Summary Report of the Operations and Activities of Online Programs in Colorado

Authors:

Dick Carpenter, Krista Kafer, Kelly Reeser, Sheryl Shafer

June 1, 2011

TABLE OF CONTENTS

The *Summary Report of the Operations and Activities of Online Programs in Colorado* provides in-depth analysis of Colorado's online programs for the 2010-2011 school year. A significant part of the analysis comes from annual reports submitted by the online schools. The annual reports provide qualitative and quantitative information about each program's budget, enrollment, contact information, course and course development processes, adult-to-student ratio, course completion rates, number of highly qualified teachers on staff, student demographic information, strategies and initiatives for supporting students, academic achievement data, and program alignment to quality standards. Annual report data are combined with information from other sources, such as the School Performance Framework (SPF) ratings and scores; interviews with 16 leaders of online schools and four district authorizers; research findings on funding models; regression analysis of student achievement data; and historical context information. The report concludes with policy considerations for lawmakers.

The Unit of Online Learning (UOL) broadened the scope of this report so that lawmakers might gain greater insight into an education sector that is growing at an unprecedented rate. In the 2010-2011 school year, 15,249 students (1.8 percent of all students) registered at online educational programs. The total represents a 14 percent increase from 2009-2010. Given the growth in this sector, it is not surprising that the General Assembly and the HB 1412 Committee (an ad hoc advisory committee on charter schools created by the legislature) each considered the issue of online schools and their regulatory and reporting requirements. The expanded format of this report to the Colorado General Assembly is intended to enrich the dialogue with the public and among legislators in preparation for the next session.

Historical Context of the Report

The summary document, like the individual program annual reports, has been required by law since 2007. Although nominally involved in online education over the previous decade, the Colorado legislature enacted major legislation in 2007 to regulate online programs. In response to findings from an official audit and recommendations from the Trujillo Commission, the legislature created the UOL at the Colorado Department of Education (CDE) to oversee online programs.

The UOL certifies online programs that serve a student population drawn from two or more school districts and enrolling more than 10 students from outside the authorizing school district (hereafter called multi-district programs). Once a program receives certification, it is valid for two years before recertification is required. Thereafter, the authorizer applies for recertification of the online program at three year intervals. Certification and recertification are based on program alignment with 15 quality standards.

Single district schools are exempt from certification requirements; however, like multi-district programs, they must annually report on how the program meets these standards along with additional program data.

After analyzing the qualitative and quantitative information contained in the reports, the UOL is required to present a summary of the data to the Colorado State Board of Education and the Education Committees of the General Assembly by the end of the legislative session.

Multi-District and Single District Programs

In Colorado, there are 22 multi-district online programs and 12 single district programs. Of the multi-district programs, six (Provost Online Academy, Colorado Virtual Academy (COVA), Colorado Calvert Academy, Guided Online Academic Learning (GOAL) Academy, Hope Online Learning Academy Co-Op, and College Pathways) are charter schools. Three districts (Douglas County School District, Jeffco Public Schools, and Academy District 20) and the Charter School Institute authorize more than one program each.

Demographics and Accountability

COVA had the highest full time enrollment in the 2010-2011 school year (4,595 students), and Virtual Village had the lowest (four students). Colorado Connections Academy, COVA, GOAL, Hope Online Learning Academy Co-Op, and Insight School of Colorado enrolled more than 1,000 students each. As compared to the entire Colorado student population, a greater percentage of students in online schools tend to be White, Black, or American Indian, while fewer tend to be Asian or Hispanic. Girls tend to enroll at slightly greater rates than boys. Although the difference based on Individualized Education Program status is nominal, online schools see notably smaller percentages of both English Language Learner students and those whose families qualify for free and reduced lunch, as compared to non-online schools.

Adult-to-Student Ratio

Online schools in Colorado have relatively low adult-to-student ratios (ratios range from 1:4 to 1:43). Many schools report that they employ part-time teachers; thus, the ratios may not be comparable to a typical classroom where teachers are typically employed full-time.

Highly Qualified Standards

To be deemed "highly qualified" under the federal No Child Left Behind (NCLB) Act, teachers must demonstrate a subject matter competency in all core academic areas to which they are assigned. At the secondary level, teachers must have a bachelor's or master's degree specific to the subject area being taught, or have at least 24 semester hours in the subject area (30 hours in social studies or science), pass a National Board

Certification in the subject area, or pass a content assessment, such as the PLACE or Praxis exams, in the subject area. Because the report template does not require programs to identify the percentage of highly qualified versus non-highly qualified teachers, such data could not be provided in the summary report.

School Performance Frameworks
The School Performance Frameworks (SPF) assign to each school one of four plan types: Performance, Improvement, Priority Improvement, and Turnaround. Each category reflects the total framework points earned by that school across all the indicator areas. SPF ratings are not available for single district online programs that do not have separate school codes and programs in the first year of operation as a school. If the number of participating students is too small for a school that has been in operation at least one year, there is no SPF report, and the school's automatic school performance rating is "Improvement." Of the 21 schools for which SPF ratings are available, three schools have Performance Plans, six have Improvement Plans, six have Priority Improvement Plans, and six have Turnaround Plans.

Individual Student Performance Analysis

When CSAP scale scores and proficiency levels (not proficient and proficient/advanced) between online programs and traditional education settings are compared, online students consistently lag behind those of non-online students, even after controlling for grade levels and the following student characteristics: sex, race/ethnicity, English Language Learner status, Individual Education Plan status, and federal free and reduced lunch program eligibility.

Alignment to Quality Standards

This section focuses on the descriptive information provided by online school operators in their annual reports. Because the length and specificity of the answers varied considerably from report to report, comparison among the schools is problematic. For this reason, the analysis identifies trends in the descriptive material for each of the 10 sections in the annual report template. Responses reveal that in most programs, students independently take online classes created by national online curriculum providers. Teachers monitor student progress and supplement the primary curriculum with additional online or teacher-created curricula. Teachers meet with students by phone, Skype, video conference, online discussion board, or in person to conduct one-on-one or small group tutoring. Some programs deliver synchronous online classes to large groups of students. Other programs require students to come on site once or twice a week for direct instruction, tutoring, or enrichment. All programs require students to come to a central location for CSAP testing. Attendance, participation, and truancy expectations vary among programs. In some cases, teachers have considerable discretion to determine if students are participating at expected levels while some schools have specific seat time or completion expectations.

Annual Budgets

The average total budget across online schools was $2.5 million. Some online schools spent more than $30 million in total. The greatest percentage of spending was for salaries and benefits, professional services, and other services. On average, programs spent the least amount of money on property.

Funding Online Schools
Currently, states report four primary options for funding virtual schools: (1) state appropriation, (2) funding formula, (3) no direct state role, and (4) a combination approach. In Colorado, funding for online schools is governed by state statute (CRS 22-30.7-107) and fits under the second option. Online students are counted on the October 1 "count day," and then the school receives the respective per-pupil funding for each student enrolled in the program.

Themes from Interviews with Online Leaders and Authorizers

The authors of this report requested interviews or written feedback to a series of survey questions from all online school leaders and authorizers in Colorado. Based on responses, the authors conducted in-person and telephone interviews and gathered responses via email from 16 leaders of online schools and four district authorizers. Responses focused on six themes—the definition of online programs, vision for the future of online learning, funding, reporting, accountability, and teacher preparedness.

Policy Considerations

Following the analysis of the data and feedback from providers, the authors drafted policy considerations. These include: (1) modifying the definition of online learning to accommodate blended models; (2) revising the way online schools are funded; (3) removing duplicative reporting requirements; (4) enabling students to take CSAP in an online format; (5) adopting standards and guidelines for authorizers to use in evaluating the quality of online schools; (6) creating state-level training for authorizers to ensure consistency and quality standards across all online schools; and (7) facilitating the creation of training programs in Colorado's universities for online teachers.

Additional Resources

The report also provides references for further study and appendices with extended data on online program expenditures, student demographics, and survey questions.

Disclaimer

The authors have attempted to ensure full accuracy in reporting data about individual schools and programs; however, data presented in most of the tables are based on the self-

reported information provided by individual schools in their annual reports. Please notify this department if any errors or omissions are discovered with respect to the data so that it can be corrected in the database.

INTRODUCTION

By law, Colorado online programs must annually report information to the Colorado Department of Education's (CDE's) Unit of Online Learning (UOL) regarding the program's budget, enrollment, contact information, course and course development processes, student-to-adult ratio, course completion rates, number of highly qualified teachers on staff, student demographic information, strategies and initiatives for supporting students, academic achievement data, and program alignment to quality standards. After analyzing the qualitative and quantitative information, the UOL is required to present a summary of the data to the Colorado State Board of Education and the Education Committees of the General Assembly by the end of the legislative session.

The 2011 report combines the required analysis with other bodies of data and research including the most recent School Performance Framework (SPF) ratings and scores; interviews with 16 leaders of online schools and four district authorizers; research findings on funding models; CSAP data; and historical context. As in past years, the report compares student academic proficiency rates between online and traditional programs. The 2011 report goes a step further by providing a comparison of student proficiency scores that controls for student characteristics, such as sex, race/ethnicity, English Language Learner status, IEP status, and federal free and reduced lunch program eligibility. This analysis shows how students perform at online programs as compared to those in traditional settings regardless of individual characteristics.

By combining information from the online reports with these other qualitative and quantitative data sources and national research findings, the authors of the report were able to formulate policy considerations for lawmakers. For example, the authors noted similarities between the reporting requirements in the annual report submitted to the UOL and the reporting requirements of other district and state agencies. The policy considerations, regression analysis of student achievement, provider testimony, research findings, and other sections new to this report format have been included so as to provide a richer, more in-depth body of knowledge of the state's online school programs. Lawmakers, the primary audience of this report, and members of the public will benefit from having a clearer picture of this education sector, which is growing in popularity among families across the state.

SUMMARY OF LEGISLATIVE AND RULE HISTORY

The legislature and the State Board of Education have overseen and supported online schools for more than a decade. Foreseeing a future trend in education, the Colorado General Assembly assigned a section in the Colorado Revised Statutes (CRS) for online schools in 1998. That same year, the Colorado Department of Education (CDE) provided a grant for the Colorado Online School Consortium, a project undertaken by 14 school

districts to develop virtual education. Subsequently renamed Colorado Online Learning, the organization developed online courses and a Quality Assurance Program. Today, Colorado Online Learning offers more than 70 courses in art, music, business, world languages, social studies, technology, health, life skills, fitness, science, math, and language arts.

The legislature revisited the issue of online schools in 2002 when it passed CRS 22-33-104.6. The new law defined online programs, authorized the first study committee on the subject, mandated that online students live within the state and participate in state assessments, and dictated funding requirements. For a district to have received state funding for an online student, the student must have been enrolled in a district public school the preceding school year. The legislature revised this requirement in 2003 and 2006 to enable more students to be served.

In 2006, the Colorado State Auditor, at the request of the legislature, released an audit of K-12 online education. The auditors reported gaps in oversight of online schools. To research the issue further, the Donnell-Kay Foundation created the Trujillo Commission to examine the issues raised by the audit. Commissioners chosen from online education, higher education, and traditional public education published a report in February 2007 with multiple recommendations for the legislature.

The legislature passed Senate Bill 07-215, which created the Division of Online Learning at CDE, subsequently renamed the Unit of Online Learning (UOL). The Unit is responsible for establishing quality standards for online programs, certifying multi-district online programs (single district and supplementary programs are not required to be certified), reviewing online schools through annual reports, and enforcing corrective action. The law also requires that online schools obtain a memorandum of understanding with a district in order to open a learning center within its borders. In the 2011 legislative session, legislators considered reducing annual reporting requirements as they substantially duplicate information provided in the Unified Improvement Plan and district/school accreditation documents.

The UOL also conducts support activities, such as training and technical assistance, overseeing the Supplemental Online Grant program, and granting the Colorado Online Teacher of the Year Awards.

MULTI-DISTRICT AND SINGLE DISTRICT PROGRAMS

Colorado has 22 multi-district online schools and 12 single district programs. Of the multi-district schools, six (COVA, Provost Online Academy, Colorado Calvert Academy, GOAL Academy, Hope Online Learning Academy Co-Op, and College Pathways) are charter schools, which means the bulk of online schools were created by school districts as an alternative to the traditional classroom.

Online schools that serve a student population drawn from two or more school districts and enrolling more than 10 students from outside the authorizing school district must apply for certification. Once a program receives certification, it is valid for two years before recertification is required. Thereafter, the authorizer applies for recertification of the online school at three year intervals. Note that single district online schools do not always have an assigned school code.

Table 1: Multi-District Online Programs				
Authorizer	Online School	Grade Levels	School Code	Recertification Date
Academy District 20	Academy Online High School	9-12	0110	2014
Colorado Springs School District 11	ACHIEVEk12	K-12	0269	2014
Boulder Valley RE-2	Boulder Universal	K-12	0930	2014
Branson School District	Branson School Online	K-12	0948	2013
Charter School Institute	Colorado Calvert Academy	K-8	1901	2015
Mapleton 1	Colorado Connections Academy	K-12	1796	2013
Adams 12 Five Star Schools	Colorado Virtual Academy (COVA)	K-12	1752	2013
Academy District 20	College Pathways (The Classical Academy)	7-12	8779	2015
Crowley County School District	Crowley County Online Academy	9-12	1967	2013
Denver County School District	DPS Online High School	9-12	6509	2014
Douglas County School District	eDCSD	K-12	5405	2013
Edison School District 54JT	Edison Academy	6-12	2504	2013
Charter School Institute	Guided Online Academic Learning (GOAL) Academy	9-12	3475	2013
Douglas County School District	Hope Online Learning Academy Co-op	K-12	3995	2013
Julesburg School District RE-1	Insight School of Colorado	9-12	4369	2013
Jefferson County R-1	Jeffco's 21st Century Virtual Academy	9-12	4408	2014
Garfield RE-2	Kaplan Academy of Colorado	9-12	3325	2013
Karvel RE-23	Karval Online Education	K-12	4504	2013
Monta Vista C-8	Monte Vista Online Academy	6-12	6520	2013
Poudre School District	PSD Online Academy	6-12	7198	2015
Charter School Institute	Provost Online Academy	9-12	1877	2015
VILAS RE-5	Vilas Online	K-12	9085	2013

Table 2: Single District Online Programs			
Authorizer	**Online School**	**Grade Levels**	**School Code**
Adams-Arapahoe 28J	APS Online	9-12	0219
Buena Vista R-31	Buena Vista Online	3-12	1154
Widefield 3	D3 My Way	K-12	n/a
Falcon 49	Falcon Virtual Academy	K-12	2877
Fremont RE-2	Focus Academy	6-12	2870
Pueblo County 70	Futures Digital Academy	6-12	3279
Mesa County #51	Grande River Virtual Academy	9-12	n/a
Littleton Public Schools	LPS@home	K-6	n/a
Jefferson County R-1	McClain LIVE	9-12	n/a
Pueblo City School District 60	Ridge Academy	9-12	n/a
Thompson R-2J	Thompson Online	K-12	8855
Park County RE-2	Virtual Village - Lake George Charter School	K-8	n/a

DEMOGRAPHICS AND ACCOUNTABILITY

According to the CDE, there are 15,249 students registered in online educational programs in the 2010-2011 school year. That total represents 1.8 percent of all students statewide.

The current enrollment reflects a 14 percent increase from 2009-2010, when there were 13,128 students in online schools. In 2002-2003, there were just 1,876 students in online programs, and, at the time, those students represented .25 percent of the entire statewide enrollment.

This section of the report includes data on student enrollment, demographic profiles of students, student-to-adult ratio data, highly qualified standards data, school performance framework data, and individual student performance analysis.

ENROLLMENT DATA

Table 3 shows student enrollment data as reported by the individual online schools.

TABLE 3: STUDENT ENROLLMENT DATA						
Authorizer	**Online School**	**2009 - 2010 Full-Time Student Count***	**2010 - 2011 Full-Time Student Count**	**2010 - 2011 Part-Time Student Count**	**Dec. 2010 End-of-Year Full-Time Student Count**	**Dec. 2010 Part-Time Course Enroll-ment**
Academy District 20	Academy District 20 Online Program	35	24	186	5	394
Colorado Springs District 11	Achievek12	59	57	7	75	3
Adams-Arapahoe 28J	APS Online (Aurora Public Schools)		101	0	0	606
Boulder Valley RE 2	Boulder Universal		69	10	4	20
Branson Reorganized 82	Branson School Online	447	397	0	376	3486
Buena Vista R-31	Buena Vista Online		7	5	0	52
Academy District 20	College Pathways (TCA)		213	93	33	244
Charter School Institute	Colorado Calvert Academy		166	0	0	166
Mapleton 1	Colorado Connections Academy	1060	1372	0	933	0
Douglas County	Colorado Cyberschool		235	75	158	2958
Adams 12 Five Star Schools	Colorado Virtual Academy (COVA)	5006	4595	439	4008	1236
Crowley County School District RE1-J	Crowley County Online Academy	20	11	0	1	58
Widefield E	D3 My Way		14	31	3	192

Authorizer	Online School	2009 - 2010 Full-Time Student Count*	2010 - 2011 Full-Time Student Count	2010 - 2011 Part-Time Student Count	Dec. 2010 End-of-Year Full-Time Student Count	Dec. 2010 Part-Time Course Enroll-ment
TABLE 3: STUDENT ENROLLMENT DATA						
Denver County 1	DPS Online High School	128	99	50	65	790
Edison 54 JT	Edison Academy	42	17	1	82	83
Falcon 49	Falcon Virtual Academy		102	6	0	18
Fremont RE-2	FOCUS Academy		10	0	0	0
Pueblo County 70	Futures Digital Academy		9	1	0	3
Charter School Institute	Guided Online Academic Learning (GOAL) Academy	603	1350	0	610	0
North Conejos School District	Heartlight Academy		14	0	10	0
Douglas County	Hope Online Learning Academy Co-Op	2846	2851	0	2520	0
Julesburg School District Re-1	Insight School Of Colorado	976	1527	25	493	27
Jefferson County R-1	Jeffco's 21st Century Virtual Academy	108	144	188	31	242
Garfield RE-2	Kaplan Academy of Colorado	338	298	11	205	52
Karval RE-23	Karval Online Education	208	168	17	164	70
Littleton Public Schools	LPS @ Home		6	0	6	0
Jefferson County R-1	McLain LIVE (JEFFCONET ACADEMY)		45	2	81	225
Mesa County Valley 51	Mesa County Valley School District		37	0	0	29
Monte Vista C-8	Monte Vista On-Line Academy	82	92	0	95	0
Charter School Institute	Provost Academy Colorado		388	1	0	3
Poudre School District	PSD Online Academy		108	0	22	0
Pueblo City School District (60)	Ridge Academy		70	76	83	547
Thompson R-2J	Thompson Online		38	21	0	71
Vilas RE-5	V.I.L.A.S. Online School	343	294	3	340.5	13
Park County RE-2	Virtual Village - Lake George Charter School		4	1	80	16

* 2009 – 2010 data are included where available

DEMOGRAPHIC STUDENT PROFILE

Table 4 reports the demographic profiles of students based on school type. Beginning with race ethnicity, compared to their non-online peers, a greater percentage of students in online schools tend to be White, Black, or American Indian, while fewer tend to be Asian or Hispanic. Girls tend to enroll at slightly greater rates than boys. Although the difference based on IEP status is nominal, online schools see notably smaller percentages of both English Language Learner students and those whose families qualify for free or reduced lunch, as compared to non-online schools.

Table 4: Demographic Profile of Students by School Type		
	Non-Online Student	**Online Student**
Race/Ethnicity		
American Indian	1.19	1.85
Asian	3.82	1.69
Black	5.99	8.01
Hispanic	28.51	20.80
White	60.49	67.64
Gender		
Female	48.95	50.65
Male	51.05	49.35
IEP Status		
No IEP	90.92	91.27
Yes IEP	9.08	8.73
ELL Status		
Non ELL	82.99	93.46
ELL	17.01	6.54
Free/Reduced Lunch Status		
Non FRL	60.90	70.93
FRL	39.10	29.07

ADULT-TO-STUDENT RATIO

Online schools in Colorado have relatively low adult-to-student ratios (ratios range from 1:4 to 1:43). In an online environment, these ratios may not be a significant measure for predicting student achievement because many other variables influence how students perform. Moreover, many schools report that they employ part-time teachers; thus, the ratios shown below may not completely reflect the complexity of the environment. Table 5 shows the number of adults, the number of students in each online school, and the adult-to-student ratio.

Table 5: Adult-to-Student Ratio				
Authorizer	**Online School**	**Number of Adults**	**Number of Students**	**Adult/ Student Ratio**
Academy District 20	Academy District 20 Online Program	20	117	1:6
Colorado Springs District 11	Achieve K12	17	371	1:22
Adams-Arapahoe 28J	APS Online (Aurora Public Schools)	7	120	1:18
Boulder Valley RE 2	Boulder Universal	1	4	1:4
Branson Reorganized 82	Branson School Online	33	397	1:12
Buena Vista R-31	Buena Vista Online	7	11	1:2
Academy District 20	College Pathways (TCA)	20	306	1:15
Charter School Institute	Colorado Calvert Academy	4.5	166	1:37
Mapleton 1	Colorado Connections Academy	1	35	1:35
Douglas County	Colorado Cyberschool	52	230	1:5
Adams 12 Five Star Schools	Colorado Virtual Academy (COVA)	119	5034	1:43
Crowley County School District	Crowley County Online Academy	18	11	*
Widefield 3	D3 My Way	6	24	1:4
Denver County 1	DPS Online High School	14	149	1:11
Edison 54 JT	Edison Academy	6	82	1:14
Falcon 49	Falcon Virtual Academy	7	108	1:16
Fremont RE-2	FOCUS Academy	24	10	*
Pueblo County 70	Futures Digital Academy	7	108	1:15
Charter School Institute	Guided Online Academic Learning (GOAL) Academy	1	25	1:25
North Conejos School District	Heartlight Academy	5	16	1:4
Douglas County School District	Hope Online Learning Academy Co-Op	267	2851	1:11
Julesburg School District RE-1	Insight School of Colorado	72	1527	1:22
Jefferson County R-1	Jeffco's 21st Century Virtual Academy	20	302	1:16
Garfield RE-2	Kaplan Academy of Colorado	12.5	309	1:25
Karval RE-23	Karval Online Education	20	168	1:9
Littleton Public Schools	LPS @ home	1	6	1:6
Jefferson County R-1	McLain LIVE (JEFFCONET ACADEMY)	9	47	1:16
Mesa County Valley 51	Mesa County Valley School District	26	45	1:2
Monte Vista C-8	Monte Vista On-Line Academy	9	92	1:11
Charter School Institute	Provost Academy Colorado	16	389	1:25
Poudre School District	PSD Online Academy	8	108	1:14
Pueblo City School District (60)	Ridge Academy	3	83	1:28
Thompson R-2J	Thompson Online	4	60	1:15

Table 5: Adult-to-Student Ratio				
Authorizer	**Online School**	**Number of Adults**	**Number of Students**	**Adult/ Student Ratio**
Vilas RE-5	V.I.L.A.S. Online School	29	298	1:11
Park County RE-2	Virtual Village - Lake George Charter School	1	5	1:5

*Self-reported data did not allow for meaningful ratio computation in this category.

HIGHLY QUALIFIED STANDARDS

One of the key components of the federal No Child Left Behind (NCLB) Act is to require that all core content teachers be "highly qualified" in their subject area. To meet NCLB's highly qualified criteria, teachers must demonstrate a subject matter competency in all core academic areas to which they are assigned. At the secondary level, teachers must have a bachelor's or master's degree specific to the subject area being taught, or have at least 24 semester hours in the subject area (30 hours in social studies or science), pass a National Board Certification in the subject area, or pass a content assessment, such as the PLACE or Praxis exams, in the subject area.

Core academic areas include the following:

- English, reading, or language arts
- Math
- Science
- World (foreign) languages
- Social studies (civics, government, history, geography, and economics)
- Arts (visual arts, drama, music)

Elementary (grades K-6) teachers may demonstrate subject-area competency by completing an approved teacher preparation program in elementary education, holding an elementary endorsement with a teaching license, passing an approved elementary content test in another state, or passing the National Board Certification elementary assessment.

Teachers at both the elementary and secondary levels may also satisfy highly qualified criteria by passing a HOUSSE (High Objective Uniform State Standard of Evaluation) evaluation. HOUSSE evaluations provide an alternative and more flexible way for certain categories of teachers to demonstrate subject matter competency. Colorado has created HOUSSE provisions for veteran elementary teachers, multi-subject special education teachers in secondary settings, and multi-subject secondary teachers in rural settings.

Table 6 reports on the number of highly qualified teachers working in each online program. Ideally, this table would include the percentage of highly qualified teachers, but these

percentages were not reported, and the data necessary to determine such percentages were not available.

Table 6: Highly Qualified Standards		
Authorizer	**Online School**	**Highly Qualified Teachers**
Academy District 20	Academy District 20 Online Program	17
Colorado Springs District 11	ACHIEVE K12	9
Adams-Arapahoe 28J	APS Online (Aurora Public Schools)	4
Boulder Valley RE 2	Boulder Universal	30
Branson Reorganized 82	Branson School Online	25
Buena Vista R-31	Buena Vista Online	6
Adams District 20	College Pathways (TCA)	17
Charter School Institute	Colorado Calvert Academy	4.5
Mapleton 1	Colorado Connections Academy	35
Douglas County	Colorado Cyberschool	11
Adams 12 Five Star Schools	Colorado Virtual Academy (COVA)	119
Crowley County School District	Crowley County Online Academy	16
Widefield 3	D3 My Way	6
Denver County 1	DPS Online High School	11
Edison 54 JT	EDISON ACADEMY	2
Falcon 49	Falcon Virtual Academy	6
Fremont RE-2	FOCUS Academy	22
Pueblo County 70	Futures Digital Academy	18
Charter School Institute	Guided Online Academic Learning (GOAL) Academy	72
North Conejos School District	Heartlight Academy	2
Douglas County School District	Hope Online Learning Academy Co-Op	30
Julesburg School District RE-1	Insight School of Colorado	68
Jefferson County R-1	Jeffco's 21st Century Virtual Academy	19
Garfield RE-2	Kaplan Academy Of Colorado	17
Karval RE-23	Karval Online Education	16
Littleton Public Schools	LPS @ home	1
Jefferson County R-1	McLain LIVE (JEFFCONET ACADEMY)	6
Mesa County Valley 51	Mesa County Valley School District	4
Monte Vista C-8	Monte Vista On-Line Academy	8
Charter School Institute	Provost Academy Colorado	8
Poudre School District	PSD Online Academy	5
Pueblo City School District (60)	Ridge Academy	3
Thompson R-2J	Thompson Online	1
Vilas RE-5	V.I.L.A.S. Online School	21
Park County RE-2	Virtual Village - Lake George Charter School	1

SCHOOL PERFORMANCE FRAMEWORKS

The Education Accountability Act of 2009 (SB 09-163) identifies a goal to prepare all students for postsecondary learning or to enter the workforce by the time they graduate from the K-12 system. The state includes four performance indicator areas as measures for achievement of this goal:

1. Academic Achievement

2. Academic Growth

3. Gaps in Academic Growth

4. Postsecondary and Workforce Readiness

The School View program, which was first introduced in 2010, can be accessed from the Colorado Department of Education's website at: http://www.schoolview.org/index.asp. The School View Data Center provides a wealth of data on federal and state accountability results, academic performance, and student and school demographics. The School View program also contains School Performance Framework (SPF) reports, which provide information about the levels of attainment in each of the four key performance areas identified above. For districts, the evaluation of overall performance on these indicators leads to an accreditation rating. For schools, including online schools, the evaluation of overall performance in these indicators leads to the assignment of the type of improvement plan schools will implement.

The SPF assigns to each school one of four plan types: Performance, Improvement, Priority Improvement, and Turnaround. Each category reflects the total framework points earned by that school across all the indicator areas. Since the SPF reports are new this year, school performance information has never before been presented in this format.

Table 7 reports SPF scores for online schools. Not all schools are listed, as some single district online programs do not have separate school codes and, thus, do not have a separate SPF report. Other single district online programs and multi-district programs are in the first year of operation as a school. These schools do have a separate school code, but they do not yet have reportable data. Finally, if the number of participating students was too small for a school that has been in operation at least one year, there was no SPF report, and the school's automatic school performance rating was "Improvement."

Table 7: School Performance Framework								
Autho-rizer	Online School	Type	Summary SPF Rating	Academic Achieve-ment	Academic Growth	Academic Growth Gaps	Post-secondary and Workforce Readiness	Total
Academy District 20	Academy District 20 Online Program	Multi	Perfor-mance Plan (revised)	N/A	N/A	N/A	N/A	
Colorado Springs District 11	ACHIEVEk12	Multi	Improve-ment Plan (revised)	N/A	N/A	N/A	N/A	
Branson Reorganized 82	Branson School Online	Multi	Improve-ment Plan	Meets, 75% (18.8 out of 25 points)	Approach-ing, 58.3% (29.2 out of 50 points)	N/A		64% (48 of 75 points)
Academy District 20	College Pathways (TCA)	Multi	Perfor-mance Plan (revised)	N/A	N/A	N/A	N/A	N/A
Adams 12 Five Star School	Colorado Virtual Academy (COVA) – Elemen-tary	Multi	Priority Improve-ment Plan (Revised)	Approach-ing, 43.8% (11 out of 25 points)	Does not meet, 25% (12.5 out of 50 points)	Does Not Meet, 25% (6.3 out of 25 points)	N/A	29.8% (29.8 of 100 points)
Adams 12 Five Star School	Colorado Virtual Academy (COVA) – Middle School	Multi	Priority Improve-ment Plan (Revised)	Approach-ing, 37.5% (9.4 out of 25 points)	Does not meet, 25% (12.5 out of 50 points)	Does Not Meet, 25% (6.3 out of 25 points)	N/A	28.2% (28.2 of 100 points)
Adams 12 Five Star School	Colorado Virtual Academy (COVA) – High School	Multi	Priority Improve-ment Plan (Revised)	Approach-ing, 37.5% (5.6 out of 15 points)	Approach-ing, 50% (17.5 out of 35 points)	Approach-ing, 50% (7.5 out of 15 points)	Does Not Meet	42.3% (42.3 of 100 points)
Crowley County School District RE1-J	Crowley County Online Academy	Multi	Turnaround Plan				Does Not Meet	25.1% (8.8 of 35 points)
Denver County 1	DPS Online High School	Multi	Turnaround Plan (Revised)	Approach-ing, 50% (7.5 out of 15 points)	N/A	N/A	Approach-ing, 37.5%, 13.1 out of 35 points	41.2% (20.6 of 50 points)
Edison 54 JT	EDISON ACADEMY	Multi	Priority Improve-ment Plan	N/A	N/A	N/A	Meets, 62.5%	62.6% (21.9 of 35 points)
Douglas County School	Colorado Cyberschool	Multi	Priority Improve-ment Plan	N/A	N/A	N/A	N/A	N/A

District								
Pueblo County 70	Futures Digital Academy	Sin-gle	Improve-ment Plan (revised)	N/A	N/A	N/A	Does Not Meet, 25%, 8.8 out of 35 points	25.1% (8.8 of 35 points)
Charter School Institute	Guided Online Academic Learning (GOAL) Academy	Multi	Improve-ment Plan (revised)	Does not meet, 25% (3.8 out of 15 points)	Does not meet, 25% (8.8 out of 35 points)	Does not meet, 25% (3.8 out of 15 points)	Does not meet, 25% (8.8 out of 35 points)	25.2% (25.2 of 100 points)
Douglas County School District	Hope Online Learning Academy Co-Op	Multi	Turnaround Plan	Does not meet, 25% (6.3 out of 25 points)	Does not meet, 25% (12.5 out of 50 points)	Does not meet, 25% (6.3 out of 25 points)	N/A	25.1% (25.1 of 100 points)
Julesburg School District RE-1	Insight School Of Colorado	Multi	Turnaround Plan	Does not meet, 31.3% (4.7 out of 15 points)	Approach-ing, 58.3%, (29.2 out of 50 points)	Approach-ing, 41.7% (6.3 out of 15 points)	Does not meet, 33.3 (11.7 out of 35 points)	37.3% (37.3 of 100 points)
Jefferson County R-1	Jeffco's 21st Century Virtual Academy	Multi	Improve-ment Plan (revised)	N/A	N/A	N/A	N/A	N/A
Garfield RE-2	Kaplan Academy Of Colorado	Multi	Turnaround Plan	Does not meet, 31.3% (4.7 out of 15 points)	Does not meet, 33.3% (11.7 out of 35 points)	Approach-ing, 50% (7.5 out of 15 points)	Does not meet, 33.3% (11.7 out of 35 points)	35.6% (35.6 of 100 points)
Karval RE-23	Karval Online Education	Multi	Priority Improve-ment Plan	Approach-ing, 39.3% (5.9 out of 15 points)	Approach-ing, 50% (17.5 out of 35 points)	Does not meet, 25% (3.8% out of 15 points)	Approach-ing, 41.7% (14.6 out of 35 points)	41.8% (41.8 of 100 points)
Monte Vista C-8	Monte Vista On-Line Academy	Multi	Improve-ment Plan (revised)	Approaching, 50% (7.5 out of 15 points)	Approaching, 50% (20.4 out of 35 points)	N/A	Does not meet, 33.3% (11.7 out of 35 points)	46.6% (39.6 of 85 points)
Poudre School District	PSD Online Academy	Multi	Performance Plan (revised)	N/A	N/A	N/A	N/A	N/A
Vilas RE-5	V.I.L.A.S. Online School	Multi	Turnaround Plan	N/A	N/A	N/A	N/A	N/A

INDIVIDUAL STUDENT PERFORMANCE ANALYSIS

This section of the report presents results from a comparison of student achievement of online to traditional public school students. Student-level data used for the comparison were reading, math, writing, science, and cross-subject composite CSAP results from the 2010 administration. Comparisons were made in two ways. The first used CSAP scale scores; the second used proficiency levels.

Overall, results indicate achievement among online students consistently lags behind those of non-online students, even after controlling for grade levels and various student characteristics. This is true when using either scale scores or proficiency levels as the outcome measure.

In both analyses, student scores were separated by grade level. Within grade levels, scores of online students were compared to those of non-online students after controlling for the following student characteristics: sex, race/ethnicity, English Language Learner status, IEP status, and free and reduced lunch status. The analyses of scale scores used multiple regression, while the analyses of proficiency levels used logistic regression. All data came from the Colorado Department of Education.

Table 8 provides the average scale scores for each group (online versus non-online) by grade level. As indicated in the means column, average scores for non-online students were consistently greater than those among online students. The smallest mean difference was in third grade reading, while the greatest difference was in fourth grade math. Regression analyses revealed all differences in Table 8 were statistically significant (p<.05), or greater than what might be expected by chance or error.

Table 8: Average Differences in Scale Scores between Online and Non-Online Students					
Grade	**Subject**	**Group**	**N**	**Mean**	**SD**
3	Reading	Non-online	61,540	551.97	84.23
		Online	549	539.38	93.25
	Math	Non-online	61,404	468.02	92.42
		Online	335	423.99	88.72
	Writing	Non-online	61,382	466.44	51.68
		Online	335	433.96	60.22
	Composite	Non-online	61,685	495.47	69.55
		Online	554	500.56	93.44
4	Reading	Non-online	60,844	585.15	61.36
		Online	354	541.33	89.02
	Math	Non-online	60,848	493.33	78.74
		Online	355	428.08	83.06
	Writing	Non-online	60,852	485.75	51.91
		Online	355	440.49	51.90
	Composite	Non-online	60,958	521.28	59.47
		Online	355	469.82	68.55

5	Reading	Non-online	59,425	612.49	67.40
		Online	361	567.37	102.98
	Math	Non-online	59,441	520.22	71.98
		Online	362	458.49	82.92
	Writing	Non-online	59,361	507.20	55.22
		Online	361	467.31	66.15
	Science*	Non-online	59,399	498.89	63.08
		Online	589	480.74	73.62
	Composite	Non-online	59,546	534.60	59.67
		Online	589	496.05	72.36
6	Reading	Non-online	58,335	628.96	67.36
		Online	478	597.40	74.65
	Math	Non-online	58,403	537.54	74.74
		Online	477	479.54	87.98
	Writing	Non-online	58,375	523.79	61.50
		Online	478	488.20	66.85
	Composite	Non-online	58,492	563.25	63.48
		Online	478	521.79	71.32
7	Reading	Non-online	57,284	641.17	64.21
		Online	480	618.86	70.83
	Math	Non-online	57,326	552.11	74.90
		Online	480	500.00	78.19
	Writing	Non-online	57,290	552.45	70.31
		Online	481	521.45	70.49
	Composite	Non-online	57,410	581.76	65.16
		Online	483	546.06	67.87
8	Reading	Non-online	56,547	652.37	59.86
		Online	573	625.74	63.89
	Math	Non-online	56,578	575.70	71.50
		Online	575	519.02	78.69
	Writing	Non-online	56,520	565.27	71.23
		Online	573	525.83	73.19
	Science*	Non-online	56,535	499.04	60.63
		Online	909	464.53	67.61
	Composite	Non-online	56,767	572.85	61.13
		Online	910	512.42	67.86
9	Reading	Non-online	58,070	661.55	52.64
		Online	979	639.21	52.23
	Math	Non-online	58,140	579.03	71.57
		Online	978	526.99	70.03
	Writing	Non-online	58,111	562.11	79.25
		Online	980	520.81	68.36
	Composite	Non-online	58,368	600.52	63.59
		Online	986	562.14	58.67
10	Reading	Non-online	54,399	680.92	58.42
		Online	825	659.74	60.14
	Math	Non-online	54,540	588.55	72.89
		Online	830	536.99	72.20
	Writing	Non-online	54,388	575.60	88.01
		Online	824	536.25	75.91

	Science*	Non-online	54,454	495.30	63.98
		Online	1054	470.15	64.81
	Composite	Non-online	54,855	584.52	65.93
		Online	1,070	537.33	65.31
All Grades	Reading	Non-online	466,444	625.44	76.44
		Online	4599	609.65	84.23
	Math	Non-online	467,231	537.84	86.75
		Online	4392	498.24	87.31
	Writing	Non-online	466,539	528.48	76.92
		Online	4387	503.35	76.80
	Science	Non-online	170,506	497.76	62.62
		Online	2554	470.60	68.17
	Composite	Non-online	468,670	555.63	72.30
		Online	5,425	524.41	74.55

*Science is tested only in grades five, eight, and ten.

As with the pattern reported in Table 8 above, online students consistently achieve proficiency at rates less than non-online students. The differences in proficiency rates were greatest in math and the smallest in reading and science. Also consistent with Table 8, logistic regression results for data reported in Table 9 indicate the within grade differences between online and non-online students in the likelihood of achieving proficiency were all statistically significant ($p<.05$).

Table 9: Percent of Students Achieving Proficient/Advanced				
Grade	Non-Online	Online	Non-Online	Online
	Reading		Math	
3	69.92	64.85	71.22	54.03
4	66.50	42.66	70.88	40.28
5	70.19	50.42	66.17	32.87
6	72.93	54.60	62.17	35.01
7	68.79	58.13	49.29	21.88
8	69.12	51.48	51.97	24.52
9	69.49	52.71	40.41	13.80
10	68.89	54.79	31.56	9.04
All Students	69.48	54.19	55.88	24.27
	Writing		Science	
3	51.00	30.45		
4	50.92	19.72		
5	58.03	31.58	46.95	38.71
6	57.81	37.45		
7	58.77	40.33		
8	55.97	35.08	49.27	26.07
9	50.30	25.82		
10	48.94	27.43	48.69	30.27
All Students	53.95	30.52	48.25	30.74

ALIGNMENT TO QUALITY STANDARDS

This section focuses on the descriptive information provided by online school operators in their annual reports. The 2010 report template required authorizers to address 36 items grouped in 10 sections. Of these, 22 items required extended descriptive responses. On 16 of the items, descriptions had to consist of a minimum of 150 words and a maximum of 600 words. Remaining items had a smaller minimum word count or none at all. Four of the sections were designated as information required to demonstrate Alignment to Quality Standards.

The length and specificity of the answers varied considerably from report to report. In some cases, authorizers diverged in their interpretation of the question and provided vastly different types of information to fulfill the indicator. These inconsistencies make comparison among the programs problematic and render any determination of alignment to quality standards highly subjective. For these reasons, this analysis only identifies trends in the descriptive material for each of the ten sections (analysis of quantitative material is provided in other sections of this report). Descriptive information from other six sections of the annual report template is included here, where appropriate.

Standard I: *The online program involves representatives of the online program's community, as well as staff, in a collaborative process to develop and communicate the online program's vision, mission, goals, and results in a manner appropriate to the online model for that program. The online program provides leadership, governance, and structure to support this vision and these supports are used by all staff to guide the decision making.*

All respondents provided a mission statement, and a minority of respondents provided a vision statement. Statements varied from one sentence to a paragraph. While each mission statement is unique, some verbiage, such as lifelong learning, 21st Century, and personalized/individualized appears in multiple statements. Two schools state in their mission statements a goal to serve at-risk/disenfranchised students, and one school states an aim of working with home school families.

Most district programs (and all of the charter schools) have a School Accountability Committee or similar body with a different name through which the leadership gains parent and community input. All charter schools have boards of directors and authorizers (local district or Charter School Institute). In general, large district online programs are managed by an online program department, technology department, or curriculum department, while small district programs are overseen by a single individual accountable to the superintendent.

Standard II: *The adopted curriculum of the online program is aligned with the Colorado Model Content Standards, assessment frameworks, and is consistent with grade level expectations. Assessment results are used by staff to obtain information on student learning, monitor student progress, support other academic plans, and to identify achievement and curricular gaps and to refine instruction.*

Most programs purchase services from a third-party provider. Colorado online programs use more than 60 online curriculum programs as primary and supplementary curriculum. Pearson Education, Aventa Learning, K12, Inc., Compass Learning, Colorado Online Learning, Study Island, eDynamic Learning, ALEKS, OdysseyWare, Brain Pop LLC, Rosetta Stone, Powerspeak, Lincoln Interactive, Florida Virtual School, Apex, and Plato Learning are used in multiple schools. A list of programs used in at least one school is included in Appendix D.

Online programs that design their own courses use teachers, administrators, and curriculum committees to create and conduct periodic reviews and revisions. Third-party providers and online schools conduct minor reviews as frequently as twice a year and more commonly every one to two years. Major review cycles are typically every three to six years. Some programs consult national or state standards or models in the creation and monitoring of curriculum and courses, such as Understanding by Design, Colorado Quality Standards for Online Programs, National Standards of Quality for Online Courses, Colorado Council on 21st Century Learning, Partnership for 21st Century Skills, American Diploma Project, McREL, American Council on Online Learning, and Advanced Placement Standards. Most schools conducted an internal alignment of the curriculum/courses to Colorado State Standards or were given an alignment document from the provider. One school hired an alignment company to conduct a systematic comparison of Colorado State Standards and the curriculum.

Most of the programs had plans to explore or add new components and strategies over the next year, such as podcasts, videoconferencing, community liaisons, Professional Learning Communities, additional online courses and tools, lab or center based opportunities, and tutoring.

Standard III: *The online program has, or has a plan and timeline place to accomplish, the technological infrastructure capable of meeting the needs of students and staff, and of supporting teaching and learning. The online program uses a variety of technology tools and has a user-friendly interface. The online program meets industry accepted accessibility standards for interoperability and appropriate access for learners with special needs. Technological support structures and programs are in place to reduce barriers to learning for all students.*

All respondents said that they currently have the technological capacity to operate the programs. Most programs use a Learning Management System (LMS) such as Blackboard, NovaNet, Moodle, Agilix Brain Honey, My Calvert, Angel Learning, eCollege, and the K12, Inc. proprietary LMS.

Synchronous online teaching is facilitated by such programs as Adobe Connect, Edmodo, Elluminate Live! GoToMeeting, or Dimdim. Teachers and students also communicate through Skype, phone, email, and instant messaging.

In addition to computers and software, some online programs provide students with webcams and printers. Many of the narratives noted that the program had assistive technology available for students with disabilities.

All Hope Online courses are conducted at a learning center. Several district programs require students to come into a center one to two days a week for direct instruction, tutoring, monitoring, and test taking. GOAL Academy has "drop-in centers" where students take assessments and connect with teachers in person. Other districts are investigating but have not implemented hybrid education opportunities. State policy requires students to take the CSAP on site.

Standard IV: *The online program has, and implements, a technology plan that includes (but is not limited to) documentation that all students and parents know and understand acceptable use of the internet in accordance with all federal and state statutes. When providing direct services (for example, ISP, computer equipment or "at location") to students, the online program will use filtering software to prevent access to inappropriate materials.*

Most online programs require parents and students to sign an acceptable use policy for computers and Internet use. A majority of online programs provide students computer hardware, software, and Internet stipends. All programs use filtering software to limit access to dangerous or obscene material. Net Nanny, 8e6, BlueCoat, and Netsweeper were named in multiple reports as the preferred Internet filtering systems.

Standard V: *Online programs must comply with all statutory requirements, including the existing budgetary reporting procedures under state law, as well as being consistent with the format required by the authorizing entity. Budgets and accounting records must be transparent, open to the public, and demonstrate support of student academic achievement.*

Many respondents use data management programs such as QuickBooks. In general, district programs have the support of the district office finance and accounting personnel, while online charter schools have their accounting and bookkeeping personnel and consultants.

All online programs submitted individual budget information, the summary of which can be reviewed in the next section and the appendices of this document.

Standard VI: *Individual student academic growth, mastery of content standards, and progress toward grade level performance expectations satisfy state standards for district accreditation and the federal "Elementary and Secondary Education Act of 1965," 20 U.S.C. sec. 6301 et seq., as amended.*

Online programs employ multiple strategies to help students maintain progress with the online curriculum, including onsite and virtual tutoring, advisors/mentors, regular phone/email/Skype communication between teachers and students, orientation classes, home visits, 24/7 technical support, student/family contracts, individualized placement, daily and weekly monitoring, pacing guides, synchronous webinar discussions for large and small groups and individuals, and counseling. As with other public schools, online programs identify students for extra help through a Response to Intervention (RtI) protocol. Some online programs have well-developed RtI identification and tracking procedures, while others are still establishing their procedures. Like traditional education settings, online programs create Advanced Learning Plans, Individual Learning Programs, and Individual Education Programs for students who need extra support or challenge.

Standard VII: *The online program's teachers use ongoing, research-based formative and summative assessments to measure student academic performance. Students have varied opportunities to demonstrate mastery of skills, show academic progress, and receive meaningful feedback on their learning.*

Schools employ multiple testing strategies including quizzes, pre- and post-tests, writing prompts, and other assessments embedded in the online curriculum, teacher-made assessments, and standardized tests, such as the Colorado State Assessment Program (CSAP), Colorado English Language Assessment (CELA), North West Evaluation Association Measure of Academic Progress (NWEA MAP), Scantron Performance Series, Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Developmental Reading Assessment (DRA), Basic Achievement Skills Inventory (BASI), PALS, Linda Mood-Bell Reading Assessment, Test of Adult Basic Education (TABE), Woodcock Johnson III, Galileo, ACT, PLAN, EXPLORE, Acuity, Accuplacer, and AIMSweb.

Standard VIII: *An online program has a policy regarding course completion.*

Course completion expectations vary by program. For example, at one online program students must finish a course with a grade of 59.5 percent or greater, and students who withdraw after 40 days may be charged a $250 course fee to recoup the fee charged by the service provider to the district. At four schools, students must earn a "D" or higher on summative assessments and graded work, and at four schools students must pass with a "C minus" or better.

Standard IX: *An online program follows policies for tracking attendance, participation, and truancy. The policy includes documentation of teacher/student interaction.*

Expectations for student attendance and truancy vary considerably. Some programs have a broad policy that enables the teacher to determine how much progress students need to make in order to remain on track. Other programs require students to complete two to eight hours of seat time every day. Time on task is tracked through the online program and off-line logged interactions between the teacher and student. Still other schools require a certain number of course completions per month or quarter.

Standard X: *The online program has a policy, and the infrastructure to store, retrieve, analyze and report, required student, teacher, financial, and other required data collections.*

At most online programs, achievement and attendance data reporting, disaggregation, and storage are facilitated by programs such as Alpine Achievement, Infinite Campus, Sycamore Education Student Information System, and Power School. In terms of financial practices, many respondents use data management programs such as QuickBooks. In general, district programs have the support of the district office finance and accounting personnel, while online charter schools have their accounting and bookkeeping personnel and consultants.

Standard XI: *The online program has a policy providing guidance counseling services as appropriate to grade level and student need.*

All schools provide students with access to counselors. In a small minority of schools, the student's advisor is expected to fulfill this role. High school programs generally require students to complete a Colorado Individual Career and Academic Plan through College in Colorado.

Standard XII: *The online program has a policy guiding school/home communication about student and program progress, program governance, and program accountability that is relevant, regular, and available in native language where reasonable.*

Most respondents included information about the types of home-school communication employed by the program, including progress reports, report cards, periodic check-ins, home visits, newsletters, Internet portals for viewing grades, blogs, and web sites. Large online programs routinely make parent information available in Spanish. Other programs note that they are willing to translate documents in the future if there is a need.

Standard XIII: *Instructional strategies, practices, and content address various learning needs and styles of students. The online program uses a body of evidence to identify advanced, underperforming, economically disadvantaged, or other special*

needs students. The online program will work with its authorizer to ensure that support structures and programs, including but not limited to Title I, ESL, special education, and gifted and talented, are integrated into the school's instructional program to promote and support student learning.

Online programs provide the same kinds of supports for English Language Learners, Special Education, and Gifted and Talented as do onsite programs, such as testing, tutoring, extended time, language support, and access to specialists. District online programs utilize district services, while online charter schools purchase outside services from the district or private sector and employ their own Special Education personnel.

Standard XIV: *The online program evaluates the degree to which it achieves the goals and objectives for student learning. There is a systematic process for collecting, disaggregating, managing, and analyzing data that enables the online program's leadership, teachers, parents, students, community members, and other stakeholders to determine areas of strength and challenge. The data collected are analyzed using a systems approach, and the analysis includes the use of the Student Accountability Report (SAR) and other state accountability reports.*

Programs use assessments to track student progress. Most programs use a combination of online assessments embedded in the online course curriculum and nationally normed or benchmarked assessments. As with all public schools, online programs are required to administer Colorado Assessment of Student Progress (CSAP) exams in grades 3-10 and the ACT in grade 11. Twenty-one of the 34 online programs completed School Performance Framework (SPF) plans, which include test scores, root cause analyses, and goals. See the section on SPF results for more information. Most single district programs did not produce an SPF. Some of the district and charter programs were in their first year of operation and therefore did not produce a report.

Standard XV: *The online program shall ensure that background checks in accordance with law are performed on all volunteers and paid staff, including but not limited to mentors, teachers, administrators, or any other persons in unsupervised contact with the student, except parents supervising their children's educational program.*

All programs have procedures for conducting the necessary background checks.

ANNUAL BUDGETS

The budget section summarizes online schools' budgets in 13 categories: salaries, benefits, salaries plus benefits, professional services, other services, supplies, other, property capitalized, property non-capitalized, Internet, hardware, software, and total. In addition to summary data, this section also lists the types of expenditures made within each budget category. Budget details for each school can be found in Appendix A.

As Table 10 indicates, the average total budget across online schools was $2.5 million, the greatest percentages of which included salaries and benefits, professional services, and other services. Aside from the "other" category, online schools spent, on average, the least on property—both capitalized and non-capitalized.

The minimum and maximum columns illustrate the great variation evident in the online budgets. Some online programs spent no money, while others spent more than $30 million in total. Those that spent no money across all or many of the budget categories did so for three primary reasons:

1. The program was a pilot and had no budget for that year.

2. The program was in its first year of operations as a multi-district online program and had no relevant budget data for that year.

3. A specific item was available at no cost from another source, therefore resulting in no expenses in a budget category.

Table 10: Budget Summary Data for Online Schools				
	Mean	**Standard Deviation**	**Minimum**	**Maximum**
Salaries	$626,095.94	$1,019,507.28	$0.00	$4,698,304.00
Benefits	$138,593.30	$212,571.40	$0.00	$973,523.00
Salaries plus benefits	$764,689.23	$1,226,401.46	$0.00	$5,671,827.00
Professional services	$785,050.13	$3,675,541.57	$0.00	$21,817,157.00
Other services	$497,134.71	$2,310,036.86	$0.00	$13,719,806.00
Supplies	$124,721.00	$318,241.99	$0.00	$1,492,359.00
Other	$6,162.90	$14,775.34	$0.00	$55,262.00
Property capitalized	$15,442.77	$48,743.09	$0.00	$194,000.00
Property non-capitalized	$18,428.57	$66,960.20	$0.00	$385,544.65
Internet	$43,084.14	$112,807.67	$0.00	$573,868.00
Hardware	$137,775.75	$358,469.46	$0.00	$1,764,934.00
Software	$134,064.49	$384,254.31	$0.00	$2,120,640.00
Total budget	$2,526,553.69	$5,994,270.45	$0.00	$30,056,748.00

Table 11 lists the type of expenditures for salaries, benefits, professional services, and other services. The salaries column lists the various positions within the schools receiving compensation. The benefits column indicates the types of benefits offered in schools, most

of which include various types of insurance. The two services columns demonstrate a wide diversity of services purchased in online schools.

Table 11: Expenditures Types for Salaries, Benefits, Professional Services and Other Services	
Salaries	**Benefits**
administrative assistants assessment coordinator counselor educational support faculty assistant interventionist mentors online facilitator principal, director, coordinator PSEO advisor reading coach registrar RtI specialist social worker special education teachers technology staff	life insurance Medicaid medical/health insurance PERA unemployment
Professional Services	**Other Services**
3rd party vendor for digital content and instruction accounting advertising audit services community outreach consulting curriculum licensing extra duty pay interview expenses professional development programming software special ed expense staff recruiting and training startup services--legal, consulting, marketing tech support tutor support website hosting and maintenance	administration expenses advertising BOCES bus passes college costs consulting curricular support data entry field trips insurance Internet reimbursements leased equipment mileage nurse office rent postage professional development repairs software student activities student testing student tuition telephone travel

Likewise, Table 12 illustrates the variety of items purchased in the supplies and other categories. Under property, schools tended to purchase many of the same types of items, such as computers, office equipment, and furniture.

Table 12: Expenditures Types for Supplies, Other and Property	
Supplies	**Other**
administration supplies books computers CSAP testing costs curriculum custodian database gas for the online administrative building general office supplies postage/UPS freight software special education student supplies vehicle repair and fueling costs vision and hearing	administration dues Colorado League of Charter Schools membership dinner, refreshments, and awards for school celebrations and commencement for students and families. equipment and refreshments for Open House and Information Events for the local community field trips instructional materials insurance legal marketing phone postage print shop professional development referral fees school board fees testing materials travel
Property Capitalized	**Property Non-Capitalized**
building/garage construction computer replacement equipment land office furniture storage	capital construction computers purchased emergency funds equipment for staff hardware hosting of Moodle office furniture online office relocation safes server

Finally, Table 13 lists the expenditures for Internet, software, and hardware. While most were product or service related, some schools also provide Internet service, hardware, and software for students and families in need.

Table 13: Expenditures Types for Internet, Software, and Hardware	
Internet	**Hardware**
Comcast computer network and solutions wireless DSL Eastern Slope Internet for families with financial need and for staff start up stipends student Internet service Verizon	Computer headsets for students laptops mic netbooks office equipment printer provide computers for students with financial need routers server software speakers student technology assistance switches video equipment webcams
Software	
annual e2020 subscription anti-virus Compass curriculum courseware curriculum and content provider filtering system Illuminate library licenses for RtI interventions. licensing fee for the OdysseyWare LMS system online instructor fees for Lincoln Interactive operating system platform fee PLATO Learning subscription fees software for digital art courses software for student use computers staff computers student and teacher software SuccessMaker Windows Office	

ONLINE SCHOOL FUNDING MODELS

As online schools have developed nationwide, funding models have evolved (Rice, 2009). Currently, states report four primary options for funding virtual schools (Anderson, Augenblick, DeCescre, & Conrad, 2006; also see Center for Digital Education, 2008 and 2009 and Watson et al., 2010 for detailed state funding information and comparisons):

1. State appropriation

2. Funding formula

3. No direct state role

4. A combination approach

STATE APPROPRIATION

State appropriations are a common way for states to fund state-led online programs, which are online schools created by legislation or by a state-level agency, and/or administered by a state education agency, for the purpose of providing online learning opportunities across the state (Cavanaugh, 2010; Center for Digital Education, 2008). Like other state appropriations, the funding either flows directly from the state to the school or through another channel, such as the state department of education. Although this model leaves a program open to capricious political climates and makes it difficult to budget and plan for the future, it can be advantageous in the early years of implementation as it enables the program to have a solid base of support separate from the vagaries of student enrollment.

Some states—like Florida—that have used this approach have transitioned the program to a per-pupil funding formula (described below). The appropriation model is more suitable for state-led online programs than local virtual schools, since a state generally has only one state virtual school, whereas it might have numerous locally run virtual schools. For locally-based online schools, direct state support could best be provided in a couple of ways (Anderson, et al., 2006):

- Develop a startup grant program to provide seed money to help in the initiation of schools.

- Give local school districts the authority to tax their constituents to support the creation and growth of virtual schools (in the same way that districts can use such taxes to support their facility needs).

- Allow local districts to fund digital curriculum and materials development with state funds that may be currently restricted for textbook, curriculum, and materials.

FUNDING FORMULA

A funding formula provides money to online schools on a per pupil basis similar to traditional funding formulas, sometimes according to the number of students enrolled, other times based on average daily attendance, or still others based on the number of courses or units of instruction taken or completed (Anderson, et al., 2006). The first of these models parallels the practice of funding brick-and-mortar schools, but it is an approach some have come to see as poorly aligned with the online school environment (Darrow, 2010; Watson & Gemin, 2009). Among other shortcomings, this model does not capture students who begin a program after a designated count day, and it fails to address the possibility of a student switching districts right before or after the count day and creating a situation where the district receiving funding for the student is not the district that does most of the teaching of that student (Watson & Gemin, 2009).

Average daily attendance is a model that improves upon a census date approach. Since student "attendance" is logged and calculated, this facilitates a more accurate designation of a student's school of record and provides some measure of accountability of a student's "presence in school." Although this is an improvement over the census date approach, several states have moved to a course completion approach. This model places far more pressure on schools to ensure their students' success than exists in traditional public school systems. An example comes from Florida with the Florida Virtual School (FLVS). Florida funds six credits per high school student per year, so each time a student successfully completes a one-credit course, FLVS receives one-sixth of its per-pupil funding level (Tucker, 2009).

Often, the formula used in states is at a lower rate than applied to brick-and-mortar schools (Center for Digital Education, 2008, 2009). Because almost no research has documented the costs of online schools, such reduced rate formulas are likely based more on assumptions and a desire to cushion traditional schools from financial loss than on actual measures of cost.

NO DIRECT STATE ROLE

Not all online schools operate using direct state funds. Some states permit the formation of virtual schools but rely on local school districts (through the use of general funds), grants, private individuals, student tuition/fees, or private institutions to cover the costs (Anderson, et al., 2006; Center for Digital Education, 2008, 2009).

COMBINATION APPROACH

A combination model can take one or all of the aforementioned approaches (Anderson, et al., 2006; Center for Digital Education, 2008, 2009). Some states provide an appropriation or financial incentive (i.e., planning and initiation grant) for online school startup and then move to a formula-based system or other non-direct state funding sources to finance the ongoing operations of these schools.

Such an approach allows people to access online schooling via multiple channels (i.e., more than one type of virtual school) and encourages a local investment in virtual schools instead of relying on state dollars. With any of the above approaches, a state could choose to create additional incentives for virtual schools. For example, state funds could flow to schools successful at raising a certain level of resources from local-based sources. Or, states could provide weighted funding to districts that choose to send students to the state online school to take selected courses.

FUNDING IN COLORADO

In Colorado, funding for online schools is governed by state statute (CRS 22-30.7-107). The model takes the form described in "Funding Formula" above. Online students in single district online or online charter schools or a Charter School Institute online charter school are counted on the October 1 "count day," and then the school receives the respective per-pupil funding for each student enrolled in the program.

In multi-district programs, students are counted on the census date, as described above, and then funding is determined thus:

"A district's on-line funding for the applicable budget year shall be the greater of:

- The district's on-line funding amount calculated for the applicable budget year…minus the district's state budget stabilization reduction amount calculated for the applicable budget year…; or

- An amount equal to the base per pupil funding amount…for the applicable budget year multiplied by the district's on-line pupil enrollment for the applicable budget year."

The authors of this report requested interviews or written feedback to a series of survey questions from all online school leaders and authorizers in Colorado. Based on responses, the authors conducted in-person and telephone interviews and gathered responses via email from 16 leaders of online schools and four district authorizers. Table 14 summarizes the responses by leader and authorizer to the following major themes: definition, vision for the future of online learning, funding, reporting, accountability—CSAP, accountability—evaluation, and teacher preparedness. The questions asked of all online leaders and authorizers are included in Appendix C.

Table 14: Themes from Interviews with Online Leaders and Authorizers	
Definition	
Leader	• The current definition of online learning is too narrow and it does not allow for movement or growth in the online model. Because the definition is confining, many school leaders believe they are not able to best serve students as a result of this limitation. The definition needs to be flexible enough to allow for delivery of the curriculum in innovative ways. • The definition needs to accommodate blended/hybrid models that center on student/teacher education rather than on limitations based on definitions. The foundation should be on student learning rather than on forcing the model to conform to the definition. For example, face-to-face instruction does not fall within the current definition, which puts blended models at a disadvantage. Focus on student learning rather than on mechanism for delivery of learning. • Large multi-district programs favor eliminating "teacher" from the current definition to broaden allowable types of delivery mechanisms. District-led programs tend not to favor broadening the delivery mechanisms because of concerns that the quality of instruction will decrease. For example, a district-led program leader stated: "It is vital that the delivery method be from a teacher to a student. However, 'teacher to student' should not be interpreted to mean direct, live, synchronous instruction. A teacher needs to be in charge of the curriculum that is delivered to the student, but wordage needs to allow for delivery of that curriculum in numerous innovative ways! Proposed wording opens the door for large corporations to come in and provide a generic, sterile curricular program and is the first step toward de-individualization of Colorado online education."
Authorizer	• Related to the inclusion of "teacher" in the definition, a district-led program authorizer stated: "Removing the teacher from the definition of online learning will turn online education into a corporate behemoth completely bypassing local districts and designed for nothing more than the creation of corporate profits with little or no educational merit." • Some districts are waiting for less regulation, which means a broader definition of what constitutes an online program. However, online programs have a lot to prove. Districts need to define what meets quality standards.
Vision for the Future of Online Learning	
Leader	• Blended/hybrid programs that combine face time with online content delivery is the future of education. Our current educational model is outdated in that it does not accommodate the needs of all learners. • Supplemental programs (students stay enrolled in their brick-and-mortar school but take one or two courses online, usually in the school building) is another vision of the future of education. • Adaptive learning models focus on what students know and are less concerned with traditional schedules and sequencing of curriculum.

	• In 15 to 20 years, education will accommodate a variety of different settings with fewer school buildings needed because students will be learning in a variety of settings. The delivery model will become more fluid as the learning becomes more tailored to the student rather than the traditional school construct. • Online schools will use face-to-face sessions to maximize student learning, and traditional brick-and-mortar programs will incorporate Internet and online resources to become more effective. • "The bottom line is: online education, in some form, is the future."
Authorizer	• There should no longer be a separate category for online schools. A school is a school. • Blended programs are designed to serve at-risk students. Definitions should include a hybrid/blended model that are variations on a theme.
Funding	
Single District Leader	• Single district schools receive equal funding as district brick-and-mortar schools. Multi-district schools receive less than district brick-and-mortar schools. • Funding is currently ineffective for online learning. • October count is an inaccurate measure of enrollment as many students enroll in online programs later in the school year. • Ideas discussed in the online community to resolve the significant funding issues include funding based on mastery or course completion. However, the opinions on this topic vary widely. Some leaders do not support funding tied to course completion because it encourages passing courses without mastery and it would place a burden on online schools that is not equal to brick-and-mortar counterparts.
Multi-District Leader	• Current funding model is not effective. The process for validating student enrollment is burdensome and is beyond what is required for brick-and-mortar. State level guidance is needed so that all schools are on the same playing field. • There were several recommendations to commission a study to determine the actual costs of an online school as compared to brick-and-mortar schools. • Multi-district schools strongly favor funding equal to brick-and-mortar schools. • Funding should follow the student through the course level, which would accommodate various levels of part-time students, or students who move through the curriculum at a different pace. • Conduct student count more than once per year. Many schools recommend twice per year or quarterly. Online schools inherently enroll many students mid-year, and the one-time funding process does not support student needs. The counter concern, however, is increasing the administrative burden of that process. • Online education is a partial solution for budget cuts because as online programs grow, there will be less need for school buildings. • Some leaders strongly opposed funding based on mastery because this places a greater burden on online schools than is required of brick-and-mortar schools. • There is no funding mechanism in place to accept out-of-district students; it requires negotiation between districts or schools, which does not always happen.
Authorizer	• Schools should be funded at the same level.
Reporting	
Leader	• With the implementation of the UIP process and the Financial Transparency Act, many schools believe that the reporting requirements to both CDE and their authorizers are redundant. Most schools believe they should report to their authorizer and not also to the CDE. Reporting should be online and only once per year. • School leaders question the value of the Annual Report because they do not see where it is used. • There is no mechanism for data sharing amongst districts and CDE, which creates redundant requirements. • If the program changes significantly (such as adding middle school classes), then that should trigger an update in reporting.

	• Reporting requirements are more stringent for online schools than brick-and-mortar counterparts.
Authorizer	• Authorizers report similar issues with redundancy in reporting and a lack of a mechanism to share information.

	Accountability—CSAP
Leader	• All schools were not opposed to accountability through CSAP, but they are strongly opposed to the current testing process.
	• Leaders strongly recommended an online testing mechanism. The current method of students travelling to a central location for multiple days is significantly cost-prohibitive and logistically difficult for families and schools.
	• Students not accustomed to paper testing in an unfamiliar environment do not perform as well on these standardized tests.
	• Issues that drive cost include: the need to rent space, hire proctors and provide space for single grade tests, and administrative time for coordinating the process.
	• The population of students enrolled in online schools is largely predisposed to not value CSAP testing.
	• Significant issues exist with students not taking the test, creating invalid test scores when automatic zeros are counted. Therefore, it is not an accurate measure of overall school performance.
	• Many school leaders stated they will never achieve AYP because of low participation rates, which they cannot control.
	• District-led blended programs, where students have regularly scheduled face time with teachers, report less difficulty with CSAP participation and administration.
	• Some leaders noticed a difference in accountability criteria for Alternative Education Campuses (AEC), and some consider their programs in this category based on the number of at-risk students served, even if they are not officially categorized as an AEC.

	Accountability—Evaluation
Leader	• Responses on the effectiveness of authorizers to evaluate online schools were highly mixed. Some schools reported that their authorizers were well equipped to evaluate them while others reported their authorizers were not well prepared.
	• State level training would be welcomed by both authorizers and online program leaders.
	• Many leaders state they look to the iNACOL for guidance on best practices. Several stated they would like to attend more conferences, particularly iNACOL, but do not have the funding to do so.
	• People who were previously in a position to evaluate schools recognized that prior to becoming associated with an online school, they did not appreciate the complexity of the online environment in terms of evaluating the schools and the standards for student performance as well as the number of variables that online schools must manage.
Authorizer	• Districts need more training in evaluating online schools. Many districts have few staff members who understand the online environment well enough to lead a training.
	• Training for authorizers at the state level would be welcomed.

	Teacher Preparedness
Leader	• Program leaders report that training opportunities for teachers in best practices for online environments are minimal. Leaders expressed strong recommendations for increased training opportunities for teachers. Training must be expanded on delivery platforms, such as Angel, Blackboard, Moodle, Web 2.0., etc.
	• CU Denver has a certification program for e-learning but opportunities need to be expanded.
	• Communication in an online environment is highly important as the typical in-person classroom cues are not available. Training on how to incorporate a social network so that teachers can develop a rapport and a relationship with students and with each other would be welcomed.
	• "Our teacher readiness varies from acceptable to competent. CDE assistance to organize training would be valuable."

POLICY CONSIDERATIONS

A recent report on nationwide online school policies observes, "While the viability and popularity of online learning is gaining widespread acceptance, the policy needed to support its growth is lagging. The continued success and sustained growth of online learning requires state education policy frameworks to be adjusted" (Watson & Gemin, 2009b, p. 3). It is a statement true of Colorado, as with many other states. As the information above indicates, Colorado's online schools provide increasingly desired options to students in diverse circumstances and settings. The data also show that online schools in Colorado have significant room for improvement and growth, even as student enrollment in online schools continues to grow.

The policy considerations and recommendations below are designed to facilitate such improvement. They grow out of the results presented above coupled with findings from recent research reports on online education nationwide. Further information about the research reports cited in this section can be found in the reference section.

- Modify the definition of online learning to accommodate blended models, including a combination of fully online learning and face time instruction. Recent literature on online learning has noted that blending online and face-to-face learning experiences is taking new forms in many schools and districts as educators and parents think in new ways about the roles of time and place in learning (Cavanaugh, 2010; Watson, 2008; Watson, Gemin, & Coffey, 2010). Blended learning programs combine online learning with elements of the traditional classroom environment. This may mean that students attend a physical school but use online curriculum and instructional methods to complete their work or that students work from home four days a week and at a learning center one day each week. The value of such programs is how they contribute to student success. For example, for students who need personal interaction, a blended program may be a better solution than fully online (Watson, et al., 2010). Some experts predict that blended learning is likely to emerge as the predominant model of the future and to become far more common than either one alone (Watson, 2008).

- Among those involved in online learning in Colorado and nationally, the consensus is that some current funding models—including Colorado's—are not satisfactory. Funding is one of the most important policy issues in online learning. According to a recent report, online schools often have many of the same costs as their brick-and-mortar counterparts, including salaries, benefits, initial training, and ongoing staff development. Online programs do not incur the same level of facilities and transportation costs as traditional districts, but they have significant technological components, with associated costs for hardware, bandwidth, and the like, plus other costs, such as teacher travel for face-to-face training, telephone technology, and

technical support (Watson & Gemin, 2009). Another study found that ongoing operating costs for online programs are about the same as operating costs of a regular brick-and-mortar school. In addition, the cost per student, whether enrolled in an online course full time or part time, is proportionately the same (Anderson, et al., 2006). Despite such reports, however, few studies have documented the real costs of creating and operating online schools (Darrow, 2010), and the budget numbers presented in this report do little to facilitate the documentation of such costs. Therefore, a study should be commissioned to evaluate the true costs of operating an online learning program in Colorado as compared to a brick-and-mortar counterpart school. The study should also evaluate the option of funding at the course level— perhaps a course completion model—as opposed to funding based on full-time student status using a census date. Such an approach would best be implemented using defined benchmarks for incremental completion (for example, 50 percent and 100 percent complete) rather than "all or nothing" (Watson & Gemin, 2009). Finally, the study should consider a single online base funding level, not including adjustments for special student populations or needs, rather than a base funding tied to specific districts).

- Online students are accustomed to completing coursework and taking assessments in an online setting; thus, CSAPs should be administered in the same way. The current paper and pencil format requirements create an unfamiliar testing environment for online students, and, consequently, may not produce reliable results.

- Streamline the reporting requirements to align with content in the UIP. Eliminate dual reporting requirements to both a district and CDE. Authorizers and CDE should develop systems that share data.

- Implement steps to increase the quality of online schools. Nationwide, the quality of online schools is a serious concern (Olivera, et al., 2009), as is the achievement of online students. One report, for example, lists dropout and failure rates among online students as high as 60 to 70 percent (Roblyer, 2006). Unfortunately, however, given the short history of online schools, research on creating high quality online schools is still in its infancy. And because the online school movement is still in its early years, effective differentiation and specialization of instruction, content, and delivery has not yet been achieved. This is important because despite references to the "ideal online learner" (Booker & Rebman, 2005), online schools serve a wide variety of students from diverse backgrounds, in different circumstances, and with a variety of needs. Thus, although there are some helpful standards and guidelines (referenced below) for creating and implementing quality online schools, it is a field still in development. That said, current knowledge should be harnessed to increase the quality of Colorado's online schools. As data earlier in this report indicate, online schools in Colorado have much room to grow in quality, and student achievement in online schools significantly

lags non-online counterparts. Therefore, recommended policies to increase the quality of online schools include but are not limited to:

- o Adopt standards and guidelines for authorizers to use in evaluating the quality of online schools. An excellent source for these includes reports by Pape and Wicks (2009) and Watson and Gemin (2009a). Each includes detailed quality indicators of online schools organized by school functions, such as management and operation, teaching and learning, support services, and evaluation. These sources could be adapted into standards and aligned rubrics for use by authorizers to measure and evaluate the quality of their online schools and to guide steps necessary to improve schools where necessary.

- o Upon adoption of standards and guidelines, create state-level training for authorizers to ensure consistency and quality standards across all online schools. Because online schools are comparably new, authorizers often have to "learn on the job" by fulfilling their oversight roles while simultaneously learning about the online learning environment and their roles therein. Even with creation of standards and rubrics referenced in the prior bullet, training would facilitate a greater understanding of online schools among authorizers and ensure the consistent use of quality standards and rubrics. Such training could be offered similar to what the CDE Schools of Choice Unit does with charter school authorizers.

- o Facilitate the creation of training programs in Colorado's universities for online teachers. Few institutions—including those in Colorado—provide adequate training for online teachers (Darrow, 2010). Because teaching online requires unique skills and knowledge (Davis, 2007; Olivera, et al., 2009), simply placing a traditionally trained teacher into an online environment is not sufficient. Training should be built on research-based best practices proven to work in an online environment, such as those reported by Darabi, Sikorski, and Harvey (2006), DiPietro, Ferdig, Black, and Preston (2008), and others.

REFERENCES

Anderson, A. H., Augenblick, J., DeCescre, D., & Conrad, J. (2006). 20/20: Costs and funding of virtual schools. Denver, CO: Augenblick, Palaich and Associates.

Booker, Q. E., & Rebman, C. M. (2005). E-student retention: Factors affecting customer loyalty for online program success. *Issues in Information Systems, 6*(1), 183-189.

Cavanaugh, C. (2010, April). The evolving online landscape: Sizing up the options among course providers to ensure a good fit with local needs. *School Administrator, 67,* 22-26.

Center for Digital Education. (2008). Online learning policy and practice survey: A survey of the states. Folsom, CA.

Center for Digital Education. (2009). Online learning policy survey: A survey of the states. Folsom, CA.

Darabi, A. A., Sikorski, E. G., & Harvey, R. B. (2006). Validated competencies for distance teaching. *Distance Education, 27*(1), 105-122.

Darrow, R. (2010, April). Funding online courses: The principal of an online school on the fiscal realities of starting and sustaining virtual programs. *School Administrator, 67,* 26-31.

Davis, M. R. (2007, Summer). How to ensure online courses are high-caliber. *Education Week Digital Directions* (pp. 16-17).

DiPietro, M., Ferdig, R. E., Black, E. W., & Preston, M. (2008). Best practices in teaching K-12 online: Lessons learned from Michigan Virtual School teachers. *Journal of Interactive Online Learning, 7*(1), 10-35.

Olivera, K., Osbornea, J., & Brady, K. (2009). What are secondary students' expectations for teachers in virtual school environments? *Distance Education, 30*(1), 23–45.

Pape, L., & Wicks, M. (2009). National standards for quality online programs. Vienna, VA: International Association for K-12 Online Learning.

Rice, K. (2009). Priorities in k-12 distance education: A delphi study examining multiple perspectives on policy, practice, and research. *Educational Technology & Society, 12*(3), 163-177.

Roblyer, M. D. (2006, November). Online high-school programs that work. *Education Digest,* 55-63.

Tucker, B. (2009). Florida's online option. *Education Next, 9*(3), 13-18.

Tunison, S. D., & Sackney, L. (2004). On-line secondary school conditions and practices. *International Studies in Educational Administration, 32*(1), 32-49.

Watson, J. (2008). Blending learning: The convergence of online and face-to-face education. Vienna, VA: North American Council for Online Learning.

Watson, J., & Gemin, B. (2009a). Management and operations of online programs: Ensuring quality and accountability. Vienna, VA: International Association for K-12 Online Learning.

Watson, J., & Gemin, B. (2009b). Policy and funding frameworks for online learning. Vienna, VA: International Association for K-12 Online Learning.

Watson, J., Gemin, B., & Coffey, M. (2010). A parent's guide to choosing the right online program. Vienna, VA: International Association of K-12 Online Learning.

Watson, J., Murin, A., Vashaw, L., Gemin, B., & Rapp, C. (2010). Keeping pace with k-12 online learning. Evergreen, CO: Evergreen Education Group.

This appendix includes budget details for each school using the same categories listed earlier in the report. Blank cells indicate no details were provided by the school. Information provide in the details column are exactly how schools entered the data.

Online School	Salaries	Details
Table A.1: Salaries for Each School		
Academy District 20 Online Program	$219,560.04	At the school level, salaries are not budgeted in terms of dollar amounts, but in terms of FTE. The amount listed here is the actual expenditure and may include general fund and/or grant sources.
Achieve K12	$316,056.00	Provides salaries for 2 full time teachers, 10 part-time teachers, 1 educational support person, 1 part-time clerical, and 1 full time administrator.
APS Online (Aurora Public Schools)	$204,256.00	Principal, 2 online instructors
Boulder Universal	$73,610.00	Clerical .4 FTE, administrative .6 FTE, 2 part-time mentors
Branson School Online	$1,486,705.00	Instructional, administration, and support staff salaries for the online school
Buena Vista Online	$12,000.00	Covers the new director position.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so we have no relevant budget data for the previous year.
Colorado Calvert Academy	$32,248.00	Three months of principal and principal's assistant for startup
Colorado Connections Academy	$1,384,212.00	25 teachers and 8 administrative staff
Colorado Cyberschool	$602,865.00	Includes licensed, substitute, classified employees.
Colorado Virtual Academy (COVA)	$4,698,304.00	
Crowley County Online Academy	$7,500.00	Director fee
D3 My Way	$28,733.00	2 positions
DPS Online High School	$363,497.00	Full time salaries
Edison Academy	$201,754.00	Principal, 2 teachers, 2 support secretaries, special education support
Falcon Virtual Academy	$324,519.00	
FOCUS Academy	$42,000.00	Coordinator/teacher
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$1,537,355.02	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.
Heartlight Academy	$43,000.00	Shared space with Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$2,933,929.00	salary expenses for all employees
Insight School Of Colorado	$2,773,455.56	
Jeffco's 21st Century Virtual Academy	$1,055,825.00	Staff salaries
Kaplan Academy Of Colorado	$765,498.48	
Karval Online Education	$402,849.00	Administration, teacher, tech support, secretary
LPS @ home	$18,288.00	Part-time teacher assigned at Hopkins Elementary School.

McLain LIVE (Jeffconet Academy)	$430,000.00	Five teachers, 1 secretary, 1 administrator, 1 FTE counselor, .3 social worker, .5 intervention education provider
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$261,575.00	OLA teacher salaries, ola support salaries, ola teacher sub, OLA SPED teacher salaries, admin salaries
Provost Academy Colorado	$1,027,000.00	
PSD Online Academy	$107,000.00	For 2009-2010: • 70% administrator $56,000 (partially paid by Title IID federal funding) • 75% office manager $30,000 • 50% mentor $21,000
Ridge Academy	$86,694.70	Program coordinator, counselor, educational assistant
Thompson Online	$58,344.00	Part-time employees as principal, elementary teacher/mentor, counselor/mentor, and faculty assistant
V.I.L.A.S. Online School	$398,600.00	The "Salaries" portion includes the administration salaries and the administrative support staff. These positions include the director, district assessment coordinator, receptionist-enrollment secretary, registrar, administrative assistant, RtI specialists, reading coach, PSEO advisor, and technology staff.
Virtual Village - Lake George Charter School	$16,125.00	Online facilitator

Table A.2: Benefits for Each School		
Online School	**Benefits**	**Details**
Academy District 20 Online Program	$47,508.73	At the school level, benefits are not budgeted in terms of dollar amounts, but in terms of TE. The amount listed here is the actual expenditure and may include general fund and/or grant sources.
Achieve K12	$89,128.00	Provides benefits for 2 full time teachers, 10 part-time teachers, 11 educational support person, 1 part-time clerical, and 1 full time administrator.
APS Online (Aurora Public Schools)	$47,471.00	Principal, 2 online instructors
Boulder Universal	$17,602.00	
Branson School Online	$403,695.00	Instructional, administration and support staff benefits for the Online School
Buena Vista Online	$1,948.00	PERA and Medicaid, no health
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so we have no relevant budget data for the previous year.
Colorado Calvert Academy	$0.00	No employee benefits were budgeted. They were paid for by Calvert Schools, Inc.
Colorado Connections Academy	$249,954.00	25 teachers and 8 administrative staff

Colorado Cyberschool	$167,301.00	Benefits
Colorado Virtual Academy (COVA)	$973,523.00	
Crowley County Online Academy	$1,410.00	
D3 My Way	$4,300.00	Taxes
DPS Online High School	$93,253.00	Benefits
Edison Academy	$39,976.25	Principal, 2 teachers, 2 support secretaries, special education support
Falcon Virtual Academy	$88,225.00	
FOCUS Academy	$11,760.00	Coordinator/teacher
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$461,358.79	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.
Heartlight Academy	$17,550.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$646,335.00	Employee benefits, including health insurance, Medicare and PERA contributions
Insight School Of Colorado	$371,408.44	
Jeffco's 21st Century Virtual Academy	$202,225.00	Staff benefits
Kaplan Academy Of Colorado	$87,696.25	
Karval Online Education	$108,649.00	PERA, Health, Life, Unemployment, Medicare
LPS @ home	$8,350.00	LPS health plan, Medicare, PERA, life insurance participation
McLain LIVE (Jeffconet Academy)	$109,000.00	Insurance and employee benefits are approximately 24 percent of salaries
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$97,478.00	Benefits on above
Provost Academy Colorado	$327,278.00	
PSD Online Academy	$10,500.00	For 2009-2010, all staff employed part-time
Ridge Academy	$19,423.76	Program coordinator, counselor, educational assistant
Thompson Online	$9,498.00	Part-time employees as principal, elementary teacher/mentor, counselor/mentor, and faculty assistant
V.I.L.A.S. Online School	$134,345.17	The "Employee Benefits" portion includes PERA for admin, office, and any teaching staff where benefits have been approved by the Board of Education, insurance, Medicare, and any other administrative benefits applicable.
Virtual Village - Lake George Charter School	$2,615.00	PERA, Medicare, Unemployment

Table A.3: Professional Services for Each School		
Online School	**Professional Services**	**Details**
Academy District 20 Online Program	$112,912.37	The amount listed here is the actual expenditure and may include general fund and/or grant sources.
Achieve K12	$0.00	
APS Online (Aurora Public Schools)	$8,000.00	Extra duty pay, counselor/registrar
Boulder Universal	$76,264.00	Aventa Learning for teacher, content and LMS access. This was for all online courses taken during 2009-2010. The four full-time students were budgeted $14,400 for 12 courses each.
Branson School Online	$27,700.00	Teacher training, interview expenses, and audit services
Buena Vista Online	$0.00	This is already available from the district and funded by other line items within other building budgets.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$355,693.00	Startup services -- legal, consulting, marketing. These services were provided by Calvert Schools, Inc. and will be reimbursed by Colorado Calvert Academy.
Colorado Connections Academy	$1,564,210.00	Community outreach, staff recruiting and training, special ed expense, etc.
Colorado Cyberschool	$51,450.00	Website hosting and maintenance
Colorado Virtual Academy (COVA)	$21,817,157.00	
Crowley County Online Academy	$11,000.00	Tech support, Internet reimbursement, software for program
D3 My Way	$15,135.00	On campus learning via web
DPS Online High School	$2,000.00	Other professional services, tutoring
Edison Academy	$25,000.00	Tutor support. Actually spent $45,104.
Falcon Virtual Academy	$0.00	
FOCUS Academy	$1,000.00	Aventa Learning Training
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$197,895.27	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.
Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$422,100.00	Consulting, legal and accounting services
Insight School Of Colorado	$988,765.00	
Jeffco's 21st Century Virtual Academy	$1,500.00	Professional development
Kaplan Academy Of Colorado	$5,713.66	
Karval Online Education	$18,623.00	Curriculum, staff development, dual credits, special education, MAPS
LPS @ home	$300.00	Professional development (fees for online courses for instructor)
McLain LIVE (Jeffconet Academy)	$0.00	

Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$10,000.00	Curriculum licensing
Provost Academy Colorado	$600,872.00	NA
PSD Online Academy	$201,516.00	For 2009-2010: • Third-party vendor for digital content and instruction • Aventa Learning • Cost per course = $300 / student / semester • Students budgeted for 13 courses per year ($3900 per student)
Ridge Academy	$1,333.92	Apex training
Thompson Online	$123,179.00	Prof development, content provider content and/or teachers, other
V.I.L.A.S. Online School	$836,835.26	The "Purchased Professional & Technical Services" portion includes services purchased from program technical writers who are versed in HTML, Flash, and other programs needed to enhance the online curriculum. "Purchased Professional & Technical Services" also includes advertising costs and special education services.
Virtual Village - Lake George Charter School	$600.00	Networking setup, monthly connection fees, and maintenance on facilitator's computer

Table A.4: Other Services for Each School		
Online School	Other Services	Details
Academy District 20 Online Program	$384.88	The amount listed here is the actual expenditure and may include general fund and/or grant sources.
Achieve K12	$42,200.00	Advertising
APS Online (Aurora Public Schools)	$4,000.00	Professional education services/development
Boulder Universal	$0.00	
Branson School Online	$413,144.00	Advertising, field trips, mileage, administration expenses, insurance
Buena Vista Online	$0.00	This is already available from the district and funded by other line items within other building budgets.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$32,018.00	Approximately half Internet and telephone services. The other half is travel for staff to attend professional development.
Colorado Connections Academy	$207,563.00	Student testing, student activities, leased equipment, travel, telephone, office rent, etc.
Colorado Cyberschool	$51,350.00	Advertising
Colorado Virtual Academy (COVA)	$0.00	
Crowley County Online Academy	$45,100.00	Advertising, tuition, travel
D3 My Way	$56.00	Misc

DPS Online High School	$11,674.00	Travel and registration, professional development, postage, bus passes, other purchased services
Edison Academy	$326,003.73	Curricular support, college costs
Falcon Virtual Academy	$26,450.00	
FOCUS Academy	$0.00	
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$431,022.61	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.
Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$13,719,806.00	Purchased services from DCSD and Learning Center student allocations
Insight School Of Colorado	$567,149.00	
Jeffco's 21st Century Virtual Academy	$0.00	
Kaplan Academy Of Colorado	$606,427.00	
Karval Online Education	$31,900.00	PowerSchool, BOCES, nurse, advertisement
LPS @ home	$219.90	Subscriptions for NetNanny Internet filtering software for Netbooks
McLain LIVE (Jeffconet Academy)	$4,300.00	Aleks, SAS in Schools, Software, etc.
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$12,500.00	Computer repair, travel, Internet reimbursements
Provost Academy Colorado	$801,406.00	
PSD Online Academy	$0.00	For 2009-2010, no other services purchased.
Ridge Academy	$9,466.51	Data entry secretarial work
Thompson Online	$700.00	Repairs, consulting, other
V.I.L.A.S. Online School	$54,874.23	"Other Purchased Services" includes student Internet services, administrative travel, special education travel, student tuition, telephone, and electrical expenses for the online administrative building.
Virtual Village - Lake George Charter School	$0.00	

Table A.5: Supplies for Each School		
Online School	Supplies	Details
Academy District 20 Online Program	$3,301.65	The amount listed here is the actual expenditure and may include general fund and/or grant sources.
Achieve K12	$10,000.00	Textbooks and other student support supplies
APS Online (Aurora Public Schools)	$0.00	
Boulder Universal	$332.00	Office supplies
Branson School Online	$88,416.00	Student supplies, special education, vision and hearing, database, administration supplies
Buena Vista Online	$0.00	This is already available from the district and funded by other line items within other building

		budgets.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$296.53	Approximately 60 percent for curriculum and 40 percent for student computers to get ready for start of school year.
Colorado Connections Academy	$1,492,359.00	Texts and instructional materials, classroom supplies, office supplies, office postage
Colorado Cyberschool	$136,795.00	Student curriculum and materials, staff materials and supplies
Colorado Virtual Academy (COVA)	$228,962.00	
Crowley County Online Academy	$3,250.00	Teaching materials
D3 My Way	$3,219.00	Supplies for program
DPS Online High School	$43,075.00	Electronic media, software, general supplies, books and periodicals, copying
Edison Academy	$214,000.00	College costs, supplies
Falcon Virtual Academy	$32,000.00	
FOCUS Academy	$500.00	Office supplies
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$100,687.12	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.
Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$706,985.00	Office supplies and curriculum
Insight School Of Colorado	$0.00	
Jeffco's 21st Century Virtual Academy	$12,500.00	Postage, office materials, copier usage, office materials
Kaplan Academy Of Colorado	$39,239.96	
Karval Online Education	$8,400.00	Printing, custodian, fuel, paper, reimbursements
LPS @ home	$200.00	Miscellaneous copies and school-based costs
McLain LIVE (Jeffconet Academy)	$860.00	Miscellaneous office materials and books
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$14,000.00	Office supplies, shipping supplies, books/periodicals, electronic media
Provost Academy Colorado	$1,051,598.00	
PSD Online Academy	$71,406.00	For 2009-2010, this figure includes start-up funds to cover general office supplies, paper, ink, desktop computers, printers, laptop, projector, phones, copier, etc.
Ridge Academy	$472.64	Office supplies and printing
Thompson Online	$1,880.00	Office, postage, copies, other
V.I.L.A.S. Online School	$100,500.13	"Supplies" includes postage/UPS freight, textbooks, CSAP testing costs, computer supplies, ink, paper, Compass curriculum annual fee, platform fee, student supplies, special education books, office supplies, gas for the online administrative building, and vehicle repair and fueling costs.
Virtual Village - Lake George Charter	$0.00	

School		

Table A.6: Other for Each School		
Online School	Other	Details
Academy District 20 Online Program	$0.00	No expenses were incurred in this category.
Achieve K12	$6,000.00	Professional development
APS Online (Aurora Public Schools)	$0.00	
Boulder Universal	$0.00	
Branson School Online	$6,000.00	Administration dues
Buena Vista Online	$0.00	This is already available from the district and funded by other line items within other building budgets.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$2,000.00	Colorado League of Charter Schools membership
Colorado Connections Academy	$0.00	
Colorado Cyberschool	$252.00	District print shop
Colorado Virtual Academy (COVA)	$0.00	
Crowley County Online Academy	$0.00	
D3 My Way	$0.00	
DPS Online High School	$500.00	Field trips
Edison Academy	$0.00	
Falcon Virtual Academy	$0.00	
FOCUS Academy	$0.00	
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$55,262.00	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.
Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$49,442.00	Other miscellaneous
Insight School Of Colorado	$0.00	
Jeffco's 21st Century Virtual Academy	$36,900.00	Mileage/travel, employee training, marketing, phone, instructional materials, testing materials, miscellaneous
Kaplan Academy Of Colorado	$0.00	
Karval Online Education	$15,114.00	Dues, fees, referral fees, insurance, phone, postage, travel, school board fees, legal
LPS @ home	$0.00	
McLain LIVE (Jeffconet Academy)	$0.00	
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$981.00	Miscellaneous
Provost Academy Colorado	$0.00	

Online School		Details
PSD Online Academy		For 2009-2010: • POA provided dinner, refreshments, and awards for school celebrations and commencement for students and families. • POA provided equipment and refreshments for open house and information events for the local community.
	$1,000.00	
Ridge Academy	$1,509.95	Travel
Thompson Online	$39,774.00	New project unknowns
V.I.L.A.S. Online School	$966.47	"Other" includes dues and fees, and other expenses.
Virtual Village - Lake George Charter School	$0.00	

Table A.7: Property Capitalized for Each School		
Online School	**Property Capitalized**	**Details**
Academy District 20 Online Program	$957.00	The amount listed here is the actual expenditure and may include general fund and/or grant sources.
Achieve K12	$0.00	
APS Online (Aurora Public Schools)	$0.00	
Boulder Universal	$0.00	
Branson School Online	$0.00	
Buena Vista Online	$0.00	This is already available from the district and funded by other line items within other building budgets.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$0.00	None planned
Colorado Connections Academy	$0.00	
Colorado Cyberschool	$0.00	NA, housed in existing school
Colorado Virtual Academy (COVA)	$0.00	
Crowley County Online Academy	$1,200.00	Computer replacement
D3 My Way	$0.00	
DPS Online High School	$0.00	
Edison Academy	$0.00	
Falcon Virtual Academy	$0.00	
FOCUS Academy	$0.00	
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$0.00	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which the authors do not have.
Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$179,819.00	Computer equipment expenses
Insight School Of Colorado	$0.00	

Jeffco's 21st Century Virtual Academy	$0.00	
Kaplan Academy Of Colorado	$0.00	
Karval Online Education	$194,000.00	Building, garage, storage, land
LPS @ home	$0.00	
McLain LIVE (Jeffconet Academy)	$0.00	
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$0.00	
Provost Academy Colorado	$29,250.00	
PSD Online Academy	$0.00	
Ridge Academy	$0.00	
Thompson Online	$0.00	
V.I.L.A.S. Online School	$135,270.83	"Property Capitalized" includes building/garage construction, equipment, office furniture, and equipment costs.
Virtual Village - Lake George Charter School	$0.00	

Table A.8: Property Non-capitalized for Each School		
Online School	**Property Non-capitalized**	**Details**
Academy District 20 Online Program	$4,408.44	The amount listed here is the actual expenditure and may include general fund and/or grant sources.
Achieve K12	$16,000.00	Provides equipment for staff and hosting of Moodle
APS Online (Aurora Public Schools)	$0.00	
Boulder Universal	$0.00	
Branson School Online	$0.00	
Buena Vista Online	$0.00	This is already available from the district and funded by other line items within other building budgets.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$5,000.00	Server for office and main communication with students
Colorado Connections Academy	$0.00	
Colorado Cyberschool	$0.00	NA, hosted in existing school
Colorado Virtual Academy (COVA)	$0.00	
Crowley County Online Academy	$0.00	
D3 My Way	$0.00	Computers purchased
DPS Online High School	$65,000.00	Non-capital equipment, hardware
Edison Academy	$0.00	
Falcon Virtual Academy	$3,420.00	
FOCUS Academy	$0.00	
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$385,544.65	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.

Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$53,500.00	Computer equipment and expenses
Insight School Of Colorado	$0.00	
Jeffco's 21st Century Virtual Academy	$0.00	
Kaplan Academy Of Colorado	$0.00	
Karval Online Education	$89,127.00	Capital construction, computers, office furniture, safes, emergency funds, online office relocation
LPS @ home	$1,800.00	Computer replacement budgeting if necessary due to damage and loss
McLain LIVE (Jeffconet Academy)	$18,200.00	Computers, printers, other office equipment. Other capitalized property is shared by all programs in the school
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$3,000.00	Computers, printers and other
Provost Academy Colorado	$0.00	
PSD Online Academy	$0.00	
Ridge Academy	$0.00	
Thompson Online	$0.00	
V.I.L.A.S. Online School	$0.00	"Non-capitalized Property" is contained under "Hardware"
Virtual Village - Lake George Charter School	$0.00	

Table A.9: Internet for Each School		
Online School	Internet	Details
Academy District 20 Online Program	$0.00	AOHS does not pay for student Internet subsidies
Achieve K12	$9,900.00	Provides Internet for families with financial need, and for staff
APS Online (Aurora Public Schools)	$50,000.00	Verizon - broadband subscriptions
Boulder Universal	$0.00	
Branson School Online	$117,000.00	Internet fees for students, teachers and administration
Buena Vista Online	$0.00	This is already available from the district and funded by other line items within other building budgets.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$7,100.00	Initial startup costs
Colorado Connections Academy	$6,280.00	High speed Internet
Colorado Cyberschool	$4,312.00	Included in "Other Purchased Services"
Colorado Virtual Academy (COVA)	$573,868.00	
Crowley County Online Academy	$0.00	
D3 My Way	$1,800.00	Comcast services
DPS Online High School	$0.00	
Edison Academy	$0.00	Contained in "Other Purchased Services"
Falcon Virtual Academy	$57,600.00	
FOCUS Academy	$0.00	Parents pay for their own Internet access

Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$135,369.00	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit which we do not have.
Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$55,626.00	Internet and phone services
Insight School Of Colorado	$344,277.00	
Jeffco's 21st Century Virtual Academy	$12,000.00	Stipends
Kaplan Academy Of Colorado	$83,387.83	
Karval Online Education	$8,100.00	Eastern Slope, DSL, student Internet service, computer network and solutions wireless
LPS @ home	$0.00	Internet services available free at LPS facilities, public libraries. Parents provide home service
McLain LIVE (Jeffconet Academy)	$0.00	Internet fees are provided at no additional charge from the school district
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$1,300.00	OLA Share of District ISP Costs
Provost Academy Colorado	$0.00	Internet/broadband fees are included in funding areas listed above
PSD Online Academy	$0.00	For 2009-2010, access was granted through PSD central office connections already in place.
Ridge Academy	$0.00	
Thompson Online	$0.00	
V.I.L.A.S. Online School	$38,525.00	"Internet/Broadband Fees" include the ports that distribute the Internet coming into the school.
Virtual Village - Lake George Charter School	$1,500.00	Reimbursement for student online connection fee

Table A.10: Hardware for Each School		
Online School	**Hardware**	**Details**
Academy District 20 Online Program	$0.00	AOHS does not pay for student hardware subsidies
Achieve K12	$6,200.00	Provide computers for students with financial need
APS Online (Aurora Public Schools)	$10,945.00	Netbooks and other technology equipment
Boulder Universal	$0.00	
Branson School Online	$177,000.00	Student and teacher computers
Buena Vista Online	$9,400.00	This includes laptops for the students to borrow. A new server to house the Moodle data. Other support technology for the building like webcams for teachers.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$144,000.00	Staff and student computers bundled with appropriate peripherals and software.
Colorado Connections Academy	$796,262.00	Student technology assistance

Colorado Cyberschool	$2,802.00	Headsets for students included in "Supplies"
Colorado Virtual Academy (COVA)	$1,764,934.00	
Crowley County Online Academy	$0.00	
D3 My Way	$0.00	
DPS Online High School	$0.00	
Edison Academy	$30,000.00	Laptops
Falcon Virtual Academy	$104,850.00	
FOCUS Academy	$3,000.00	Netbooks
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$125,440.00	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.
Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$130,676.00	Computer hardware for student use
Insight School Of Colorado	$1,061,824.00	
Jeffco's 21st Century Virtual Academy	$35,000.00	Office equipment, computer equipment
Kaplan Academy Of Colorado	$168,070.45	
Karval Online Education	$109,883.00	New computers, printers
LPS @ home	$1,800.00	ASUS EeePC at $300/unit
McLain LIVE (Jeffconet Academy)	$0.00	Students in the JeffcoNet program are not provided any type of hardware to be used outside of the school. Other hardware is included in other sections of this report.
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$3,000.00	
Provost Academy Colorado	$0.00	Hardware for student use is included in funding areas listed above
PSD Online Academy	$250.00	For 2009-2010, POA received recycled hardware from PSD central office. The school purchased minimal equipment including headsets, microphone, and speakers.
Ridge Academy	$0.00	
Thompson Online	$500.00	Video equipment, computer, printer, other
V.I.L.A.S. Online School	$135,270.83	"Hardware" includes student computers, printers, and routers and switches
Virtual Village - Lake George Charter School	$1,044.00	Student computers

Table A.11: Software for Each School		
Online School	Software	Details
Academy District 20 Online Program	$0.00	AOHS does not pay for student software subsidies.
Achieve K12	$8,750.00	Provides software for student use computers, staff computers, as well as SuccessMaker licenses for RtI interventions
APS Online (Aurora Public Schools)	$40,000.00	Annual e2020 subscription
Boulder Universal	$0.00	

Branson School Online	$250,000.00	Software for student instruction
Buena Vista Online	$6,000.00	This is the licensing fee for the OdysseyWare software.
College Pathways (TCA)	$0.00	College Pathways is in its first year of operations as a multi-district online program, so no relevant budget data for previous year.
Colorado Calvert Academy	$0.00	Not detailed, part of computer purchases
Colorado Connections Academy	$635,400.00	Student and teacher software
Colorado Cyberschool	$1,954.00	Software for digital art courses
Colorado Virtual Academy (COVA)	$0.00	
Crowley County Online Academy	$0.00	
D3 My Way	$200.00	Illuminate
DPS Online High School	$0.00	
Edison Academy	$0.00	
Falcon Virtual Academy	$443,000.00	
FOCUS Academy	$46,000.00	Curriculum and content provider
Futures Digital Academy	$0.00	
Guided Online Academic Learning (GOAL) ACADEMY	$155,079.00	This only covers the period 11/1/2009 to June 30, 2010 the other half is covered by the CCA Audit, which we do not have.
Heartlight Academy	$0.00	Shared space by Second Chance and Choices Program
Hope Online Learning Academy Co-Op	$654,855.00	Curriculum licenses and other software
Insight School Of Colorado	$2,120,640.00	
Jeffco's 21st Century Virtual Academy	$2,000.00	Instructional support
Kaplan Academy Of Colorado	$76,607.40	
Karval Online Education	$100,100.00	Library, Courseware, LMS System
LPS @ home	$6,109.00	PLATO Learning subscription fees
McLain LIVE (Jeffconet Academy)	$760.00	Major software costs are provided by the school / District at no additional costs.
Mesa County Valley School District	$0.00	Pilot program-no budget at this time
Monte Vista On-Line Academy	$4,000.00	
Provost Academy Colorado	$0.00	Software is included in funding areas listed above
PSD Online Academy	$0.00	
Ridge Academy	$0.00	
Thompson Online	$0.00	
V.I.L.A.S. Online School	$129,727.74	"Software" includes the operating system, Windows Office, Compass curriculum, platform fee, filtering system, and the anti-virus.
Virtual Village - Lake George Charter School	$11,075.00	Online curriculum and online instructor fees for Lincoln Interactive

APPENDIX B: DEMOGRAPHIC PROFILES BY ONLINE SCHOOL

The tables below include descriptive statistics for student demographic variables disaggregated by school. Note that only those schools present in the data provided by the Colorado Department of Education are listed below.

Table B.1: Student Demographic Percentages of Gender and Race/Ethnicity by School							
Online School	**Female**	**Male**	**American Indian**	**Asian**	**Black**	**Hispanic**	**White**
Academy Online	72.73	27.27	9.09	9.09	0.00	9.09	72.73
Achieve K12	56.25	43.75	2.08	0.00	0.00	16.67	81.25
Colorado Distance and Electronic Learning Academy	54.46	45.54	3.13	0.89	3.57	21.43	70.98
Branson School Online	59.53	40.47	0.78		1.56	13.23	84.44
Colorado Virtual Academy	48.50	51.50	1.87	1.77	3.18	10.46	82.73
Connections Academy	50.13	49.87	1.57	0.65	5.61	11.49	80.68
Edison Academy	55.56	44.44	0.00	0.00	0.00	16.67	83.33
Kaplan Academy of Colorado	62.24	37.76	1.02	1.02	6.12	16.33	75.51
GOAL Academy	56.10	43.90	1.63	1.63	4.88	47.15	44.72
Hope Online	50.40	49.60	1.40	2.94	23.26	47.19	25.20
Insight School of Colorado	55.79	44.21	4.74	0.53	4.74	14.74	75.26
21st Century Virtual Academy	28.57	71.43	0.00	0.00	0.00	0.00	100.00
Karval Online	46.96	53.04	2.61	0.00	2.61	7.83	86.96
eDCSD: Colorado Cyber School	46.60	53.40	0.97	4.85	2.91	4.85	86.41
Online High School	65.63	34.38	3.13	0.00	25.00	31.25	40.63
Monte Vista Online Academy	47.54	52.46	0.00	0.00	0.00	36.07	63.93
PSD Online Academy	57.14	42.86	0.00	0.00	0.00	7.14	92.86
VILAS Online School	51.68	48.32	2.68	0.67	1.34	27.52	67.79

Table B.2: Student Demographic Percentages of ELL, IEP, and Free/Reduced Lunch by School						
Online School	**No IEP**	**IEP**	**Non ELL**	**ELL**	**Non FRL**	**FRL**
Academy Online	90.91	9.09	100.00	0.00	72.73	27.27
Achieve K12	97.92	2.08	100.00	0.00	64.58	35.42
Colorado Distance and Electronic Learning Academy	90.18	9.82	100.00	0.00	70.54	29.46
Branson School Online	98.05	1.95	100.00	0.00	82.88	17.12
Colorado Virtual Academy	89.65	10.35	98.90	1.10	82.94	17.06
Connections Academy	90.86	9.14	99.35	0.65	95.69	4.31
Edison Academy	87.50	12.50	94.44	5.56	100.00	0.00
Kaplan Academy of Colorado	93.88	6.12	100.00	0.00	97.96	2.04
GOAL Academy	89.43	10.57	98.37	1.63	48.78	51.22

Hope Online	92.38	7.62	73.80	26.20	46.79	53.21
Insight School of Colorado	93.73	6.27	99.73	0.27	12.11	87.89
21st Century Virtual Academy	100.00	0.00	92.86	7.14	100.00	0.00
Karval Online	89.57	10.43	100.00	0.00	93.04	6.96
eDCSD: Colorado Cyber School	94.17	5.83	98.06	1.94	96.12	3.88
Online High School	81.25	18.75	84.38	15.63	68.75	31.25
Monte Vista Online Academy	98.36	1.64	100.00	0.00	90.16	9.84
PSD Online Academy	100.00	0.00	100.00	0.00	78.57	21.43
VILAS Online School	91.95	8.05	100.00	0.00	41.61	58.39

QUESTIONS FOR PROGRAM LEADERS

1. **Definitions**
   A full-time Online Education Program in Colorado is defined as ..."a non-religious, non-sectarian full-time online education program or school authorized by...that delivers a sequential program of synchronous or asynchronous **instruction from a teacher to a student primarily** through the use of technology via the Internet in a virtual or remote setting" (taken from the CDE Unit of Online Learning website). In your opinion, is this satisfactory or do you have suggested revisions?
   a. What is your vision of the future of education incorporating online learning?

2. **Funding**
   a. Is the current funding model satisfactory?
   b. If not, what changes in the funding model do you recommend?
   (Issues to consider: enrollment count, part-time/full-time students, funding by course versus student, requirements for proving enrollment, funding based on mastery or completion rather than enrollment)

3. **Reporting**
   a. What are your current reporting requirements?
   b. What changes in the current reporting mechanisms do you recommend?
   (Issues to consider: redundancy in reporting, frequency of reporting, to whom are you responsible for reporting?)

4. **Accountability**
   a. CSAP: what is your view of how well CSAP testing is carried out for online programs and schools in terms of testing procedures, logistics, settings, online versus on paper?
   b. Evaluation: To whom and for what are you accountable? Is your authorizer adequately prepared to evaluate an online school? In your view, what is the best method of ensuring accountability of your school for student learning?

5. **Teacher Preparedness**
   a. Are the teachers you hire generally prepared to work effectively in an online environment?
   b. If not, what recommendations would you have for teacher training programs?

6. **Areas for Improvement**
   a. What specific changes to legislation or state policy would you recommend?

QUESTIONS FOR AUTHORIZERS

1. **Definitions**
   A full-time Online Education Program in Colorado is defined as …"a non-religious, non-sectarian full-time online education program or school authorized by…that delivers a sequential program of synchronous or asynchronous **instruction from a teacher to a student primarily** through the use of technology via the Internet in a virtual or remote setting" (taken from the CDE Unit of Online Learning website). In your opinion, is this satisfactory or do you have suggested revisions?
   a. What is your vision of the future of education incorporating online learning?

2. **Funding**
   a. Is the current funding model satisfactory?
   b. What changes in the funding model do you recommend?
      (Issues to consider: enrollment count, part-time/full-time students, funding by course versus student, requirements for proving enrollment, funding based on mastery or completion rather than enrollment)

3. **Reporting**
   a. What reporting requirements do you place on your schools?
   b. What changes in the current reporting mechanisms do you recommend?
      (Issues to consider: redundancy in reporting, frequency)

4. **Accountability**
   a. CSAP: What is your view about how well CSAP testing is carried out in online programs and schools with respect to testing procedures, logistics, settings, online versus on paper?
   b. Evaluation: Does your district have the capacity and training necessary to effectively evaluate online schools? If not, what trainings are needed?
   c. How well does the current accountability structure provide meaningful data for you as an authorizer?

5. **Areas for Improvement**
   a. What specific changes to legislation or state policy would you recommend?

APPENDIX D: CURRICULA USED IN COLORADO ONLINE PROGRAMS

The following curricula are used in Colorado online programs: Pearson Education, Aventa Learning, K12, Inc., Compass Learning, Colorado Online Learning, Study Island, eDynamic Learning, ALEKS, OdysseyWare, Brain Pop LLC, Rosetta Stone, Powerspeak, Lincoln Interactive, Florida virtual school, Apex, Plato Learning Environment, Plato Discovery Education, Giant Campus, HippoCampus Algebra , Reading Eggs, Education 2020, Edoptions StarSuite, class.com, Carone Fitness, Learning Springs, Virtual Sage, Global Student Network, EdisonLearning, Achieve 3000, Success Maker, Write-to-Learn, Step up to Writing, Spectrum Spelling, Zaner-Bloser Handwriting, Steck-Vaughn Science, Peterson Everyday Spelling, Calvert Educational Services, Singapore Math, Yourteacher.com, Madcap logic, McGraw Hill, South Central BOCES Learning Force, Scholastic Inc., Peoples education, Learning.COM, Easy Tech, Learning A-Z Reading A-Z, I Paradigms Online Curriculum, KC Distance Learning 7-12 Curriculum, Discovery Education Educational Designers, MySchoolHouse.com, Click n Kids, Evan Moor Online, Headsprout, Dance Mat Typing, Let's Go Learn, LifePrint, Little Planet Learning, Media Training Worldwide, Perfection Learning, Plagiarism Checker (CheckMyWork), RazKids, Respondus Study Mate, SAS Curriculum Pathways, College Board, Scientific Learning FastForward, Virtual Lab, YogaEd, Barton Remedial Reading, Reading Plus, A+nywhere Learning Systems, YourTeacher, CustomGuide, and Thinkwell.