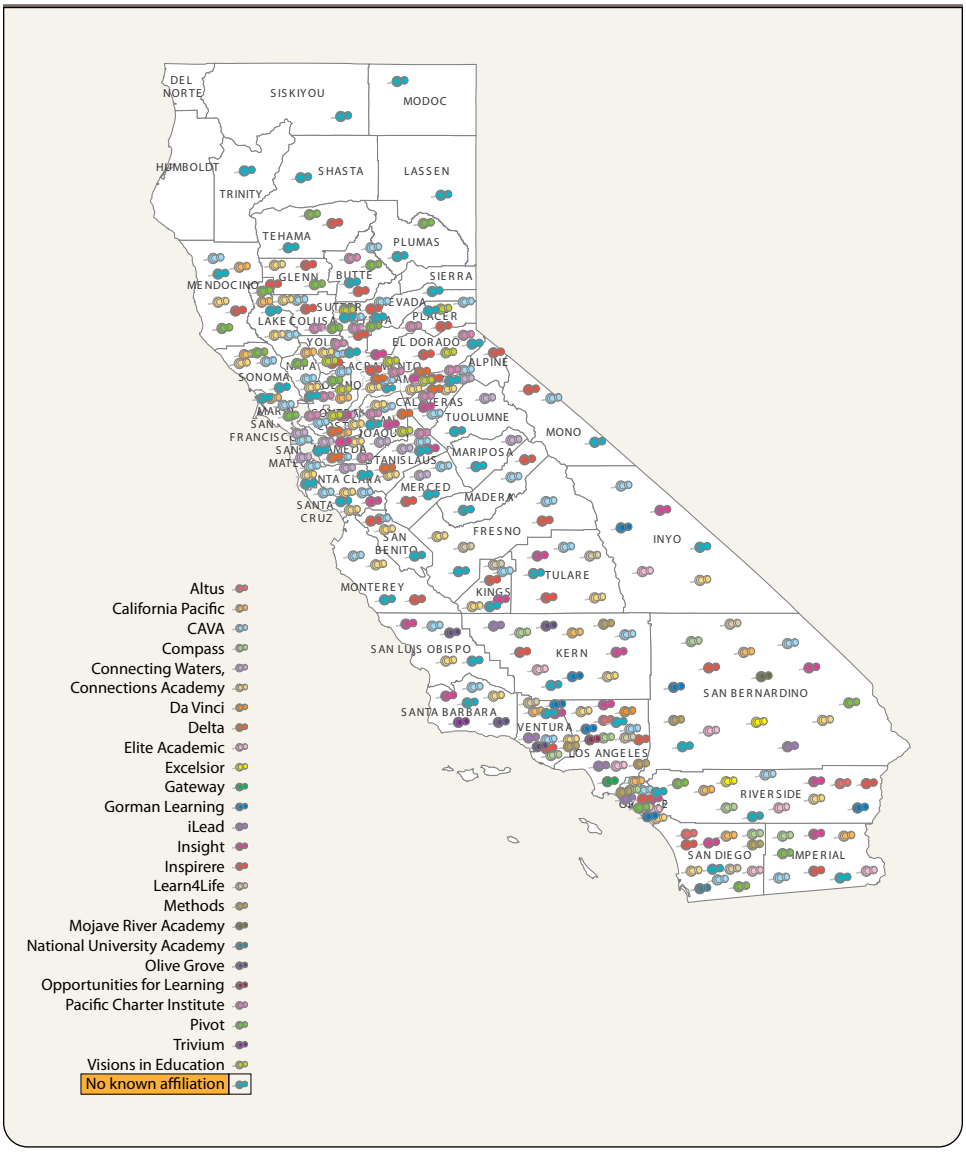
Map C is based on the same data as Map B, but instead of identifying each individual school, it shows the total number of online charter schools in each county. Only three of the state's 58 counties – Sierra, Humboldt, and Del Norte – lack an online charter school. In most of the state however, there are at least six different online charter schools to choose from in each

county. And in the southernmost counties – Kern, Ventura, Los Angeles, San Bernardino, Riverside, Orange, and San Diego – there are more than 15 online charter schools operating in each county. All of this is in addition to the district-operated online schools in those same counties.

The purpose of online schools – whether charter or district-run – is to provide an alternative for students whose needs can't be met in classroom-based education. But these maps make clear that we are past the point where any growth in online charter schools can be rationalized as meeting a need for students who lack this option. Charter school chains may seek to expand for their own reasons; but public policy needs to consider how the state is already oversaturated with such schools.

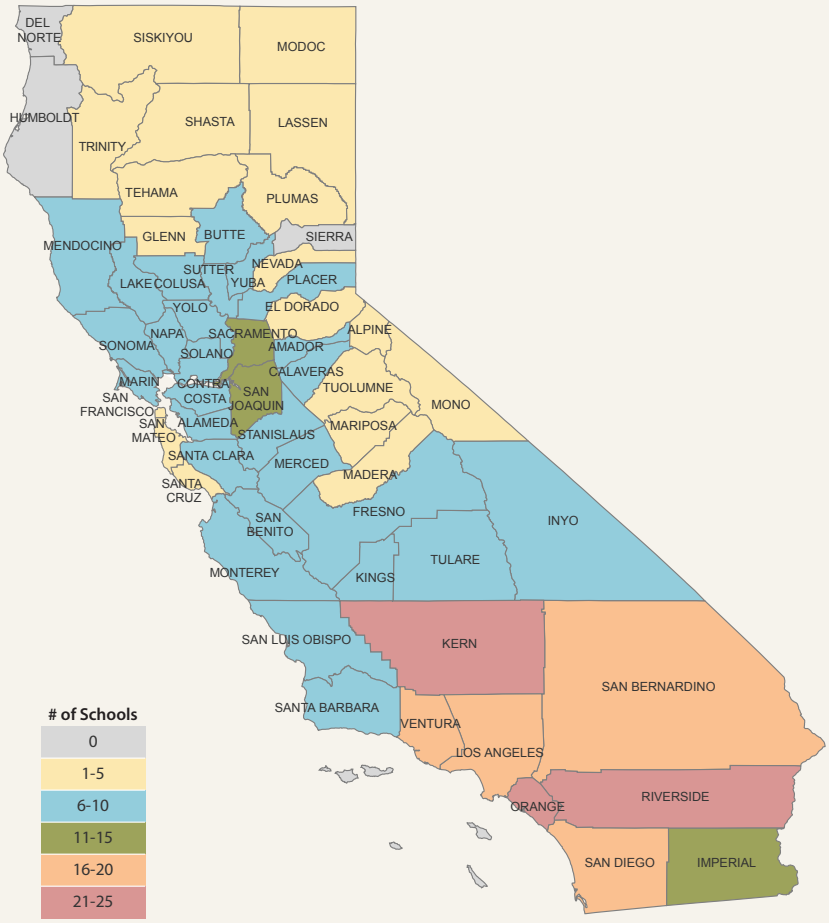
**Map B**

**Charter School Chains by County**



**Map C**

## Number of Online Charter Schools Per County




*This map includes schools in our Universe of Schools. Count of schools per county is based on the counties that schools explicitly state they enroll students from. Schools that do not report counties that they enroll students from are excluded from this map.*

## Where Do We Go from Here? – Potential Policy Solutions

The data presented in this report show that online charter schools provide an inferior quality of education; that the state is wasting hundreds of millions of dollars by funding these schools at a level far above their costs; and that the state's school system is already oversaturated with such schools. This set of challenges has been faced by many states, and over the past decade a variety of policy options have been put forward as potential means of addressing some of the most pressing problems posed by nonclassroom-based charter schools. Among the proposals put forth by policy analysts and elected officials involve:

### *Regulating Growth*

- Prohibit public funding for online charter schools if a student's home district already offers an online education program whose educational track record is as good or better than the charter school (parents who believe their student needs a different type of online program may appeal on a case-by-case basis).[206]
- Cap the statewide percentage of students that can be enrolled in online charter schools (Oregon caps this at 3 percent).

### *Funding and Costs*

- Ensure that per-pupil funding for online charter schools is in line with these schools' actual operating costs, based on a state study of operating costs for NCB charter schools as a whole and "homeschool" charters as a special subset of these schools. End the near-universal waiver that has seen nearly all NCB charter schools funded at 100 percent the same rate as brick-and-mortar schools despite state law mandating that the typical NCB charter school receive per-pupil funding set at 70 percent the rate of a traditional public school. Higher funding rates should be reserved for schools that demonstrate increased investment in real instructional costs – such as paying educators at a rate equal to that of nearby school districts – rather than inflated vendor profits or management fees.
- Prohibit vendor fees calculated as a percent of revenues.
- Require that major curriculum or management vendors, as a condition of selling to a publicly funded charter school, provide documentation showing the lowest price at which they sell the same product or service in other locations. Public funding can only be used to pay for the lowest-available price.[207]
- Require that authorizing districts calculate the share of their costs towards expenses NCB charter schools don't have – including health services, cafeterias, athletics, gyms, libraries, maintenance, and transportation – and reduce per-ADA funding to NCB charter schools by this amount.
- Reduce special education funding to NCB charter schools that are not required by law to accept all students with special needs, so that more of those funds can go to schools serving these students.

## *Ethics and Transparency*

- Charter schools must be independent of any particular vendor or content provider. This means that schools must solicit at least two bids for major curriculum, educational, and administrative services and cannot write a particular vendor into its charter application.
- For any contracts for educational content, educational services, or administrative services over a given dollar value, the part of the vendor's business that is related to this contract must be subject to public records laws. Invoices for educational products and services must specify the exact type of service performed and the rate charged, at the greatest level of detail known to the vendor.[208]
- Contracts with vendors must allow the school Board to terminate the contract for cause at any time and at its sole discretion, provided reasonable notice. Prohibit mandatory arbitration or dispute resolution procedures that weaken the Board's ability to act in the best interests of students.
- Prohibit employment contracts that make online teachers' salaries dependent on student attendance if teachers themselves use subjective judgments to determine student attendance.
- A school district cannot authorize a charter school whose student body is more than 10 percent in size of the entire district's student population.

## *Homeschooling*

- Independent study programs must be formulated by a credentialed teacher who meets regularly with the student and determines a course of study and appropriate assignments and assessments. Parents cannot determine the curriculum for their children.
- Charter schools may not provide parents funds or credit for purchasing curriculum of their choice, nor may they reimburse parents for such purchases. All students in an NCB school must be using the same curriculum, as required by law for independent study.[209]
- All work and assignments produced by NCB charter students must be reviewed by their teacher in determining grades, completion of work, and attendance. Periodic work samples alone are insufficient.
- Public funds cannot be used to hire private tutors.
- NCB charter schools must ensure that students receive the same instructional minutes that is required of independent study students in traditional public schools.

## *Academic Standards*

- NCB schools that score lower than other schools serving the same demographic of students for two years in a row will have their enrollment frozen until they have scores at or above the state average for two years in a row.

- NCB charter teachers must have subject-area certification for high school courses, at the same standard enforced in traditional public schools.
- Require authorizers to conduct an annual audit of each NCB charter school under their jurisdiction to determine academic quality, completion of work, and attendance. Provide adequate funding to the authorizer to conduct this audit.

## Conclusion

Legislators have taken a critical step in creating a two-year hiatus for policymakers to evaluate the costs and benefits of nonclassroom-based charter schools. When charter schools of any kind expand, they impose a cost on traditional public-school students in their home districts.[210] Yet in the case of NCB charter schools, the calculus appears to be even more lopsided – with smaller benefits and higher costs than even brick-and-mortar charter schools. This report points to serious deficiencies in the quality of education provided by NCB charter schools. It also makes clear that many NCB schools are being funded significantly above their true operating costs. Under California law, it is up to each parent to decide whether a given school will do right by their child. But for lawmakers faced with the decision of whether to expand or restrict the number of such schools, it is impossible to conclude that the state needs more NCB charter schools funded at current levels. In a time when school districts everywhere face the heartbreak of knowing they cannot provide all the services their students need and deserve, it is critical that lawmakers act as conservative stewards of the state's tax dollars by focusing funding on the schools where it can do the greatest good for the greatest number of the state's students.

# Methodological Appendix

## *Defining the Universe of Schools for This Study, and Distinguishing "Primarily Online" from "Traditional Homeschool" Charter Schools.*

To assess the effectiveness of California's nonclassroom-based (NCB) charter schools, we analyzed data from the California School Dashboard for the year 2018-19 in order to measure how NCB schools performed relative to the state average. For this part of the report, we focused specifically on NCB charter schools whose education is delivered primarily online.

In 2018-19, there were 313 nonclassroom-based schools, serving nearly 175,000 students, or 27 percent of all charter school students in California.[211] But not all of these are online schools – some provide paper packets for students to pick up or in other ways support traditional homeschooling.

Under state law, a charter school is defined as "nonclassroom-based" if less than 80 percent of its student body is engaged in classroom-based education. Such schools must recertify their status at least every five years.[212] Our investigation thus began with the list of all charter schools designated NCB between 2014-15 and 2019-20.[213] This list included 285 schools with just over 150,000 students.

Separately from the NCB list, the state Department of Education reports schools' status as either fully virtual, primarily virtual, primarily classroom, or entirely non-virtual.[214] This list revealed 28 schools, with nearly 24,000 students, that were identified as either fully or primarily virtual, but were not included in our list of NCB schools. Upon examination, we determined that these schools were omitted either because they had just recently opened or because their NCB status was up for renewal but they had not yet completed that process. Adding these to the original list of NCB schools gave us a total of 313 schools with 174,827 students.

Since our first interest was in schools whose lessons are primarily conveyed online, we used each school's unique County-District-School (CDS) code in order to match each NCB school with its reported status as either completely or primarily virtual, primarily classroom, or entirely non-virtual. There were 105 NCB schools with 67,728 students that were officially classified as fully or primarily virtual. However, schools' virtual designations are self-reported by each school, and are not audited or enforced by the state – thus creating some difficulties in identifying the appropriate universe of schools to study. As a result, there were schools reported as non-virtual, or for which no data at all was reported, whose education is indeed delivered primarily online. For example, two California Virtual Academy schools were listed with no data indicating their virtual status. Similarly, the 6,500-student Visions in Education school is classified as "Not Virtual" despite the fact that the school advertises itself as "Northern California's leading online high school and homeschool provider."[215] We therefore examined the remaining NCB schools (classified as primarily classroom, entirely non-virtual, or lacking data) in order to determine which appeared to primarily offer online education. This is not always an easy determination, as some schools offer online instruction

as one of several options and some homeschool charter schools provide parents with funds to purchase the curricular products of their choice (whether online or in paper) – in which case even school administrators may not know how many of their students are learning primarily online. The latter category includes schools that consider themselves to be homeschool programs rather than "online schools" because they don't directly offer online instruction. For our purposes, however, if the primary curriculum used by "homeschool" parents is an online application, we consider this to be a "primarily online" school. The primary goal of this study is to examine both the educational efficacy and the cost structure of online education in NCB charter schools; thus, our classification was based on how students receive their education rather than how the school self-classifies its pedagogy.

We carefully examined each school, using a number of factors to determine the extent to which students' education is delivered online, including:

1. the school's own description of its educational program.
2. the size of its student body (very large schools are more likely to be online, as the technology enables them to reach a more extensive population).
3. its physical presence (schools with significant classroom space are more likely to make use of tutoring or small-group instruction as a central part of an independent study curriculum).
4. whether it was part of a charter school chain whose other schools were known to offer primarily online instruction.
5. students' and parents' descriptions of their experience with the school (when this information was available).

In each case, we sought to make conservative judgments, considering schools to be "primarily online" only if the evidence strongly pointed to that conclusion; when the evidence was unclear, we erred on the side of excluding schools from the "primarily online" category. It is possible, of course, that some schools were misclassified. But based on the criteria described above, we are confident that the universe of schools identified provides an accurate measure of online education in NCB charter schools.

Ultimately, there were 51 schools that did not self-identify as virtual but whose educational program appeared to be primarily online. Adding these to our previous set of schools gave us a total of 156 schools with 114,964 students, comprising 49 percent of all NCB schools and two-thirds of NCB students. This is the universe of schools that serves as the primary focus of this study.

## *Measuring School Demographics and Academic Performance*

To measure these schools' demographic makeup and academic performance, we used the CDE's 2018-19 Dashboard data files for Enrollment, English Language Arts, Mathematics, College/Career Indicator, and Graduation Rate Indicator.[216] These provide both enrollment and performance data for the school as a whole and the following student subgroups: African

American, American Indian, Asian, Filipino, Hispanic/Latino, Pacific Islander, White, Multiple Races, English Learner, Socioeconomically Disadvantaged, Students with Disabilities, Foster youth, and Homeless youth. Using each school's unique CDS code, we matched schools in our universe with the data in these files. Data was sufficient for 136 of our 156 schools to make this match, and this is the universe of schools we drew on for our analysis of demographics and academic performance. The one performance measure we did not include is schools' suspension rate since it is hard to imagine what circumstances might lead to suspension in an online charter school, plus almost all the schools in our universe reported zero suspensions; thus, we concluded this was not a meaningful comparison.

Some charter school operators have asserted that graduation rates are an inaccurate measure of their schools' performance because they fail to account for the higher rate of student mobility in online charter schools.[217] To the extent this is true, the numbers reported both in the California Dashboard data and in national studies may underestimate these schools' true graduation rates. However, CREDO 2015 and Bueno 2020 found that online charter school students were not more highly-mobile than those in traditional public schools before they enrolled in an online charter school, and that it appears the increased mobility of online charter school students is an effect of those schools rather than a characteristic of their student populations. For this reason, we treat the reported graduation rates as accurate measures of the schools' performance.

In addition to reporting the raw data, we wanted to get an idea of how each school compared relative to the rest of the state. Until 2014, California published the Academic Progress Index, which included a statistical ranking of each school's performance against demographically similar schools, but this measure has been discontinued. We initially sought to recreate a similar statistical measure that could control for a broad range of factors while comparing schools' performance. In conversation with the California Department of Education, however, CDE informed us that they no longer have the data required to create such a measure and, further, that the state would not support efforts to recreate something like the API, as it had decided the multiple measures included in the Dashboard are preferable to condensing each school's performance into a single measure. To gauge each school's performance, then, we assessed each school in four ways. First, we compared each of the school's performance indicators to the statewide average for that indicator. Second, using the complete state datafiles, we constructed a table of ranked percentile scores for each indicator and identified each school's percentile rank for each of the indicators. Third, we examined each school's population distribution among the student subgroups identified in the Dashboard, and we compared each school's relative share of each subgroup to the state average. Finally, we compared educational outcomes for each subgroup to statewide average educational outcomes for that subgroup. In this manner, we have sought to provide a measure of each school's academic achievement relative to schools with demographically similar populations.

# Appendix B:

## Course Description – English 10A, California Connections Academy

https://www.connectionsacademy.com/california-online-school/curriculum/high-school/courses#, accessed 10-19-20.

## English 10 A

### Description:

This is the first of two courses that comprise English 10. In this course, the student will explore the timeless themes of world literature, including works from the Americas, Europe, and Africa. In reading these diverse selections, the student will gain a thorough understanding of fiction genres, including classics, contemporary fiction, poetry, and drama. The student will also read Mark Twain's *Adventures of Huckleberry Finn*. John Steinbeck's novella *Of Mice and Men* may be read instead of *Adventures of Huckleberry Finn*. In reading these American literature selections and creating a multimedia presentation, the student will understand longer works of literature in their historical and literary context. Writing instruction guides the student through the process of composing expository and analytical essays. It also provides opportunities for the student to write creatively; the student will compose a short story and poem.

Throughout the course, the student expands his vocabulary in context. The mastery of both critical vocabulary and grammar skills helps the student become a more thoughtful and effective reader and writer.

### Units:

- The Literature of the Americas
- The Literature of the Americas II
- Adventures of Huckleberry Finn
- Europe I
- Europe II
- Africa
- Semester Review and Exam

### Online Text/eBook

- eText Reading the World
- eText The Adventures of Huckleberry Finn
- eText The Importance of Being Earnest
- eText Writing with Power Grade 10

# Appendix C:

## Course Description – English 10A, Pearson Online Academy

https://www.pearsononlineacademy.com/curriculum/high-school/high-school-classes#, accessed 10-19-20.

## English 10 A

### Description:

This is the first of two courses that comprise English 10. In this course, the student will explore the timeless themes of world literature, including works from the Americas, Europe, and Africa. In reading these diverse selections, the student will gain a thorough understanding of fiction genres, including classics, contemporary fiction, poetry, and drama. The student will also read Mark Twain's *Adventures of Huckleberry Finn*. John Steinbeck's novella *Of Mice and Men* may be read instead of *Adventures of Huckleberry Finn*. In reading these American literature selections and creating a multimedia presentation, the student will understand longer works of literature in their historical and literary context. Writing instruction guides the student through the process of composing expository and analytical essays. It also provides opportunities for the student to write creatively; the student will compose a short story and poem.

Throughout the course, the student expands his vocabulary in context. The mastery of both critical vocabulary and grammar skills helps the student become a more thoughtful and effective reader and writer.

### Units:

- The Literature of the Americas
- The Literature of the Americas II
- Adventures of Huckleberry Finn
- Europe I
- Europe II
- Africa
- Semester Review and Exam

### Online Text/eBook

- eText Reading the World
- eText The Adventures of Huckleberry Finn
- eText The Importance of Being Earnest
- eText Writing with Power Grade 10

# Endnotes

[1] All numbers from California Department of Education. CDE lists 285 schools having received an NCB funding determination, with total enrollment of 150,899. But there were an additional 28 charter schools that classified themselves as either fully or primarily virtual, with total enrollment of 23,928. These schools were in between funding determinations but are, in fact, non-classroom-based schools, so they are included in our total figure.

[2] Review of "Approval of Charter School Numbers Assigned to Newly Established Charter Schools" on California State Board of Education agendas March 2014 - November 2020, https://www.cde.ca.gov/be/ag/ag.

[3] Harold Blume, "Cato Caves In," *LA Weekly*, November 25, 1998. http://www.laweekly.com/cato-caves-in; Nanette Asimov, "Charter school could be first to reap big profits," *San Francisco Chronicle*, June 10, 2001. The new law was Senate Bill 740, codified in Ed Code 47634.2.

[4] On the A3 charter school scandal, see Bianca Bruno, "Eleven charged in $50 Million Charter School Fraud Scheme," Courthouse News Reporter, May 29, 2019. https://www.courthousenews.com/eleven-charged-in-50-million-charter-school-fraud-scheme.

[5] Arne Duncan and Reed Hastings, "A Digital Promise to Our Nation's Children," *Wall Street Journal*, September 19, 2011. https://www.wsj.com/articles/SB10001424053111903927204576575101438816300.

[6] While digital education products are used in traditional public schools, they are most often used as supplementary products that teachers may assign to provide students with exercises to complement in-class instruction. Thus the education technology industry has long looked to charter schools as its most inviting market. See for example James Marshall Crotty, "Reed Hastings on How to Build a $20 Billion Education Juggernaut," Forbes, May 11, 2012. https://www.forbes.com/sites/jamesmarshallcrotty/2012/05/11/reed-hastings-on-what-it-takes-to-grow-a-20-billion-education-company/?sh=7ae60a9a4085.

[7] *Grand View Research, Education Technology Market Size, Share and Trends Analysis Report by Sector, by End User, By Type, By Region, and Segment Forecasts, 2020-2027*. July, 2020. https://www.grandviewresearch.com/industry-analysis/education-technology-market?utm_source=prnewswire&utm_medium=referral&utm_campaign=ict_20-july-20&utm_term=education-technology-market&utm_content=rd1.

[8] *California Education Code*. Section 43500, as ameded 2020. https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=EDC&division=3.&title=2.&part=24.5.&chapter=&article=.

[9] The one Dashboard measure not included here is the rate of student suspensions. Almost all online charter schools reported zero suspensions, and since it is difficult to imagine circumstances under which one might be expelled from an online charter school, we omitted this measure.

[10] California Department of Education, Academic Performance Calculation, https://www.cde.ca.gov/ta/ac/cm/acadindcal.asp. Accessed November 14, 2020.

[11] Students may demonstrate their readiness for college or a career through performance on the ELA and Math tests; AP exams, International Baccalaureate, College credit; a state seal of bilteracy; military science/leadership; or completion of a Career Technical Education Pathway. California Department of Education, College/Career Readiness Calculation. https://www.cde.ca.gov/ta/ac/cm/ccical.asp. Accessed November 14, 2020.

[12] Where there is no bar representing online charter schools, this indicates that there were too few members of a given demographic group taking the test in online charter schools, making it impossible to create a composite score for that measure. The one exception to this is the statewide average math score for white students. This score was 1.4 points above the standard, so close to zero that no bar shows up on a chart at the scale shown.

[13] Tara Garcia Mathewson and Sarah Butrymowicz, "Ed tech companies promise results, but their claims are often based on shoddy research," Hechinger Report, May 20, 2020. https://hechingerreport.org/ed-tech-companies-promise-results-but-their-claims-are-often-based-on-shoddy-research.

[14] Zimmer, R., Buddin, R, Chau, D., Gill, B., Guarino, C., Hamilton, L., Krop, C., McCaffrey, D., Sandler, M., & Brewer, D. (2003). Charter school operation and performance: Evidence from California. Santa Monica, CA: RAND Corporation.

[15] Gary Miron, Brian Horvitz and Charisse Gulosino, "Full-Time Virtual Schools: Enrollment, Student Characteristics, and Performance," in Alex Molnar, ed., Virtual Schools in the U.S. 2013. National Education Policy Center, 2013. https://nepc.colorado.edu/sites/default/files/nepc-virtual-2013.pdf; Gary Miron, Charisse Gulosino and Brian Horvitz, "Full-Time Virtual Schools," in Alex Molnar, ed., Virtual Schools in the U.S. 2014. National Education Policy Center, 2014. https://nepc.colorado.edu/sites/default/files/virtual-2014-all-final.pdf; Gary Miron and Charisse Gulosino, "Full-Time Virtual Schools," in Alex Molnar, ed., Virtual Schools in the U.S. 2015. National Education Policy Center, 2015; Gary Miron and Charisse Gulosino, Virtual Schools Report 2016. National Education Policy Center, 2016. https://nepc.colorado.edu/sites/default/files/publications/RB-Miron%20Virtual%20Schools.pdf; Gary Miron, Charisse Gulosino, Christopher Shank and Caryn Davidson, "Full-Time Virtual and Blended Schools," in Alex Molnar, ed., Virtual Schools in the U.S. 2016. National Education Policy Center, 2017. https://nepc.colorado.edu/sites/default/files/publications/RB%20Virtual%20Schools%202017_0.pdf; Gary Miron, Christopher Shank and Caryn Davidson, Full-Time Virtual and Blended Schools: Enrollment, Student Characteristics and Performance, National Education Policy Center, 2018. https://nepc.colorado.edu/sites/default/files/publications/RB%20Miron%20Virtual%20Schools%202018_0.pdf; and Gary Miron and Najat Elgeberi, "Full-Time Virtual and Blended Schools: Enrollment, Student Characteristics and Performance," in Alex Molnar, ed., Virtual Schools in the U.S. 2019. National Education Policy Center, 2019. https://nepc.colorado.edu/publication/virtual-schools-annual-2019.

[16] See for example Andrew Maul, Review of Urban Charter School Study 2015, National Education Policy Center, 2015. https://nepc.colorado.edu/%20thinktank/review-urban-charter-school.

[17] James L. Woodworth et al, *Online Charter School Study: 2015, Center for Research on Education Outcomes*, https://credo.stanford.edu/sites/g/files/sbiybj6481/f/online_charter_study_final.pdf.

[18] The authors note that these results were "consistent across racial-ethnic subpopulations and students in poverty."James L. Woodworth et al, *Online Charter School Study: 2015, Center for Research on Education Outcomes*, https://credo.stanford.edu/sites/g/files/sbiybj6481/f/online_charter_study_final.pdf.

[19] CREDO Director Macke Raymond, quoted in Benjamin Herold, "Cyber Charters Have 'Overwhelming Negative Impact,' CREDO Study Finds," Education Week, October 27, 2015. http://blogs.edweek.org/edweek/DigitalEducation/2015/10/CREDO_online_charters_study.html.

[20] Education Commission of the States, *What State Policymakers Need to Know about Funding Virtual Charter Schools*, The Progress of Education Reform vol. 15, no. 1, February 2014. https://www.ecs.org/clearinghouse/01/11/11/11111.pdf.

[21] California Department of Education, *Average Salaries and Expenditure Percentage.* https://www.cde.ca.gov/fg/fr/sa/cefavgsalaries.asp. Accessed November 22, 2020. The most recent year in which Connections Academy reports teacher salaries is 2017-18, when its average teacher was paid $50,500. Twelve-month inflation for the Los Angeles metropolitan area in 2018-19 was 3.3%,; if teachers' salaries increased accordingly the average would have been $52,166 in 2018-19. California Connections Academy Southern California School Accountability Report Card, Reported Using Data from the 2018-19 School year. Provided to the author by California Online Public Schools in response to public records request. Consumer Price Index, Los Angeles Area – October 2020. U.S. Bureau of Labor Statistics, Western Information Office. https://www.bls.gov/regions/west/news-release/consumerpriceindex_losangeles.htm. Accessed November 22, 2020.

[22] 2019-20 enrollment for California Connections Academy schools is from California Department of Education, *California School Directory,* https://www.cde.ca.gov/schooldirectory. Accessed December 19, 2020.

[23] www.pearsononlineacademy.com. Charter schools are not permitted under the state laws of Montana, Nebraska, North Dakota, South Dakota and Vermont.

[24] For instance, California Connections Academy's High School curriculum (https://www.connectionsacademy.com/california-online-school/curriculum/high-school/courses#/, accessed October 19, 2020) is nearly identical with that of Pearson Online Academy (https://www.pearsononlineacademy.com/curriculum/high-school/high-school-classes#/, accessed October 19, 2020). If one clicks on any of the class titles, the more detailed descriptions are also identical.

[25] Telephone communication with Jennifer Smith, October 16, 2020.

[26] This figure does not include federal funding. Based on 2018-19 data from unaudited actual financial statements, filed on SACS Alternate form, for the four Connections Academy schools active in that school year (North Bay, Ripon, Central and Capistrano). In 2018-19 these four schools had combined total ADA of 5,514 and total state and local funding of $55.5 million, averaging. Total of $10,062 in state and local funding per ADA. LCFF funding was increased by a COLA factor of 3.26% in 2019-20 and 0% in 2020-21. (https://www.cde.ca.gov/fg/aa/pa/lcffcola.asp.). Thus, current state and local funding is estimated as 2018-19 funding multiplied by 1.0326.

[27] Tuition fees reported by Pearson Online Academy, telephone communication with Jennifer Smith, Oct 12, 2020.

[28] The true number may be even higher. Pearson provides a 5% discount for students who register before July 31 of a given year. (https://www.pearsononlineacademy.com/enroll/private-school-tuition) Since CDE notifies schools of their Principal Apportionment (the monthly funding they will receive) as of July 20 of each year (https://www.cde.ca.gov/fg/aa/pa/papayschedule.asp), this would seem to qualify for the 5% discount. In that case, HS tuition would be $6,536 per year, and the difference between per-pupil funding provided by California taxpayers and that required for private tuition would be $3,854.

[29] As of 2019-20, there were six Connections Academy schools with total enrollment of 6,377. https://www.cde.ca.gov/schooldirectory.

[30] The cost structure of education technology vendors is not subject to public records requirements under current law. Thus, if a charter school contracts with a curriculum provider or management company – even if this company is affiliated with the school's parent corporation -- the public can see the contract between the school and its provider, but has no way of knowing how the price charged relates to the actual cost of the products and services in question – or if the vendor provides these same products and services to other customers at a significantly lower price.

[31] California Department of Education, *Public Schools and Districts Data File*, https://www.cde.ca.gov/ds/si/ds/pubschls.asp. October 1, 2020.

[32] See Gordon Lafer, *Breaking Point: The Cost of Charter Schools for Public School Districts*, In The Public Interest, 2018. https://www.inthepublicinterest.org/wp-content/uploads/ITPI_Breaking_Point_May2018FINAL.pdf.

[33] All numbers from California Department of Education. CDE lists 285 schools as having received an NCB funding determination, with total enrollment of 150,899 students. But there were an additional 28 charter schools that classified themselves as either fully or primarily virtual, with total enrollment of 23,928. These schools were in between funding determinations but are, in fact, nonclassroom-based schools, so they are included in our total figure.

[34] Review of "Approval of Charter School Numbers Assigned to Newly Established Charter Schools" on California State Board of Education agendas March 2014 - November 2020, https://www.cde.ca.gov/be/ag/ag.

[35] Harold Blume, "Cato Caves In," LA Weekly, November 25, 1998, http://www.laweekly.com/cato-caves-in; Nanette Asimov, "Charter school could be first to reap big profits," San Francisco Chronicle, June 10, 2001, https://www.sfgate.com/education/article/Charter-school-could-be-first-to-reap-big-profits-2910312.php; The new law was Senate Bill 740, codified in Ed Code 47634.2.

[36] On the A3 charter school scandal, see Bianca Bruno, "Eleven charged in $50 Million Charter School Fraud Scheme," Courthouse News Reporter, May 29, 2019, https://www.courthousenews.com/eleven-charged-in-50-million-charter-school-fraud-scheme.

[37] *California Education Code*, Section 47612.5, http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=47612.5.

[38] Arne Duncan and Reed Hastings, "A Digital Promise to Our Nation's Children," Wall Street Journal, September 19, 2011, https://www.wsj.com/articles/SB10001424053111903927204576575101438816300.

[39] While digital education products are used in traditional public schools, they are most often used as supplementary products that teachers may assign to provide students with complementary exercises to in-class instruction. Thus, the education technology industry has long looked to charter schools as its most inviting market. See for example James Marshall Crotty, "Reed Hastings on How to Build a $20 Billion Education Juggernaut," Forbes, May 11, 2012, https://www.forbes.com/sites/jamesmarshallcrotty/2012/05/11/reed-hastings-on-what-it-takes-to-grow-a-20-billion-education-company/?sh=7ae60a9a4085.

[40] Grand View Research, "Education Technology Market Size, Share and Trends Analysis Report by Sector, by End User, By Type, By Region, and Segment Forecasts, 2020-2027," Grand View Research, July 2020, https://www.grandviewresearch.com/industry-analysis/education-technology-market?utm_source=prnewswire&utm_medium=referral&utm_campaign=ict_20-july-20&utm_term=education-technology-market&utm_content=rd1.

[41] *California Education Code*, Section 43500, as amended 2020, https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=EDC&division=3.&title=2.&part=24.5.&chapter=&article=.[42]

[43] The one Dashboard measure not included here is the rate of student suspensions. Almost all online charter schools reported zero suspensions, and since it is difficult to imagine circumstances under which one might be expelled from an online charter school, we omitted this measure.

[44] California Department of Education, Academic Performance Calculation, https://www.cde.ca.gov/ta/ac/cm/acadindcal.asp (accessed November 14, 2020).

[45] Students may demonstrate their readiness for college or a career through performance on the ELA and Math tests; AP exams, International Baccalaureate, College credit; a state seal of biliteracy; military science/leadership; or completion of a Career Technical Education Pathway. California Department of Education, College/Career Readiness Calculation, https://www.cde.ca.gov/ta/ac/cm/ccical.asp (accessed November 14, 2020). Some charter operators have asserted that graduation rates are an inaccurate measure of their schools' performance because they fail to account for the higher rate of student mobility in online charter schools. See, for example, Katrina Abston, "Response to In The Public Interest Report," California Virtual Academies, February 26, 2015, https://cava.k12.com/response-to-in-the-public-interest-report.html. To the extent this is true, the numbers reported both in the California Dashboard data and in national studies may underestimate these schools' true graduation rates. However, studies discussed elsewhere in this report have found that online charter students were not more highly mobile than those in traditional public schools before they enrolled in an online charter school, and that it appears the increased mobility of online charter students may be an effect of those schools rather than a characteristic of their student populations (see CREDO 2015 and Bueno 2020). For this reason, we treat the reported graduation rates as accurate measures of the schools' performance.

[46] Where there is no bar representing online charter schools, this indicates that there were too few members of a given demographic group taking the test in online charter schools, making it impossible to create a composite score for that measure. The one exception to this is the statewide average math score for white students. This score was 1.4 points above the standard, so close to zero that no bar shows up on a chart at the scale shown.

[47] Eligibility and performance measures for alternative charter schools can be found at California Department of Education, Dashboard Alternative School Status (DASS), https://www.cde.ca.gov/ta/ac/dass.asp (accessed November 15, 2020).

[48] *California Education Code*, Section 52052(d), establishes two types of alternative schools. The first kind is explicitly defined in state law and required to be operated. These include schools for students in the juvenile justice system, county-run special education schools, schools for pregnant or parenting students, and other students facing specific challenges. These schools do not recruit students from outside the populations they have been established to serve. For instance, in the alternative schools run by the San Bernardino County of Education, the only students who enroll are those referred to the school by either a school administrator or a probation officer. (Interview with Yvonne Molles, Early Childhood Special Education Teacher and president of San Bernardino County Teachers Association, November 12, 2020.) By contrast, alternative online charter schools advertise themselves to the public, often without identifying themselves as an alternative school. (See, for example, the Delta https://www.deltacharter.net or Altus https://www.altus4u.com/about chain of schools.) By law, alternative schools other than those established by the state to serve specific purposes are permitted to enroll non-disadvantaged students as up to 30% of their student body. California Department of Education, DASS Eligibility Criteria, https://www.cde.ca.gov/ta/ac/eligibilitycriteria.asp (accessed November 15, 2020).

[49] *California Education Code*, Section 51745(c). The law is intended to ensure that Students with Disabilities are not being inappropriately assigned to Independent Study where their IEPs cannot be implemented. As this report documents, students with more severe disabilities are underrepresented in nonclassroom-based charter schools, however, it is widely acknowledged by government agencies and the charter industry that discriminatory practices that exclude Students with Disabilities from nonclassroom-based charters is not legal, and various entities have provided guidance to charter schools on the requirements for non-discriminatory admissions processes. For example, the California Charter Schools Association resource library provides this guidance to their members here: http://library.ccsa.org/2011/09/non-classroom-based-charter-schools-and-special-education-faqs.html)

[50] Stephen Lipscomb, "Special Education Financing in California," Public Policy Institute of California, August 2009, https://www.ppic.org/content/pubs/report/R_809SLR.pdf. This report identifies "severe disabilities" as including autism, visual impairment, deaf, deaf-blind, orthopedic impairment, emotional disturbance, intellectual disability, traumatic brain injury, and multiple disabilities. It identifies "non-severe disabilities" as including "learning disabilities, speech or language impairments, and other health impairments."

[51] Data on Special Education enrollment by detailed category of disability was provided to the author by CDE Special Education Division, Data, Evaluation and Analysis Unit, October 2020.

[52] Ron Zimmer et al., *Charter school operation and performance: Evidence from Californi*a (Santa Monica, CA: RAND Corporation, 2003).

[53] The study also found that K12 Inc. schools' per-pupil spending for students with special needs was less than half of the state average in states where K12 schools were located. This suggests that even among a smaller population of students with special needs, K12 enrolls those with comparatively mild needs.

[54] Some charter operators have asserted that graduation rates are an inaccurate measure of their schools' performance because they fail to account for the higher rate of student mobility in online charter schools. See, for example, Katrina Abston, "Response to In The Public Interest Report," California Virtual Academies, February 26, 2015, https://cava.k12.com/response-to-in-the-public-interest-report.html. To the extent this is true, the numbers reported both in the California Dashboard data and in national studies may underestimate these schools' true graduation rates. However, studies discussed elsewhere in this report have found that online charter students were not more highly mobile than those in traditional public schools before they enrolled in an online charter school, and that it appears the increased mobility of online charter students may be an effect of those schools rather than a characteristic of their student populations (see CREDO 2015 and Bueno 2020). For this reason, we treat the reported graduation rates as accurate measures of the schools' performance.

[55] Gary Miron and Jessica Urschel, Understanding and Improving Full-Time Virtual Schools, National Education Policy Center, 2012, https://nepc.colorado.edu/sites/default/files/nepcrbk12miron.pdf.

[56] Gary Miron, Brian Horvitz and Charisse Gulosino, "Full-Time Virtual Schools: Enrollment, Student Characteristics, and Performance," in Alex Molnar, ed., Virtual Schools in the U.S. 2013, National Education Policy Center, 2013, https://nepc.colorado.edu/sites/default/files/nepc-virtual-2013.pdf; Gary Miron, Charisse Gulosino and Brian Horvitz, "Full-Time Virtual Schools," in Alex Molnar, ed., Virtual Schools in the U.S. 2014, National Education Policy Center, 2014, https://nepc.colorado.edu/sites/default/files/virtual-2014-all-final.pdf; Gary Miron and Charisse Gulosino, "Full-Time Virtual Schools," in Alex Molnar, ed., Virtual Schools in the U.S. 2015, National Education Policy Center, 2015; Gary Miron and Charisse Gulosino, Virtual Schools Report 2016, National Education Policy Center, 2016, https://nepc.colorado.edu/sites/default/files/publications/RB-Miron%20Virtual%20Schools.pdf; Gary Miron, Charisse Gulosino, Christopher Shank and Caryn Davidson, "Full-Time Virtual and Blended Schools," in Alex Molnar, ed., Virtual Schools in the U.S. 2016, National Education Policy Center, 2017, https://nepc.colorado.edu/sites/default/files/publications/RB%20Virtual%20Schools%202017_0.pdf; Gary Miron, Christopher Shank and Caryn Davidson, Full-Time Virtual and Blended Schools: Enrollment, Student Characteristics and Performance, National Education Policy Center, 2018, https://nepc.colorado.edu/sites/default/files/publications/RB%20Miron%20Virtual%20Schools%202018_0.pdf; Gary Miron and Najat Elgeberi, "Full-Time Virtual and Blended Schools: Enrollment, Student Characteristics and Performance," in Alex Molnar, ed., Virtual Schools in the U.S. 2019, National Education Policy Center, 2019, https://nepc.colorado.edu/publication/virtual-schools-annual-2019.

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[58] Office of the State Auditor, Online education: Department of Education Performance audit, 2006, Denver, CO; Iowa Department of Education, Legislative Report: Virtual Schools in Iowa Annual Report, 2017, Des Moines, IA, https://www.educateiowa.gov/documents/legislativeinformation/2017/01/virtual-schools-legislative-report-january-31-2017-2; Office of the Legislative Auditor, Evaluation report: K-12 Online Learning, 2011, St. Paul, MN; Legislative Education Study Committee, Financial Responsibility, Governance, and Student Outcomes of Virtual Charter Schools, New Mexico Legislative Finance Committee, December 2017; June Ahn and Andrew McEachin, "Student Enrollment Patterns and Achievement in Ohio's Online Charter Schools," Educational Researcher, 46(1), 44-57, https://journals.sagepub.com/doi/full/10.3102/0013189X17692999.

[59] Office of the State Auditor, *Online education: Department of Education Performance* audit, 2006, Denver, CO.

[60] Legislative Education Study Committee, *Financial Responsibility, Governance, and Student Outcomes of Virtual Charter Schools*, New Mexico Legislative Finance Committee, December 2017.

[61] Chan-Zuckerberg Initiative, Grants, https://chanzuckerberg.com/grants-ventures/grants (accessed November 14, 2020). CREDO's 2015 national study of online charter schools was supported by funding from the Walton Family Foundation. James L. Woodworth et al, Online Charter School Study: 2015, Center for Research on Education Outcomes, https://credo.stanford.edu/sites/g/files/sbiybj6481/f/online_charter_study_final.pdf.

[62] See for example Andrew Maul, *Review of Urban Charter School Study 2015*, National Education Policy Center, 2015, https://nepc.colorado.edu/%20thinktank/review-urban-charter-school.

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[64] The authors note that these results were "consistent across racial-ethnic subpopulations and students in poverty."James L. Woodworth et al, Online Charter School Study: 2015, Center for Research on Education Outcomes, https://credo.stanford.edu/sites/g/files/sbiybj6481/f/online_charter_study_final.pdf.

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[68] Carycruz Bueno, "Bricks and Mortar vs. Computers and Modems: The Impacts of enrollment in K-12 Virtual Schools," *Education Working Paper No. 20-250*, Annenberg Institute at Brown University, 2020, https://www.edworkingpapers.com/sites/default/files/ai20-250.pdf.

[69] Brian Fitzpatrick et al, "Virtual Illusion: Comparing Student Achievement and Teacher and Classroom Characteristics in Online and Brick-and-Mortar Charter Schools," Educational Researcher, March 2020, https://journals.sagepub.com/doi/10.3102/0013189X20909814.

[70] For instance, this is the argument made by the Pearson corporation in defense of its Connections Academy subsidiary in "Connections Academy Efficacy Research Report," Pearson Inc., 2018, https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/efficacy-and-research/reports/audited/Connections-Academy-research-report.pdf. Surprisingly, Pearson staff report that "we discovered no studies that were completed in the last five years that explored the impact of Connections Academy on learner outcomes" despite the existence of multiple such studies carried out by CREDO, state authorities, and independent academics. Pearson has not released the raw data or complete methodology used in its assessment, but its staff report that student mobility was weighted more heavily than any other factor – including income, race/ethnicity, and disability. With this adjustment, Pearson reported that there was no statistically significant difference in math or reading scores between Connections Academy students and those in traditional brick-and-mortar schools.

[71] Eric Hanushek, John Kain and Steven Rivkin, "Disruption versus Tiebout improvement; the costs and benefits of switching school," *Journal of Public Economics* 88, 2004, http://hanushek.stanford.edu/sites/default/files/publications/Hanushek%2BKain%2BRivkin%202004%20JPubE%2088%289%29.pdf.

[72] Pearson's "Connections Academy Efficacy Research Report," 2018, Figure 1, reports that the most common reasons for students to enter an online charter schools are "require or want greater flexibility," "want a change from their local school," "want a safe learning environment," or "parents want more involvement with child's education."

[73] CREDO 2015, p. 16.

[74] Carycruz Bueno, "Bricks and Mortar vs. Computers and Modems: The Impacts of enrollment in K-12 Virtual Schools," *Education Working Paper No. 20-250*, Annenberg Institute at Brown University, 2020, https://www.edworkingpapers.com/sites/default/files/ai20-250.pdf.

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[81] See "Savvas SuccessMaker Math and Literacy Program for Grades K-8: Research & Results," https://www.savvas.com/index.cfm?locator=PS2qJ3&PMDBSOLUTIONID=6724&PMDBSITEID=2781&%20PMDBCATEGORYID=24901&PMDBSUBSOLUTIONID=&PMDBSUBJECTAREAID=&PMDBSUBCATE%20GORYID=&PMDbProgramID=143493&elementType=asset&elementID=Custom%20Bucket%208.

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[103] Oklahoma's most recent state report card showed Connections Academy receiving D's for two years running, while K12 Inc.'s school received consecutive F's. Oklahoma State Department of Education, *Oklahoma Charter School Report 2019*, https://sde.ok.gov/sites/default/files/2019%20Charter%20Report%20Final.pdf (accessed November 16, 2020). Massachusetts' Connections Academy school was targeted for intervention in 2019 for failing to meet expectations in science, math, and elementary and middle school English. Massachusetts Department of Education, *School and District Profiles: TEC Connections Academy Commonwealth Virtual School*, https://profiles.doe.mass.edu/general/general.aspx?topNavID=1&leftNavId=100&orgcode=39020900& orgtypecode=6 (accessed November 16, 2020). Oregon Connections Academy (recently renamed Oregon Charter Academy) was placed on the state's federally mandated improvement list following a record of poor graduation rates and chronic absenteeism. Whmacken2013, "Oregon Connections Academy/Oregon Charter Academy: Another Failing Online Charter School," *Thinking Oregon*, October 25, 2019, https://thinkingoregon.org/2019/10/25/oregon-connections-academy-another-failing-online- school (accessed November 16, 2020). In 2018, both K12 Inc. and Connections Academy's Idaho schools incurred academic sanctions and saw their charter renewals conditioned on improved performance. Devin Bodkin, "Thirteen Public Charter Schools Incur Academic Sanctions," Idaho News, April 9, 2018, https://www.idahoednews.org/news/idaho-virtual-schools-earn-low-marks. In 2020, the only online charter school in Chicago – the Chicago Virtual Charter School, opened in 2006 and operated by K12 Inc. until 2018 – was closed by Chicago Public Schools, due to a combination of poor academic performance and questionable financial practices. Hanna Leone, "This Chicago charter school is the state's first and only mostly online public school. Here's why it may be on the verge of closing." *Chicago Tribune*, February 4, 2020, https://www.chicagotribune.com/news/breaking/ct-chicago-virtual-charter-school- cps-online-learning-20200204-ghegwerqpjcbxlmwov6jmtbzwm-story.html; Yana Kunichoff, "Illinois state board reject please to save virtual school and another Chicago charter school," *Chalkbeat*, March 18, 2020, https://chicago.chalkbeat.org/2020/3/18/21196047/illinois-state-board-rejects-pleas-to-save-virtual- school-and-another-chicago-charter-school.

[104] "Major Provider of Virtual Learning Services to Public Schools Removes Unconstitutional Religious Content," *American Atheists*, September 3, 2020, https://www.atheists.org/2020/09/edgenuity-removes- religious-content-online-public-school-classes.

[105] Katrina Lim, "Company deflects responsibility for controversial quiz question," *WQOW*, September 16, 2020, https://wqow.com/2020/09/16/quiz-question-raises-concerns-in-chippewa-falls-area-unified- school-district.

[106] Kristen Taketa, "One San Diego school district drops an online program over offensive content; another sticks with it," *San Diego Union-Tribune*, September 14, 2020, https://www.sandiegouniontribune.com/news/education/story/2020-09-14/one-san-diego-district- drops-online-program-over-offensive-content-another-sticks-with-it.

[107] Acellus Academy, "Roger Billings Scholarship Program," https://www.acellusacademy.com/online- high-school/#hstuition.

[108] Petition started by Heather Moselle, "Opposing Acellus for Hawaii Public Education," updated December 2020, https://www.change.org/p/hawaii-department-of-education-opposing-acellus-for-hawaii-public- education?recruiter=962262180&utm_source=share_petition&utm_medium=twitter&utm_campaign=sha re_petition&recruited_by_id=89220d70-7922-11e9-9c01-75ea6e58f830&pt=AVBldGl0aW9uANLhcQEAAAAAX0Bp2X1tjLdkMDhiMTY0OA%3D%3D.

[109] Jared Newman, "The extremely weird story of a remote-learning company that's making parents livid," *Fast Company*, September 14, 2020, https://www.fastcompany.com/90549530/the-extremely-weird- story-of-a-remote-learning-company-thats-making-parents-livid.

[110] This and all following descriptions of the review findings are from Office of Curriculum and Instructional Design, Hawai'i State Department of Education, Instructional Content Review of Acellus Accelerator, Final Report, October 2020, http://www.hawaiipublicschools.org/DOE%20Forms/Parent%20Communication/Summary%20Report%20Review%20of%20Acellus.pdf.

[111] Suevon Lee, "Hawaii Board Of Education Votes To End Controversial Distance Learning Program," *Honolulu Civil Beat*, October, 15, 2020, https://www.civilbeat.org/2020/10/hawaii-board-of-education- votes-to-end-controversial-distance-learning-program.

[112] For instance, an Ohio school district reported finding racist, sexist, or anti-Islamic content in 12 different Acellus modules and cancelled its contract. Alissa Widman Neese, "Westerville, Upper Arlington schools cut ties with online learning companies," *The Columbus Dispatch*, September 4, 2020, https://www.dispatch.com/story/news/local/2020/09/04/westerville-upper-arlington-schools-cut- ties-with-online-learning-companies/113664002.

[113] Statement by Tony Thurmond, State Superintendent of Public Instruction, California Department of Education, "Concerns Regarding Acellus Online Learning Program," September 21, 2020, https://www.cde.ca.gov/nr/el/le/yr20ltr0921.asp; Sharon Martin, "CUSD to drop Acellus online curriculum after claims of racist, outdated content: Complaints of racist, offensive material prompted move," *Chico Enterprise-Record*, August 28, 2020, https://www.chicoer.com/2020/08/28/cusd-to-drop- acellus-online-curriculum-after-claims-of-racist-outdated-content; Jared Newman, "The extremely weird story of a remote-learning company that's making parents livid," Fast Company, September 14, 2020, https://www.fastcompany.com/90549530/the-extremely-weird-story-of-a-remote-learning-company- thats-making-parents-livid; Kristen Taketa, "One San Diego school district drops an online program over offensive content; another sticks with it," *San Diego Union-Tribune*, September 14, 2020, https://www.sandiegouniontribune.com/news/education/story/2020-09-14/one-san-diego-district- drops-online-program-over-offensive-content-another-sticks-with-it.

[114] Press release by K12 Inc., "K12 Inc. Reports Full Year Fiscal 2019 Revenues Increase 10.7% to $1.026 Billion," *Business Wire*, August 2019, http://news.stridelearning.com/k12-inc-reports-full-year-fiscal- 2019-revenues-increase-10-7-to-1-016-billion.

[115] Florina Rodov, "Online Charter Schools NO Solution in a Pandemic," *LA Progressive*, September 17, 2020.

[116] California Code of Regulations, Title 5, Section 11963.2 – reaffirms that the default determination of funding that should be approved by the SBE "shall be 70%" unless a greater or lesser percentage is determined appropriate.

[117] California Department of Education, *Nonclassroom-Based Funding Determinations: State Board of Education-approved, Nonclassroom-Based Funding Determination Requests by Fiscal Year*, fiscal years 2011-12 through 2020-21, https://www.cde.ca.gov/sp/ch/nclrbifunddet.asp (accessed November 22, 2020). During this period, CDE made 994 funding determinations for nonclassroom-based schools, of which 956 was awarded 100% funding. On the scandals leading to new legislation in 2001, see Harold Blume, "Cato Caves In," *LA Weekly*, November 25, 1998, http://www.laweekly.com/cato-caves-in; Nanette Asimov, "Charter school could be first to reap big profits," *San Francisco Chronicle*, June 10, 2001, https://www.sfgate.com/education/article/Charter-school-could-be-first-to-reap-big-profits- 2910312.php; Senate Bill 740, codified in Ed Code 47634.2.

[118] Pearson Online Academy, Online Private School for Grades K-12, www.pearsononlineacademy.com. Charter schools are not permitted under the state laws of Montana, Nebraska, North Dakota, South Dakota, and Vermont.

[119] For instance, California Connections Academy's High School curriculum, https://www.connectionsacademy.com/california-online-school/curriculum/high-school/courses (accessed October 19, 2020) is nearly identical with that of Pearson Online Academy, https://www.pearsononlineacademy.com/curriculum/high-school/high-school-classes (accessed October 19, 2020). After clicking on any of the class titles, the more detailed descriptions are also identical.

[120] Telephone communication with Jennifer Smith, October 14, 2020.

[121] Telephone communication with Jennifer Smith, October 16, 2020.

[122] This figure does not include federal funding. Based on 2018-19 data from unaudited actual financial statements, filed on SACS Alternate form, for the four Connections Academy schools active in that school year (North Bay, Ripon, Central, and Capistrano). In 2018-19 these four schools had combined total ADA of 5,514 and total state and local funding of $55.5 million, averaging a total of $10,062 in state and local funding per ADA. LCFF funding was increased by a COLA factor of 3.26% in 2019-20 and 0% in 2020-21, https://www.cde.ca.gov/fg/aa/pa/lcffcola.asp. Thus, current state and local funding is estimated as 2018-19 funding multiplied by 1.0326.

[123] Tuition fees reported by Pearson Online Academy, telephone communication with Jennifer Smith, Oct 12, 2020.

[124] The true number may be even higher. Pearson provides a 5% discount for students who register before July 31 of a given year. Since CDE notifies schools of their Principal Apportionment (the monthly funding they will receive) as of July 20 of each year, this would seem to qualify for the 5% discount. In that case, high school tuition would be $6,536 per year, and the difference between per-pupil funding provided by California taxpayers and that required for private tuition would be $3,854. Pearson Online Academy, "Pearson Online Academy Private School Tuition and Discounts," https://www.pearsononlineacademy.com/enroll/private-school-tuition; California Department of Education, *Principal Apportionment Payment Schedule*, https://www.cde.ca.gov/fg/aa/pa/papayschedule.asp.

[125] As of 2019-20, there were six Connections Academy schools with total enrollment of 6,377. California Department of Education, *California School Directory*, https://www.cde.ca.gov/schooldirectory.

[126] The cost structure of education technology vendors is not subject to public records requirements under current law. Thus, if a charter school contracts with a curriculum provider or management company – even if this company is affiliated with the school's parent corporation – the public can see the contract between the school and its provider, but has no way of knowing how the price charged relates to the actual cost of the products

and services in question or if the vendor provides these same products and services to other customers at a significantly lower price.

[127] See, for example, the American Legislative Exchange Council's "Virtual Public Schools Act," https://www.alec.org/model-policy/the-virtual-public-schools-act/. K12 Inc. has long been active in ALEC.

[128] Alex Molnar et al., *Virtual Schools in the U.S. 2019*, National Education Policy Center, May 2019, https://nepc.colorado.edu/publication/virtual-schools-annual-2019.

[129] Education Commission of the States, *What State Policymakers Need to Know about Funding Virtual Charter Schools*, The Progress of Education Reform vol. 15, no. 1, February 2014, https://www.ecs.org/clearinghouse/01/11/11/11111.pdf.

[130] Pennsylvania Department of the *Auditor General, Bureau of School Audits, Charter and Cyber Charter Education Funding Reform Should Save Taxpayers $365 Million Annually*, June 20, 2012, https://www.paauditor.gov/Media/Default/Reports/CyberCharterSpecialReport201206.pdf.

[131] Bruce Baker and Justin Bathon. *Financing Online Education and Virtual Schooling: A Guide for Policymakers and Advocates*, Boulder, CO: National Education Policy Center, October 15, 2013, http://nepc.colorado.edu/publication/financing-online-education (accessed March 13, 2020).

[132] Legislative Education Study Committee, *Financial Responsibility, Governance and Student Outcomes of Virtual Charter Schools, New Mexico Legislative Finance Committee*, December 2017, https://www.nmlegis.gov/handouts/ALESC%20121817%20Item%205%20Financial%20Responsibility,%20Governance,%20and%20Student%20Outcomes%20of%20Virtual%20Charter%20Schools.pdf (accessed November 22, 2020).

[133] Education Commission of the States, *What State Policymakers Need to Know about Funding Virtual Charter Schools*, The Progress of Education Reform vol. 15, no. 1, February 2014, https://www.ecs.org/clearinghouse/01/11/11/11111.pdf. In 2019-20, average per-pupil funding for Georgia's brick-and-mortar charter schools was $10,017, while average per-pupil funding for the state's virtual schools was $7,256 (or 27.5% less). State Charter Schools Commission of Georgia, *State Charter Funding*, https://scsc.georgia.gov/resources-guidance/guidance/state-charter-funding (accessed November 8, 2020).

[134] California Department of Education, *Average Salaries and Expenditure Percentage*, https://www.cde.ca.gov/fg/fr/sa/cefavgsalaries.asp (accessed November 22, 2020). The most recent year in which Connections Academy reports teacher salaries is 2017-18, when its average teacher was paid $50,500. Twelve-month inflation for the Los Angeles metropolitan area in 2018-19 was 3.3%; if teachers' salaries increased accordingly the average would have been $52,166 in 2018-19. *California Connections Academy Southern California School Accountability Report Card, Reported Using Data from the 2018-19 School year,* provided to the author by California Online Public Schools in response to public records request; Consumer Price Index, Los Angeles Area – October 2020. U.S. Bureau of Labor Statistics, Western Information Office, https://www.bls.gov/regions/west/news- release/consumerpriceindex_losangeles.htm (accessed November 22, 2020).

[135] Quoted in James Marshall Crotty, "Reed Hastings On How to Build a $20 Billion Education Juggernaut," *Forbes*, May 11, 2012, https://www.forbes.com/sites/jamesmarshallcrotty/2012/05/11/reed-hastings-on-what-it-takes-to-grow-a-20-billion-education-company/?sh=accb9f740854.

[136] California Department of Education, Charter Schools Division, *Nonclassroom-Based Funding Determination Form, Instruction Guide*, Fiscal Year 2019-20, https://www.cde.ca.gov/sp/ch/nclrbifunddet.asp (accessed November 22, 2020).

[137] *Capistrano Connections Academy 2018-19 Budget, Connections Academy of California LLC Fee Schedule*, provided to the author in response to public record requests.

[138] Pearson Corporation, "Pearson 2018 Preliminary Results (Unaudited)," February 2019, https://www.pearson.com/content/dam/one-dot-com/one-dot-com/global/Files/news/news- annoucements/2019/2018-Prelim-Results-Press-Release-financials-20190222.pdf.

[139] Budget and average daily enrollment data from Capistrano Connections Academy 2019-20 budget. California Online Public Schools Board meeting package, June 18, 2019, provided to the author by CalOPS in response to public records request.

[140] San Diego Unified School District, Board of Education 2019-20 Budget Adoption Hearing, Hune 25, 2019. San Diego Unified School District's 2019-20 enrollment is reported as 122,916 by the California Department of Education, http://www.ed-data.org/district/San-Diego/San-Diego-Unified. Average Daily Attendance had not yet been reported as of this report's writing, but was estimated at 96,489 based on the average relationship between enrollment and ADA over the previous four years.

[141] Acellus Academy, "Roger Billings Scholarship Program," https://www.acellusacademy.com/online-high-school/#hstuition.

[142] Connecting Waters curriculum providers are identified at https://www.connectingwaters.org/omlbriefdescript (accessed November 22, 2020). Funding and enrollment data are from *Enrollment and Concentration Grant Funding for 2018-19, 2018-19 P2 Charter School LCFF Target Entitlement*, provided to the author by California Department of Education.

[143] Based on terms of contract agreement between Edgenuity and Red Wing, Minnesota schools. Goodhue County Education District #6051, *Online Learning Platform Review Team – Update and Recommendation*, March 18, 2020, https://meetings.boardbook.org/Public/Agenda/971?meeting=137096.

[144] The Altus schools describe Edgenuity as "our formal education program of online curriculum," https://audeo2.com/all-about-audeo/online-learning-with-edgenuity. Funding and enrollment data are from *Enrollment and Concentration Grant Funding for 2018-19, 2018-19 P2 Charter School LCFF Target Entitlement*, provided to the author by California Department of Education.

[145] Fee schedule and invoices for Connections Academy schools in various states were provided to the author in response to public records requests.

[146] Oklahoma Connections Academy received total funding of $8.02 million in FY 2019. Oklahoma State Department of Education, *2019 and 2018 Oklahoma Connections Academy Revenue Comparison*

*Report*, https://sdeweb01.sde.ok.gov/OCAS/NormalPages/Common/ReportsPassThrough.aspx?RepID=RevenueComparison&ycd=1&Year=2019&CountyCode=55&DistrictCode=Z003. Average daily enrollment that year was 1,186, https://sde.ok.gov/average-daily-membership-adm-and-average-daily-attendance-ada. Thus funding per-ADA was $6,266. The school's contract with Connections Education calls for it to pay 11.5% of total revenue for these combined services, or $720 per ADA. California Connections Academy per-ADA funding averaged $10,396 for the four Connections Academy schools in operation in 2018-19, and these schools' contracts call for 11% of total revenues to be paid for the combination of these services, or an average of $1,143. Funding and enrollment data are from *Enrollment and Concentration Grant Funding for 2018-19, 2018-19 P2 Charter School LCFF Target Entitlement*, provided to the author by California Department of Education. Schedule of Fees for California Connections Academy schools' contracts with Connections Education provided by California Online Public Schools in response to public records request.

[147] Center for Popular Democracy, "Risking Public Money: California Charter School Fraud," March 2015, https://populardemocracy.org/sites/default/files/Charter-Schools-California-Report-b.pdf; In The Public Interest, "Fraud and Waste in California's Charter Schools," March 2018, https://www.inthepublicinterest.org/wp-content/uploads/ITPI_CA_Charter_Fraud_Mar2018.pdf; Network for Public Education, "Another Day, Another Charter Scandal," https://networkforpubliceducation.org/another-day-another-charter-scandal-2-2.

[148] In recent years, for instance, a Hawaii virtual school founder hired her nephew as athletic director – for a school with no sports teams; the founder of Pennsylvania's largest cyber school pocketed $300,000 of school funds to buy a private airplane; and Ohio's biggest online charter filed suit to stop state officials from seeing if any of their registered students were actually attending classes. Benjamin Herold, "A Virtual Mess: Inside Colorado's Largest Online Charter School," *Education Week*, November 3, 2016, https://www.edweek.org/ew/articles/2016/11/03/a-virtual-mess-colorados-largest-cyber- charter.html.

[149] Valerie Strauss, "Why California's charter school sector is called 'the Wild West," *Washington Post*, September 28, 2016, https://www.washingtonpost.com/news/answer-sheet/wp/2016/09/28/why- californias-charter-school-sector-is-called-the-wild-west.

[150] Maureen Magee, "Charter school king pleads guilty to felony," *San Diego Union-Tribune*, February 25, 2016, https://www.sandiegouniontribune.com/news/education/sdut-van-zant-charter-schools-pleads- guilty-2016feb25-story.html.

[151] Will Huntsberry, "'A Classic Conflict of Interest': Entangled Business Deals at Charter School Chain Learn4Life," *Voice of San Diego*, August 1, 2019, https://www.voiceofsandiego.org/topics/education/a- classic-conflict-of-interest-entangled-business-deals-at-charter-school-chain-learn4life.

[152] Grace Chen, "Corruption Charges Filed against Five in San Diego School District Probe," *Public School Review*, November 4, 2020, https://www.publicschoolreview.com/blog/corruption-charges-filed- against-five-in-san-diego-school-district-probe; Jeff MacDonald, "Sweetwater's Gandara Gets 7 Months," *San Diego Union Tribune*, June 27, 2014, https://www.sandiegouniontribune.com/news/watchdog/sdut- jesus-gandara-sentenced-sweetwater-superintendent-2014jun27-htmlstory.html.

[153] Deborah Sullivan Brennan, "Former Poway superintendent to pay $185,000 to school district, pleads guilty to misdemeanor," *San Diego Union-Tribune*, April 25, 2018, https://www.sandiegouniontribune.com/communities/north-county/sd-no-collins-plea-20180425- story.htm; Luke Money, "Ex-clerk admits stealing more than $700,000 from Orange County school," *Los Angeles Times*, March 18, 2020, https://www.latimes.com/california/story/2020-03-18/retired-clerk- admits-stealing-more-than-700000-from-orange-county-school.

[154] Morgan Cook and Kristen Taketa, "How an alleged charter school conspiracy netted $50 million," *San Diego Union-Tribune*, June 1, 2019, https://www.sandiegouniontribune.com/news/watchdog/story/2019-06-01/sd-me-charter-schools.

[155] The full scope of the Inspire scandal is not yet known, but one county Superintendent and former state fiscal auditor described it as "potential[ly]… fraud on a magnitude that I've not seen." Kristen Taketa, "Inspire charter schools spread across California as critics warn of performance, financial concerns," *San Diego Union-Tribune*, August 11, 2019, https://www.sandiegouniontribune.com/news/education/story/2019-08-10/inspire-charter-schools- spread-across-california-as-critics-warn-of-performance-financial-concerns; Kristen Taketa, "State will audit Inspire charter school network for alleged fraud," *San Diego Union-Tribune*, October 9, 2019, https://www.sandiegouniontribune.com/news/education/story/2019-10-09/state-agency-will-audit- inspire-charter-school-network-for-alleged-fraud. Inspire enrollment data is from CDE Data Quest, https://www.cde.ca.gov/schooldirectory.

[156] Office of the Attorney General, "Attorney General Kamala D. Harris Announced $168.5 Million Settlement with K12 Inc., a For-Profit Online Charter School Operator," July 8, 2016, https://oag.ca.gov/news/press-releases/attorney-general-kamala-d-harris-announces-1685-million- settlement-k12-inc.

[157] Lincoln Learning Solutions, "Lincoln Learning Solutions, Moon Area School District form partnership," *PR Newswire*, September 13, 2017, https://www.prnewswire.com/news-releases/lincoln-learning- solutions-moon-area-school-district-form-partnership-300519032.html.

[158] Paula Reed Ward, "Cyber Charter founder Trombetta is sentenced to 20 months in prison," *Pittsburgh Post-Gazette*, July 24, 2018, https://www.post-gazette.com/news/crime-courts/2018/07/24/Cyber- Charter-founder-Trombetta-sentenced-20-months-prison-8-million-midland-beaver- county/stories/201807240110.

[159] Nick Trombola, "Auditor General calls for change to state's charter school law after review of PA Cyber, Lincoln Park," *Pittsburgh Post-Gazette*, July 22, 2020, https://www.post- gazette.com/news/education/2020/07/22/Lincoln-Learning-Solutions-Pennsylvania-Cyber-Charter- school-Lincoln-Park-Performing-Arts-audit-law-DePasquale/stories/202007220118.

[160] Jessie Balmert, "Election 2018 and ECOT: A primer on the scandal-ridden online charter school and why it matters," *Cincinnati Enquirer*, May 19, 2018, https://www.cincinnati.com/story/news/politics/elections/2018/05/19/election-2018-and-ecot-why- charter-school-scandal-matters/609172002/.

[161] Andy Chow, "Ohio Supreme Court Rules Against ECOT in Student Participation Case," Statehouse News Bureau, August 8, 2018, https://www.statenews.org/post/ohio-supreme-court-rules-against-ecot- student-participation-case.

[162] Associated Press, "Giant Online Charter School Probed for Ghost Students," August 13, 2019, https://www.courthousenews.com/giant-online-charter-school-probed-for-ghost-students.

[163] While additional investigations may be forthcoming, in October 2020 the State Board of Education demanded repayment of $11.2 million from EPIC, and the Statewide Virtual Charter School Board voted to initiate contract termination proceedings against the school. Andrea Eger, "'Epic owes Oklahoma $8.9 million': Improper transfers, chronic misreporting found by state auditor's investigation," *Tulsa World*, October 2, 2020, https://tulsaworld.com/news/local/education/epic-owes-oklahoma-8-9-million- improper-transfers-chronic-misreporting-found-by-state-auditors-investigation/article_f8a41072-01e2- 11eb-9691-976475d9051b.html; Andrea Eger, "Statewide Virtual Charter School Board votes to begin contract termination process against Epic Charter Schools," T*ulsa World*, October 14, 2020, https://tulsaworld.com/news/local/education/statewide-virtual-charter-school-board-votes-to-begin- contract-termination-process-against-epic-charter-schools/article_cf6ad0a2-09ac-11eb-b88c-dba6bdaccaf3.html.

[164] The Primavera story is reported in Craig Harris, "Primavera charter CEO gets $8.8M despite having Arizona's third-highest dropout rate," *Arizona Republic*, September 1, 2018, https://www.azcentral.com/story/news/local/arizona-education/2018/08/22/primavera-online- charter-school-ceo-damian-creamer/839045002.

[165] *California Education Code*, Section 43500, as amended 2020. https://leginfo.legislature.ca.gov/faces/codes_displayText.xhtml?lawCode=EDC&division=3.&title=2.& part=24.5.&chapter=&article=.

[166] EC Sections 47612.5(b) and 51745.

[167] EC Article 5.5

[168] California Department of Education explains that: "In traditional schools, teachers assess the time value of nonclassroom-based independent study work to determine the completion of at least the 'minimum day' defined in law for the grade level of the student and thereby record a "day of attendance." Those minimum day definitions do not apply to charter schools, however…. To put the matter another way, the minimum *amount* of work necessary to constitute a charter school day of nonclassroom-based independent study attendance is within the charter school's and teacher's discretion to determine - but whatever that minimum amount of work is, it must be done on the scheduled school day for which it is claimed as attendance for ADA purposes." https://www.cde.ca.gov/sp/ch/csncbadaltr04.asp.

[169] The California Department of Education FAQ on Independent Study, Sections 13 and 14, dated 11/17 (https://ccis.org/wp-app/wp-content/uploads/2017/11/Frequently-Asked-Questions.pdf), demonstrates some of these contradictions. The FAQ explains that NCB charter schools are not required to have a minimum number of instructional minutes per day, but they are required to meet annualized instructional minutes. However, their attendance reporting is only based on "time value" per day, which has no minimum day requirement for charter schools, only for district and county managed schools. Additionally, EC Section 51747.5 states that "(b) School districts, charter schools, and county offices of education may claim apportionment credit for independent study only to the extent of the time value of pupil work products, as personally judged in each instance by a certificated teacher." But since the "time value" can be anything per day for a charter school, this standard is essentially meaningless.

[170] For instance, for schools in the Innovative Education Management chain, "attendance and daily engagement is tracked and marked by the parent…[and] the parent will keep track of concepts and activities covered during each [month] to be reported to and reviewed by the Education Specialist… The Education Specialist must interact with the student and/or view the full body of student work at each Learning Records meeting. The Education Specialist will collect a minimum of one work sample from each subject area of HS course per semester for the official learning record portfolios." https://southsuttercs.org/ss-parentinformation/ss-parent-faq#What_samples_need_to_be_provided?

[171] Oklahoma legislators, for instance, adopted a 2020 law aimed at tightening the definitions of attendance and "instructional activity" in the wake of the EPIC school scandal in that state. Oklahoma State Legislature, HB 2905, the Virtual Charter School Reform and Transparency Act of 2020. http://www.oklegislature.gov/BillInfo.aspx?Bill=hb2905.

[172] A clear example of this abuse is outlined in the previously referenced letter to FCMAT regarding the Inspire network. According to the letter from six County Superintendents, "Inspire appears to provide only a partial educational program and requires parents to provide most of the instruction and curriculum for their children, partly through enrichment funds that Inspire gives parents to buy classes, curriculum, extracurricular activities and more." Kristen Taketa, "State will audit Inspire charter school network for alleged fraud," *San Diego Union Tribune*, October 9, 2019 https://www.sandiegouniontribune.com/news/education/story/2019-10-09/state-agency-will- audit-inspire-charter-school-network-for-alleged-fraud

[173] EC Sections 48222, 48224, and 33190

[174] See, for example, The Contemporary Homeschooler, "California Leads the Way in Cutting Edge, Personalized Education with Charter Schools for Homeschool Families," February 10, 2017, https://thecontemporaryhomeschooler.com/2017/02/10/the-state-of-california-pays-me-to-customize- my-kids-education; Time4Learning, "Welcome to Homeschooling Guide," pp. 3-4, https://media.time4learning.com/uploads/Welcome-To-Homeschooling- Guide.pdf?mkt_tok=eyJpIjoiT0dNeU5UQXhNVGRqTkRjeCIsInQiOiJ4eVdFQmd5K1llZnI3TURYME81bjdNMTJWZjNvKzNyUWxhMTgxR0xxXC9cL3JVZWN6NjJnSUtPQ05nUG5aVDB0d01YZklHTHNlMDZqbDUrdVRVaW9KbnROMHNBVXZQU2UrVmU4TlNBcjY3UTh2OG5xVUpiS1p3b01QTDlFbmo3V0F6In0%3D.

[175] Parents are not provided cash to spend at their own discretion, but are either provided a budget which they can use on a list of school-approved vendors, or reimbursed for purchases made from those same vendors.

[176] Horizon Charter Schools, *Get More From Your Home Schooling Experience*, https://www.horizoncharterschools.org. Accessed January 22, 2021.

[177] South Sutter Charter School, "Instructional Funding," https://southsuttercs.org/ss- parentinformation/ss-parent-faq#Instructional_Funding.

[178] South Sutter Charter School, "Parent FAQ," https://southsuttercs.org/ss-parentinformation/ss-parent-faq#Working_with_an_Education_Specialist_(ES) (accessed November 23, 2020).

[179] EC Article 5.5. Independent Study [51745-51749.6]

[180] EC Section 51747.5 requires that a credentialed teacher must coordinate, evaluate and supervise the independent study of each pupil. However, EC section 51749.5 (3) states that independent study courses must be taught under the supervision of "certificated employees who hold the appropriate subject matter credential." The Charter Schools Act was also recently amended to require charter school teachers have the same credential as all public school teachers, but it is unclear how this is applied to independent study.

[181] Leah Hall, "40 Questions When Choosing a Charter (or Not Choosing)," California Homeschool Network, https://www.californiahomeschool.net/homeschooling-resources/charter-schools/.

[182] Alena, "Ways to get funds for homeschooling in different states," March 22, 2018, https://medium.com/alenas-journal/ways-to-get-funds-for-homeschooling-in-different-states- f2e50639a5d2.

[183] Kristen Taketa, "'Home school carters' let families use state dollars to buy Disneyland tickets, horseback riding lessons and more," *San Diego Union-Tribune*, June 16, 2019, https://www.sandiegouniontribune.com/news/education/story/2019-06-15/home-school-charters-let- families-use-state-dollars-to-buy-disneyland-tickets-private-lessons-and-more.

[184] Kirsten Taketa, "Inspire charter schools spread across California as critics warn of performance, financial concerns," *San Diego Union-Tribune*, August 11, 2019, https://www.sandiegouniontribune.com/news/education/story/2019-08-10/inspire-charter-schools- spread-across-california-as-critics-warn-of-performance-financial-concerns.

[185] EC Section 51747.3[a]

[186] Kristen Taketa, "'Home school carters' let families use state dollars to buy Disneyland tickets, horseback riding lessons and more," *San Diego Union-Tribune*, June 16, 2019, https://www.sandiegouniontribune.com/news/education/story/2019-06-15/home-school-charters-let- families-use-state-dollars-to-buy-disneyland-tickets-private-lessons-and-more.

[187] This program is non-Common Core and is not accredited, but is available to homeschooling families anywhere in the world. It includes some optional add-on materials and tutorial services that are available for an additional fee, but for $99 per family per year, "Discovery K12 provides 180 days of online curriculum in 7 subjects, grading, reporting, and technical support." Discovery K12, http://discoveryk12.com/dk12/homeschooling-in-california.

[188] Calvert Education, "Tuition," https://www.calverteducation.com/enroll/tuition.

[189] Calvert Education, "Tuition," https://www.calverteducation.com/enroll/tuition.

[190] Kristen Taketa, "'Home school carters' let families use state dollars to buy Disneyland tickets, horseback riding lessons and more," *San Diego Union-Tribune*, June 16, 2019, https://www.sandiegouniontribune.com/news/education/story/2019-06-15/home-school-charters-let- families-use-state-dollars-to-buy-disneyland-tickets-private-lessons-and-more.

[191] Kristen Taketa, "'Home school carters' let families use state dollars to buy Disneyland tickets, horseback riding lessons and more," *San Diego Union-Tribune*, June 16, 2019, https://www.sandiegouniontribune.com/news/education/story/2019-06-15/home-school-charters-let- families-use-state-dollars-to-buy-disneyland-tickets-private-lessons-and-more.

[192] The bill also prohibits for-profit educational management organizations or charter management organizations from running charter schools. *Assembly Bill No. 406*, California Legislative Counsel's Digest, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB406.

[193] Cal Matters, "Explainer: AB 406," https://calmatters.org/explainer/201/embed/4e875200-97a5-11e9- 85df-8b590fbaa5da (accessed November 23, 2020).

[194] Katy Murphy, "For-profit charter schools would be banned under California bill heading to the governor," *San Jose Mercury News*, August 23, 2018, https://www.mercurynews.com/2018/08/23/for- profit-charter-schools-would-be-banned-under-california-bill-heading-to-the-governor (accessed November 23, 2020).

[195] John Fensterwald, "Gov. Brown again to decide whether to ban for-profit charter schools," *EdSource*, September 3, 2018, https://edsource.org/2018/gov-brown-again-to-decide-whether-to-ban-for-profit-charter-schools/601903 (accessed November 23, 2020).

[196] John Fensterwald, "Gov. Brown again to decide whether to ban for-profit charter schools," *EdSource*, September 3, 2018, https://edsource.org/2018/gov-brown-again-to-decide-whether-to-ban-for-profit- charter-schools/601903 (accessed November 23, 2020).

[197] Pearson, "Pearson 2018 results," February 22, 2019, https://www.pearson.com/news-and-research/announcements/2019/02/pearson-2018-results.html.

[198] *Statement of Agreement between California Online Public Schools and Connections Education/Pearson Online & Blended Learning*, July 1, 2019. Provided to the author by CalOPS in response to public records request.

[199] Legislative Education Study Committee, *Financial Responsibility, Governance and Student Outcomes of Virtual Charter Schools*, New Mexico Legislative Finance Committee, December 2017, https://www.nmlegis.gov/handouts/ALESC%20121817%20Item%205%20Financial%20Responsibility,% 20Governance,%20and%20Student%20Outcomes%20of%20Virtual%20Charter%20Schools.pdf (accessed November 22, 2020).

[200] *Assembly Bill No. 406*, California Legislative Counsel's Digest, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB406.

[201] California Connections Academy and Connections Education LLC, Charter School Virtual Learning Programs Statement of Agreement, July 1, 2019, Section 18, Termination, and Section 24, Resolution of Disputes. Provided by California Connections Academy in response to public records request. It is noteworthy that while this contract requires a charter school to go through lengthy mediation and court proceedings in order to terminate its contract with Connections Education, no such obligation is imposed on the parent company in the event that it is unhappy with how the school is carrying out its program.

[202] T. Keung Hui, "A virtual charter school 'divorce' leaves 2,400 students caught in the middle," *Raleigh News & Observer*, March 13, 2019, https://www.newsobserver.com/news/politics- government/article227454219.html.

[203] T. Keung Hui, "N.C. virtual school under scrutiny," *Raleigh News & Observer*, May 13, 2019, https://www.courier-tribune.com/news/20190513/nc-virtual-charter-school-under-scrutiny.

[204] California Department of Education, *Public Schools and Districts Data File*, https://www.cde.ca.gov/ds/si/ds/pubschls.asp (accessed October 1, 2020).

[205] This includes only those schools deemed to provide a primarily online education, and does not include NCB homeschool charters. While online charters are permitted to operate in any county adjacent to their home district, this map does not assume that all schools do this. Mapped locations include only those that the schools in question explicitly state that they serve.

[206] This principle was proposed by the Republican chair of the Pennsylvania Legislature's Education Committee in 2019, https://legiscan.com/PA/drafts/SB34/2019.

[207] Pennsylvania Public School Code, 24 PS 17-1725-A, section a, paragraphs 2 & 3. "For non-special education students, the charter school shall receive for each student enrolled no less than the budgeted total expenditure per average daily membership of the prior school year, as defined in section 2501 (20), minus the budgeted expenditures of the district of residence for nonpublic school programs; adult education programs; community/junior college programs; student transportation services; for special education programs; facilities acquisition, construction and improvement services; and other financing uses, including debt service and fund transfers as provided in the Manual of Accounting and Related Financial Procedures for Pennsylvania School Systems established by the department. This amount shall be paid by the district of residence of each student," www.education.pa.gov/Documents/ K- 12/Charter%20Schools/Charter%20School%20Funding/CSFunding%2024PS17-1725-A.pdf.

[208] A 2019 Pennsylvania bill proposed something similar to this, requiring "adequate transparency and financial accountability for contractors, including for-profit management companies that provide management, educational or administrative services to school districts or charter school entities. Also requires these entities to publicly disclose the use of any monies received from a school district or charter school as well as subject those funds to audit by the state. Cyber & Cyber Charter School Reform Report, 5th Edition, Democratic House Education Committee, Rep. James Roebuck chair, Pennsylvania Legislature, April 2019, https://www.pahouse.com/files/Documents/Newsletter/2019-04-29_041459 2019%20Charter%20School%20Report.pdf.

[209] EC Section 51749.5 (a)(4)

[210] See Gordon Lafer, "Breaking Point: The Cost of Charter Schools for Public School Districts," *In The Public Interest*, 2018, https://www.inthepublicinterest.org/wp- content/uploads/ITPI_Breaking_Point_May2018FINAL.pdf.

[211] All numbers from California Department of Education. CDE lists 285 schools having received an NCB funding determination, with total enrollment of 150,899. But there were an additional 28 charter schools that classified themselves as either fully or primarily virtual, with total enrollment of 23,928. These schools were in between funding determinations but are, in fact, non-classroom-based schools, so they are included in our total figure.

[212] California Department of Education, Nonclassroom-Based Charter Schools Determination of Funding Requests for the Fiscal Year 2019-20, October 23, 2019, https://www.cde.ca.gov/sp/ch/ncbfdltrfy1920.asp.

[213] California Department of Education, *Nonclassroom-Based Funding Determinations; State Board of Education* approved non-clasroom-based funding determinations during fiscal years 2014-15 to 2019-20 pursuant to California Code of Regulations, Title 5 (5CCR), Section 11963, https://www.cde.ca.gov/sp/ch/nclrbifunddet.asp (accessed February 7, 2020).

[214] Schools' virtual status is included in the CDE's Educational Management Data Division's "Public Schools and Districts Data File," https://www.cde.ca.gov/ds/si/ds/pubschls.asp.

[215] Visions in Education Charter School, "About Visions In Education," September 24, 2020, https://www.youtube.com/watch?v=OVdwm07z3lg (accessed November 15, 2020). Visions offers two options for high school students, both of which are online.

[216] California Department of Education, 2019 Dashboard: Data Files and Record Layouts. https://www.cde.ca.gov/ta/ac/cm/datafiles2019.asp (accessed May 18, 2020).

[217] See, for example, Katrina Abston, "Response to In The Public Interest Report," *California Virtual Academies*, February 26, 2015, https://cava.k12.com/response-to-in-the-public-interest-report.html