#EachChildOurFuture

Study of Internet- or Computer-Based Community School Funding Models

DECEMBER 2019

Ohio | Department of Education

INTRODUCTION

Online learning is an important part of Ohio's education system. It is one approach among many by which the vision of the state's Strategic Plan for Education, *Each Child, Our Future,* is achieved — where *"each child is challenged to discover and learn, prepared to pursue a fulfilling post-high school path and empowered to become a resilient lifelong learner who contributes to society."*

Online learning provides a way for students and families to choose a mode of learning that, for some students, is more effective, meaningful and responsive to their needs or circumstances than the more traditional school-based learning. Ohio's system of education should include an online learning sector that is high quality, appropriately funded and accountable for results. The recommendations in this report are offered in the interest of continuing to support Ohio's efforts to ensure fairness in funding and financial accountability within its education system.

This document has been prepared for Governor Mike DeWine and the Ohio General Assembly pursuant to a statutory requirement[1] to study e-school[2] funding, specifically competency-based and completion-based models of funding and the feasibility of implementing such models in Ohio.

BACKGROUND

Online learning has become increasingly popular in Ohio. The number of full-time equivalent (FTE) students educated in online community schools has grown from 1,900 in school year 2000-2001 to 23,800 in school year 2018-2019. Online delivery of content for educational purposes opens doors by virtue of the flexibility it allows. For students who may be challenged in traditional environments, such as those who have experienced bullying and the exceptionally gifted, online learning options may better meet their unique needs. Additionally, online learning may offer students access to additional learning opportunities they may not have had access to through their assigned school districts: students need only a computer and internet access to enter virtual classrooms with other learners from around the state for courses that may otherwise be unavailable to them.

While this modality has benefits for some students, online learning is not for everyone. This approach to education requires a student to be disciplined and motivated to study independently in a nontraditional setting. Often, successful online learners possess advanced time management and focusing skills, which enable them to succeed in this unique setting.

Online learning comes in many forms in Ohio's K-12 system. In some schools, online learning takes place in a traditional setting providing supplemental resources inside classrooms. Other schools use traditional settings for some courses and online instruction for others. There are schools that use online learning as their primary mode of instruction and schools that use it as a secondary tool. Schools make judgements about how digital learning opportunities can best support their students in the context of student and community needs and expectations.

[1] Sec. 265.470 of Am. Sub. House Bill 166; 133rd General Assembly

[2] Throughout this document, the term "e-school" is used to mean the statutorily specified "internet- or computer-based community school."

Ohio law[3] outlines the criteria and requirements for **internet- or computer-based community schools**. These schools are defined as:

> *"community school(s)…in which the enrolled students work primarily from their residences on assignments in nonclassroom-based learning opportunities provided via an internet- or other computer-based instructional method that does not rely on regular classroom instruction or via comprehensive instructional methods that include internet-based, other computer-based, and noncomputer-based learning opportunities*."[4]

For the 2019-2020 school year, 14 of the 315 community schools in Ohio are authorized as internet- or computer-based community schools (commonly referred to as e-schools). As of December 2019, e-schools generated funding for 23,487 full-time equivalent students. While e-schools represent only 4.4% of community schools operating in Ohio, they serve more than 22.8% of total students enrolled in community schools.

Each community school works with its sponsor to establish an education plan, determine methods of instruction and select its desired curriculum. These programmatic elements are subject to applicable statutory requirements. The specifications for each of these elements generally is contained in the contract between the community school and its sponsor. All community schools establish a minimum school year calendar of at least 920 hours. For e-schools, these hours can occur outside of the traditional school calendar, including evenings and weekends.

CURRENT MODEL OF FUNDING E-SCHOOLS IN OHIO

In Ohio, e-schools are funded based on a student's participation in learning opportunities, including both online and offline opportunities (such as reading a book, exercising for physical education class, meeting with a teacher or attending a class field trip). Each e-school is required to track a student's participation in various learning opportunities. This information is used to determine the state funding provided to the school.

Ohio's foundation funding system for schools is comprised of a base per-pupil amount (opportunity grant) and several additional allocations of funding based on the characteristics and demographics of both the student and school. For e-schools, Ohio law[5] limits funding to the base per-pupil amount ($6,020 in Fiscal Year 2020) and a modest amount of additional per-pupil funding for "facilities" ($25 per pupil). E-schools also may receive special education funding for students with disabilities and career-technical education funding for students participating in approved career-technical education programs.

Funding for e-schools is different from that of brick-and-mortar community schools in several ways. Brick-and-mortar school funding is based on enrollment rather than documented learning opportunities. Like e-schools, brick-and-mortar community schools receive base per-pupil, special education and career-technical education funding; however, they receive a greater amount in facilities funding than e-schools. Brick-and-mortar schools also receive additional funding for students in grades K-3 to support literacy, students who are economically disadvantaged and students who are English learners. Brick-and-mortar community schools that serve students from low-wealth school districts receive targeted assistance funding, and those that transport students to school receive transportation funding.

In FY19, after considering base cost and other add-ons, e-schools received an average of $7,312 per pupil (FTE) compared to $8,772 per pupil on average for brick-and-mortar community schools. The differences in funding for e-schools compared to brick-and-mortar community schools is prescribed in state law and is, in part, predicated on the notion that e-schools have comparatively lower operating costs.

[3] Ohio Revised Code (ORC) 3314.013
[4] ORC 3314.02(A)(7)
[5] ORC 3314.08

VERIFYING ENROLLMENT, ATTENDANCE AND PARTICIPATION IN LEARNING OPPORTUNITIES

Under current state law,[6] the Ohio Department of Education is responsible for ensuring enrollment and attendance data are reported accurately to the state by community schools. All community schools, including e-schools, report the enrollment and attendance data for their students in the Education Management Information System (EMIS). EMIS data populates the Ohio District Data Exchange (ODDEX) School Options Enrollment System (SOES). The Ohio Department of Education uses SOES data to inform public school districts about students who are district residents who are enrolled in community schools.

Employees of the Ohio Department of Education, known as area coordinators, conduct periodic FTE reviews to verify the accuracy of the enrollment and attendance data reported by community schools in EMIS. The Department's authority to conduct FTE reviews, as well as the process for such reviews, is outlined in Ohio law and further amplified in the Department's FTE Review Manual.[7] The FTE Review Manual sets expectations for the FTE review process, including how the review process is carried out and what documentation and forms schools must collect and maintain. The FTE Review Manual, available on the Department's website,[8] is updated annually.

To ensure data reported to the Department are accurate, the FTE review team closely examines the following:

- Enrollment and attendance policies;
- Student enrollment data and the school's procedures for maintaining enrollment data;
- Attendance documentation; and
- In the case of e-schools, documentation of learning opportunities.

The review also seeks to ensure schools' policies are compliant with applicable state laws and rules. For e-schools, the review team compares the schools' enrollment, attendance documentation data and participation in learning opportunities documentation with the EMIS data submitted they submitted. The team also ensures the Individualized Education Programs (IEPs) and Evaluation Team Reports (ETRs) for students with disabilities are current and properly identify disability conditions and funding category codes.

FTE reviews are not conducted for all schools each year. The Department selects schools to be reviewed using a number of risk factors (such as the amount of state funding generated, issues with prior-year FTE reviews and data quality indicators) and ensures each school receives an FTE review at least once every five years. Many schools receive FTE reviews more frequently.

LESSONS LEARNED FROM ECOT AND OTHER E-SCHOOLS

The process the Department uses to verify enrollment, attendance and participation in learning opportunities was challenged in 2016. At the time, the Electronic Classroom of Tomorrow (ECOT), the state's largest e-school, objected to the detailed manner in which the Department approached the FTE review and, specifically, the ability of the state to rely on documented learning opportunities to verify funding. ECOT claimed state law did not require e-schools to maintain such documentation and the Department could not base funding on the number of hours students were actually engaged in learning opportunities. ECOT argued that funding should be based solely on enrollment without regard to a student's actual participation. Ultimately, the Ohio Supreme Court upheld the Department's use of documented learning opportunities in the summer of 2018.[9]

[6] ORC 3301.0714
[7] ORC 3314.08(K)
[8] http://education.ohio.gov/Topics/Finance-and-Funding/School-Payment-Reports/State-Funding-For-Schools/Community-School-Funding/Community-School-Funding-Information
[9] Electronic Classroom of Tomorrow v. Ohio Dept. of Edn., 154 Ohio St.3d 584, 2018- Ohio-3126

Simultaneous to the litigation, the Department found significant variances in the amount of funding ECOT claimed and was paid compared to what could be substantiated by documented learning opportunities. For example, students with fewer than five hours in documented learning opportunities across a full academic year were claimed as full-time students and generated full funding for the school. While the Department found other e-schools with deficiencies in documented learning opportunities, the largest overpayment of state funds occurred at ECOT. In January 2018, ECOT's sponsor voted to suspend operations, and the school subsequently was closed. As of December 2019, ECOT still owes more than $106.5 million, which the Ohio Attorney General's Office is pursuing on the State's behalf.

While the Department has been able to substantiate the funding claimed by other e-schools and has not issued an FTE final determination for an e-school since ECOT, the experience should not be forgotten. The Ohio Supreme Court upheld the Department's approach to implementing state law and enforcing the use of documenting learning opportunities, thereby reinforcing the current regulatory context for the e-school sector which is much more stringent than the enrollment-based approach advocated by ECOT.

Changing the operating environment for e-schools must be addressed carefully. Ohio's past experiences inform several important design imperatives:

- **Clarity and consistency:** It will be important to ensure there is a clear and consistent method by which e-schools generate funding. The methodology needs to be clearly defined and well understood.
- **Effective stewardship of taxpayer dollars:** Effective controls must be in place to ensure the funding methodology results in appropriate payments made based on evidence of activity or performance. It is important to be able to ensure that taxpayer dollars are used to educate students.
- **Auditability:** It also is important that a clear basis for payment exists that can be appropriately audited.
- **Unintended consequences:** New funding mechanisms should be approached with careful consideration to avoid the creation of unintended consequences. Opportunities for perverse incentives should be minimized, including incentives that may motivate poor-quality educational services or a lack of attention to student needs. Strong oversight and accountability systems should be maintained.

AUTHORIZATION AND REQUIREMENTS FOR THIS STUDY

Ohio law, effective July 18, 2019, as enacted in Am. Sub. House Bill 166 of the 133rd General Assembly, requires the following:

> *SECTION 265.470. The Department of Education shall study the feasibility of new funding models for internet- or computer-based community schools. In conducting the study, the department shall do all of the following:*
> *(A) Consider models of funding based on competency and course completion;*
> *(B) Consider models of funding used in other states, including Florida and New Hampshire;*
> *(C) Make recommendations on the feasibility of new funding models for internet- or computer-based community schools.*
> *Upon completion of the study, and not later than December 31, 2019, the department shall submit copies of the study to the Governor, the President and Minority Leader of the Senate, the Speaker and Minority Leader of the House of Representatives, and the chairpersons of the standing committees on education of the Senate and the House of Representatives.*

This is not the first time performance-based funding has been suggested or discussed. In 2018, then-Auditor of State Dave Yost recommended the state explore the concept of funding based on competency or part based on enrollment and part on student exit exams.[10] The Thomas B. Fordham Institute has also written on the topic and explored performance-based funding.[11] At the end of 2018, the legislature established a Joint Legislative

[10] https://ohioauditor.gov/news/pressreleases/Details/5157
[11] https://fordhaminstitute.org/ohio/commentary/testimony-given-joint-legislative-committee-e-school-funding-112918

Committee on E-School Funding to further study the issue and develop recommendations. The committee, however, only met twice and did not issue a report or any recommendations.

While others have opined on the virtues of moving to a funding system that pays e-schools based on performance, a key requirement of this study is not just an examination of the concepts of competency and course completion, but the feasibility of implementation in Ohio and, by extension, consideration of the current operating environment for e-schools. The question of feasibility should also be approached with a specific view toward accountability. While it may be easy to forget the circumstances of ECOT, any changes to e-school funding should be tested against opportunities for abuse, exploitation and fraud.

OUTREACH ACTIVITIES

E-school funding is administered by the Department's Office of Budget and School Funding. Office staff led the work of this study and created a cross-office group within the Department to provide input. The study and resulting recommendations also were informed by discussions with external stakeholders, as a larger body of work on the topic that precedes this study. Specifically, Ohio Department of Education staff completed the following activities:

- **Convened the leaders of all 14 e-schools:** Department staff facilitated small-group discussions on the challenges e-schools face with Ohio's current funding model, considerations to any changes to funding, and general discussion about how e-schools provide educational and support services.
- **Convened e-school sponsors:** Staff facilitated a similar discussion with representatives from sponsors of Ohio e-schools.
- **Engaged with key interested parties and experts:** Staff separately met or had telephone conferences with representatives from the Auditor of State's office, Office of the Attorney General, Thomas B. Fordham Institute, Aurora Institute (formerly iNACOL), Foundation for Excellence in Education, Pearson, and K-12 Inc.
- **Conducted a literature review:** A literature review was facilitated by information provided by the Regional Educational Laboratory Midwest and Educational Commission of the States.
- **Interviewed experts from other states:** Staff discussed funding models for online schools with representatives from the departments of education in the states of Florida, New Hampshire, Minnesota, Utah and Texas.

The input and information the Department received played an important role in informing the findings and recommendations of this study.

TYPES OF FUNDING MODELS

Throughout this document, reference is made to a variety of approaches to funding e-schools. From least to most restrictive, these are:

- **Enrollment-based funding:** This model provides funding to the e-school based on simple documentation that the student is appropriately enrolled in the school. There is no additional requirement to generate funding.
- **Demonstration of learning opportunities funding:** This model goes beyond simple enrollment and requires that the e-school work with the student to document the student's actual participation in learning opportunities. Funding is then generated based on each student's participation based on the documentation. This requires that records be kept by the school. These records are sometimes built into the learning management software used by the school. At other times, student logs of activities are used.
- **Performance funding:** This model goes beyond learning opportunities and generates funding based on a student's actual accomplishment. There are two primary types of performance funding:
    - **Completion based:** This model generates funding based on a student's actual completion of a "course" or a "lesson" or "module." Each course or module is apportioned some percent or fraction of the student's annual educational experience and paid in that manner. For example, one course could be one-fifth of the annual expectation for a student and, consequently, would pay 20 percent of the student's funding to the e-school.
    - **Competency based:** This model generates funding based on the evidence of a student's actual learning. It goes beyond completion of the course and expects that a student can actually demonstrate the acquisition of knowledge and skills sufficient to generate payment based on the learning achieved.

The Department's directive for this study is primarily to review the feasibility of performance-based funding models, such as completion- and competency-based funding models. The Aurora Institute succinctly defines performance-based funding as follows:

> *Performance-based funding is a school finance model that links funding for public education programs with measurable student performance outcomes. The concept of performance-based funding is fairly straightforward—reward public education programs based on measurable student learning performance outcomes including course completion and competency development. As students successfully develop competencies and complete courses, they trigger payment and performance-based funding incentives for their schools or districts.*[12]

Moving to an outputs-based system, where funding is generated based on completing a course or demonstrating mastery in specific subjects, would be a significant departure from Ohio's current funding system. However, funding outputs is something that has garnered interested across the country. The Foundation for Excellence in Education (Excel*in*Ed) identified two primary reasons for this interest:

> *First, it is more sensible to pay for what really matters: outcomes in terms of student performance and success, as opposed to inputs like seat-time. Indeed, there is broad agreement that linking payment to performance creates an incentive for better performance, and in fact, this has happened in higher education and other industries. In other words, performance funding should result in better outcomes for students as districts are more motivated to do what it takes for their students to succeed.*

[12] The Aurora Institute's Performance-Based Funding & Online Learning: Maximizing Resources for Student Success.

> *Second, the focus on outcomes allows policymakers to worry less about the inputs, like the number of hours of instruction or class size. As a result, districts are freed to innovate. One area of particular relevance is mastery-based approaches to personalized learning, where students progress only when they demonstrate mastery of curricular content and applications. In a mastery-based system, teachers meet students where they are, and students demonstrate mastery at varying paces. Seat-time funding does not currently account for or support these mastery-based progressions.*[13]

In developing performance-based models, it is important to consider performance-based funding as a multi-step policy evolution from course completion to competency development. Course completion-based funding is a step toward performance-based funding but is not the same as competency-based funding. In fact, the National Center for Innovation in Education found that competency-based funding is not practiced in the United States. States that have implemented elements of performance-based funding have done so as completion-based funding.[14] Finally, it also is important to protect quality and ensure student performance outcomes are validated through independent assessments and/or end-of-course exams.

OVERVIEW OF STATE OVERSIGHT OF ACADEMIC CONTENT STANDARDS AND COURSE CURRICULUM

The concept of performance-based funding is rooted in the type and number of courses a student either completes or for which a student demonstrates competency. As a result, a performance-based system provides funding in a manner that is very different than how Ohio currently funds public education — based on activity or time. In consideration of moving to a system that relies on competency or completion, it is important to first understand the oversight and authority the state has in the area of academic content standards and curriculum.

One of the most important responsibilities of the State Board of Education is the adoption of learning standards. Learning standards explain the knowledge and skills Ohio students in prekindergarten through grade 12 should acquire by the end of a course, a grade level or a grade span. The State Board of Education has adopted learning standards in many areas: mathematics, English language arts, science, social studies, world languages, fine arts, technology, physical education and financial literacy. There also are standards for all career-technical education programs. Ohio's Learning Standards emphasize skills like critical thinking and problem-solving and are designed to help students succeed in college, careers and life after graduating high school.

These learning standards establish what Ohio students need to learn but do not prescribe a method of instruction, specific curriculum or uniform assessment. For community schools, the contracts that sponsors establish with the schools must outline how the educational model of the school aligns with Ohio's Learning Standards. The way a school chooses to ensure students are acquiring the necessary knowledge and skills will vary across the state. The flexibility to choose curriculum and instructional materials is part of Ohio's rich tradition of local control.

While the state does not have oversight of a school's curriculum and instructional material choices, schools report the courses in which students are enrolled and if the students were granted credit toward high school graduation. Policies at local school districts and community schools, however, determine the criteria students must meet to earn credit and, as a result, can vary from school to school. Because of this variability, it is very difficult to conduct analyses, make judgements or reach conclusions based on course completion data. Consequently, the Department determined that any analysis of course completion data would not be useful for purposes of this study.

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[13] Excel*in*ED's Education Funding Reform Issue Brief: Performance Funding
[14] National Center for Innovation in Education's Low-Stakes Completion-Based Funding

OVERVIEW OF OHIO'S ASSESSMENT SYSTEM

Aligned with Ohio's Learning Standards, the state assessment program measures what students should know and the skills they are able to demonstrate. As public community schools, e-schools must follow the same state testing requirements as traditional public districts.

Ohio's assessment system does not test every subject in every grade. Rather, federal and state law require that students are tested in key grade levels for specific subjects, including:

- **English language arts:** Grades 3-8, high school English Language Arts II end-of course exam;
- **Mathematics:** Grades 3-8, high school Algebra I, Geometry end-of-course exams (or, optionally, Integrated Math 1 and Integrated Math II exams);
- **Science:** Grades 5 and 8, high school Biology end-of-course exam;
- **Social Studies:** High school American History and American Government end-of-course exams.

Schools also are required to administer assessments to special populations, including students with disabilities who qualify to take alternate assessments and English learners.[15]

Finally, Dropout Prevention and Recovery (DOPR) schools, including DOPR e-schools, must test all students in grades 9 and higher for growth in English language arts and mathematics in two different test windows 13 weeks apart to calculate a growth rating. Currently, the testing instrument used for this purpose is one provided by the Northwest Evaluation Association (NWEA's Measures of Academic Progress).

All schools report student performance on state assessments through EMIS. Most of this reporting occurs after the end of the school year.

[15] Alternate Assessment for Students with Significant Cognitive Disabilities (AASCD) and Ohio English Language Proficiency Assessment (OELPA)

E-SCHOOLS IN OHIO

In the 2019-2020 school year, 14 online community schools are operating in the state. These 14 e-schools are further divided into two distinct types — e-schools serving a general student population and DOPR e-schools. The data presented in this report is from school year 2018-2019. During that year, there were nine DOPR e-schools. (One DOPR e-school closed at the end of the school year.) One general education e-school opened in the current school year.

Table 1 illustrates the size, academic performance and some demographic information about each of the e-schools, as reported on the 2018-2019 Ohio School Report Cards.

Table 1. 2018-2019 E-School Performance and Demographic Data

E-School Name	Grade Span	Average Daily Membership (ADM)	Overall Report Card Grade	Students with Disabilities %	Economically Disadvantaged %	Mobility %	Graduation Rate %
General Education E-Schools							
Alternative Education Academy	K-12	1,940	F	19.6	60.6	59.6	26.4
Buckeye On-Line School for Success	K,1-12,PS	574	F	27.7	36.4	30.2	53.7
Great River Connections Academy	K-12	554	F	15.2	57.0	75.9	NR
Ohio Connections Academy, Inc	K-12	4,362	D	12.8	45.7	34.0	72.5
Ohio Virtual Academy	K-12	12,702	D	17.7	57.5	40.4	60.9
Dropout Prevention and Recovery E-Schools							
Auglaize County Educational Academy	K-12	83	Meets Standards	14.5	56.6	60.0	71.1
Fairborn Digital Academy	9-12	145	Meets Standards	19.3	69.0	55.5	25.9
Findlay Digital Academy	9-12	127	Meets Standards	19.7	45.7	48.9	81.7
Goal Digital Academy	K-12	650	Exceeds Standards	25.7	69.8	60.4	37.3
Greater Ohio Virtual School	7-12	404	Meets Standards	18.1	37.1	62.7	36.7
Mahoning Unlimited Classroom	4-12	90	Meets Standards	23.3	60.0	74.8	33.3
Massillon Digital Academy, Inc*	4-12	39	Meets Standards	NC	64.1	64.1	43.5
Quaker Digital Academy	K-12	475	Exceeds Standards	12.8	46.7	48.0	41.8
TRECA Digital Academy	K-12	1,823	Meets Standards	19.1	63.6	51.0	22.3

*Closed School.
Source: FY19 Ohio School Report Cards.
Note: A school may not serve all grades it is authorized to serve in a given school year.

As **Table 1** illustrates, the size of e-schools in Ohio varies greatly, from small district-sponsored DOPR schools serving fewer than 100 high school students in a limited geographical area to statewide e-schools serving several thousand students. **Table 1** also displays the mobility percentage, which shows the percentage of students who, because they enrolled or withdrew from the e-school mid-year, did not spend a majority of the year at the e-school. More than half of the e-schools in the state have mobility rates above 50%, indicating that more than half of students did not spend a majority of the year within the e-school.

While not displayed, the Department also examined variances between the student profile of an e-school student compared to the statewide average. During last school year, 63.5% of the students who enrolled at e-schools for any length of time were economically disadvantaged compared to a state average of 49.9%. Additionally, 18.3% of e-school students were identified as students with disabilities, compared to 15.5% of students statewide.

While **Table 1** displays the grade levels each e-school is authorized to serve, **Table 2** displays the age ranges served by each e-school and the distribution of students across grade levels during the 2018-2019 school year. The data below is displayed based on a headcount of students.

Table 2. 2018-2019 E-School Student Age Range and Grade Level

E-School Name	Student Age Range	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
General Education E-Schools															
Alternative Education Academy	5-21	138	128	136	158	136	182	306	352	357	685	449	324	290	3,641
Buckeye On-Line School for Success	5-21	24	21	24	19	29	46	43	63	82	107	121	120	99	798
Great River Connections Academy	5-21	49	34	34	56	44	78	97	131	158	283	163	116	57	1,300
Ohio Connections Academy, Inc	5-21	247	230	238	311	269	325	441	627	668	723	688	661	380	5,808
Ohio Virtual Academy	5-21	900	678	701	773	898	1,012	1,323	1,631	1,796	2,000	2,264	2,169	2,355	18,500
Total General Education E-Schools		**1,358**	**1,091**	**1,133**	**1,317**	**1,376**	**1,643**	**2,210**	**2,804**	**3,061**	**3,798**	**3,685**	**3,390**	**3,181**	**30,047**
Dropout Prevention and Recovery E-Schools															
Auglaize County Educational Academy	12-20	0	0	0	0	0	0	7	11	16	23	33	40	25	155
Fairborn Digital Academy	14-22	0	0	0	0	0	0	0	0	0	87	82	80	52	301
Findlay Digital Academy	14-21	0	0	0	0	0	0	0	0	0	29	42	57	94	222
Goal Digital Academy	4-22	0	8	10	9	11	27	42	80	111	102	189	199	249	1,037
Greater Ohio Virtual School	12-21	0	0	0	0	0	0	0	36	56	159	207	254	374	1,086
Mahoning Unlimited Classroom	12-21	0	0	0	0	0	1	11	13	25	54	55	50	50	259
Massillon Digital Academy, Inc*	9-19	0	0	0	0	4	2	7	8	12	20	16	27	21	117
Quaker Digital Academy	5-22	14	19	16	28	20	39	38	45	46	98	144	130	183	820
TRECA Digital Academy	5-22	54	47	68	82	87	119	163	260	304	892	520	602	491	3,689
Total DOPR E-Schools		**68**	**74**	**94**	**119**	**122**	**188**	**268**	**453**	**570**	**1,464**	**1,288**	**1,439**	**1,539**	**7,686**
Total E-Schools		**1,426**	**1,165**	**1,227**	**1,436**	**1,498**	**1,831**	**2,478**	**3,257**	**3,631**	**5,262**	**4,973**	**4,829**	**4,720**	**37,733**

*Closed School.
Source: FY19 EMIS data.
Note: A school may not serve all grades it is authorized to serve in a given school year.

Table 2 shows that nearly 37,750 students were enrolled in e-schools during the course of the 2018-2019 school year. It also reinforces the great variance in the size of e-schools across the state. The table also shows that the majority (52.4%) of e-school students in both DOPR and general education e-schools are in secondary grade levels. For DOPR e-schools, nearly 75% of students are enrolled in grades 9-12. The general education e-schools have almost half of their students (47%) enrolled in the secondary grade levels.

Finally, **Table 3** compares the headcount of students at each e-school, the FTE that each e-school generated during the course of the year and the maximum FTE possible if documented learning opportunities were not a required factor in determining e-school funding.

Table 3. E-School Headcount vs. Funded FTE

E-School Name	Student Headcount	Funded FTE	Maximum FTE Based on Enrollment	Funded FTE as a Percent of Maximum FTE	Funded FTE as a Percent of Student Headcount	Maximum FTE as a Percent of Student Headcount
General Education E-Schools						
Alternative Education Academy	3,641	1,931	2,355	82.0%	53.0%	64.7%
Buckeye On-Line School for Success	798	572	713	80.2%	71.7%	89.4%
Great River Connections Academy	1,300	539	718	75.1%	41.5%	55.2%
Ohio Connections Academy, Inc	5,808	4,344	4,849	89.6%	74.8%	83.5%
Ohio Virtual Academy	18,500	12,641	14,574	86.7%	68.3%	78.8%
Totals General Education E-Schools	**30,047**	**20,027**	**23,208**	**86.3%**	**66.7%**	**77.2%**
Dropout Prevention and Recovery E-Schools						
Auglaize County Educational Academy	155	83	97	85.5%	53.6%	62.7%
Fairborn Digital Academy	301	144	200	72.1%	47.9%	66.5%
Findlay Digital Academy	222	127	180	70.8%	57.4%	81.1%
Goal Digital Academy	1,037	645	677	95.2%	62.2%	65.3%
Greater Ohio Virtual School	1,086	398	786	50.7%	36.7%	72.4%
Mahoning Unlimited Classroom	259	86	136	63.2%	33.2%	52.6%
Massillon Digital Academy, Inc*	117	39	74	53.4%	33.6%	62.9%
Quaker Digital Academy	820	474	580	81.8%	57.8%	70.7%
TRECA Digital Academy	3,689	1,823	2,495	73.1%	49.4%	67.6%
Totals DOPR E-Schools	**7,686**	**3,820**	**5,225**	**73.1%**	**49.7%**	**68.0%**
Totals	**37,733**	**23,847**	**28,434**	**83.9%**	**63.2%**	**75.4%**

*Closed School.
Source: FY19 EMIS data.

Table 3 displays the same headcount summarized in **Table 2**. However, the more striking comparison in this table is the comparison between the unique number of students in each e-school and the e-school's final funded FTE. Overall, the e-schools were funded for approximately 23,850 FTEs, or 63.2% of the headcount. That average masks the difference between general education e-schools vs. the DOPR e-schools. The five general education e-schools enrolled more than 30,000 students during the course of the year and generated funding for just more than 20,000 FTEs, or 66.7% of the headcount. This percentage is much higher than that of the DOPR e-schools. Nearly 7,700 students were reported by DOPR e-schools during the course of the year, who generated 3,800 FTEs, or 49.7%.

There are two reasons for the gap between the headcount of students and the percentage funded: the length of the student's enrollment period in the e-school and the amount of learning opportunities each student engaged in during the enrollment period. Both are discussed in greater detail below.

Enrollment period. The first cause of the gap between headcount and funded FTE is enrollment. Fewer than half of the nearly 37,750 students who were enrolled in e-schools during the 2018-2019 school year stayed in those e-schools the entire year (48.1%). This is shown by the mobility data presented in **Table 1**. More than one-third of students (35.7%) left an e-school *at least* once during the school year, 12.6% withdrew from an e-school at least twice and 3.6% were withdrawn three or more times during the school year.

All Ohio community schools must withdraw any student who, without a legitimate excuse, fails to participate in 72 consecutive hours of the learning opportunities offered to the student.[16] Of the students withdrawn, 9% were withdrawn due to 72 hours of consecutive unexcused absences. Some students (244) were withdrawn more than once because of the 72-hour rule.

Table 3 displays what each e-schools' maximum FTE would have been in 2018-2019 if the school had been paid solely on enrollment (without adjustments for documented learning opportunities). The table shows that e-schools would have been funded based on 28,400 FTEs, or approximately 75.4% of the total number of unique students.

Again, in this case, there is a significant differential between regular e-schools (77.2%) and DOPR e-schools (68%). This indicates that DOPR e-schools have a higher number of students who are enrolled for less than the full year.

Amount of documented learning opportunities. While partial year enrollment and withdrawals for non-attendance account for a large part of the variance between headcount and the funded FTE, the second cause of the variance is explained by the percentage of time each school can document students engaged in learning opportunities.

Table 3 shows the funded FTE for e-schools is only 83.9% of the maximum FTE. This means that on average e-schools cannot document 16.1% of a full-time student's learning opportunities. Once again, there is a difference based on the type of school. Regular e-schools can document 86.3% of their maximum FTE while DOPR e-schools are able to document only 73.1% of their maximum FTE. This indicates that either students enrolled in DOPR e-schools are less engaged, or DOPR e-schools have a more difficult time obtaining appropriate documentation.

While not displayed above, the Department also looked at the FTE generated by students who were enrolled in e-schools for a full year. The data indicates for the 17,800 students who spent the full year at an e-school, the total FTE generated was almost 16,000 FTEs (89.9% of the headcount). Students who persist and are with an e-school for the full year seem to have higher engagement rates in learning opportunities than students who are not with the e-school the full year.

HIGHLIGHTS OF FUNDING MODELS USED IN OTHER STATES

Other states and their experiences provide a meaningful opportunity to examine alternative methods of funding online community schools. The legislation requiring this study called for an examination of Florida and New Hampshire. Additionally, the Department looked to Arizona, Idaho, Minnesota, Utah and Texas as other examples. The review of other states was a combination of direct interviews, research conducted by the Education Commission of the States and prior research conducted by the Department related to online schools.[17] As is the case in Ohio, the fundamental structure of each state's overarching school funding system informs the design of funding for online schools. The table below summarizes some of the key features of these states and their online schools. States are not organized alphabetically, but rather arrayed from those that fund students in a manner closely aligned to Ohio's current structure to those that fund students based on completion.

[16] ORC 3314.03(A)(6)(b)
[17] See the Department of Education's Recommendations of Definitions Related to Online Learning, November 2018.

Table 4 displays some summary statistics for each of the comparison states, including total K-12 enrollment in public schools and online school participation in each state.

Table 4. State Comparison Data

State	Number of Students in the State	Number of Traditional Districts	Number of Students in Charter Schools	Number of Charter Schools	Number of Students in E-Schools	Number of E-Schools	E-School Funding Model	E-Schools' Affiliation Type
Ohio	1,659,018	612	102,625	319	23,847	14	Participation	Charter
Arizona	1,118,000	230	185,588	550	13,684	30	Participation	Charter/District
Idaho	298,246	90	20,579	57	5,260	11	Enrollment/Completion	Charter
Minnesota	874,370	336	54,211	220	5,843	15	Enrollment/Completion	Charter/District
Utah	661,268	41	71,417	124	8,724	7	Enrollment/Completion	Charter/District
New Hampshire	180,105	167	3,422	31	211	1	Completion	State
Texas	5,359,413	1,025	310,846	753	13,766	7	Completion	Charter/District
Florida	2,807,524	74	283,560	655	33,914	72	Completion	State/District/Charter

Source: National Center for Education Statistics and Miron, G., Shank, C., & Davidson, C. (2018) "Full-Time Virtual and Blended Schools: Enrollment, Student Characteristics, and Performance." Data is from school year 2016-2017
Note: Data for Ohio is updated to reflect data as of the 2018-2019 school year. Addititionally, NCES reports New Hampshire has two online schools. Because each, a middle school and high school, is run by a single organization, most studies and reports consider it a single online school.

Included at the end of this study is more detailed review of each of the states the Department examined (**Appendix 1**). There is not a single state to point to in modeling an ideal funding model, however several themes emerged.

- **Online learning is more integrated in other states.** Online education has greater integration as a resource within the education community as opposed to an alternative choice option for students. Connected with that idea, every state reviewed had both part-time enrollment options for students, as well as full-time options.
- **Most states limit funding to 1.0 FTE.** Limiting funding for a student to 1.0 FTE is almost universally the norm. Only New Hampshire (and previously Florida) allows students to generate a full 1.0 FTE at the traditional public school district *and* generate completion-based funding for supplemental online courses.
- **Local districts often retain the responsibility for special services for students enrolled in online programs part-time.** States with part-time completion options directly provide course completion funding to online providers. In most cases, however, the traditional public schools retain the responsibility (and supplemental funding) for providing additional services to students with disabilities, economically disadvantaged students and English learners.
- **Enrollment-based funding is still very prevalent.** Most states continue to base e-school funding on count days or enrollment in a manner similar to brick-and-mortar schools. Even states like Utah, Minnesota and New Hampshire, with performance-based funding, continue to pay full-time online students on the basis of enrollment.
- **Completion-based funding is used by a few states, but no state uses competency-based funding.** While several states, including Florida, Idaho, Minnesota, New Hampshire, Texas and Utah use completion-based funding, a competency-based funding model does not exist in another state.

FINDINGS, FEASIBILITY AND ISSUES FOR FURTHER STUDY

GENERAL FINDINGS AND OBSERVATIONS

Based on meetings, interviews, research and reflection, the Department concluded that a significant amount of accountability and oversight already exists in Ohio compared to other states. However, the Department offers the following findings related to e-schools, performance-based funding and the current operating environment. These are in no particular order but could inform how performance-based funding might work in Ohio. In some cases, these findings include observations about how such realities apply to Ohio.

- **E-schools are an important part of Ohio's education offerings**. Students choose e-schools for a variety of reasons, and these schools have a place in the landscape of school choice for families and students. For the DOPR e-schools, there is a belief that students would otherwise drop out if not for their existence. Life circumstances (such as health, work responsibilities and children) make the flexibility of e-schools a good fit for some students.
- **Ohio's current accountability and oversight of e-school funding is already strong and well regarded**. In the states reviewed for this study, the Department did not come across a mechanism as regular and thorough as the FTE review process. While some states had course approval processes or processes to annually evaluate performance, the Department did not identify any state with a compliance monitoring mechanism. In fact, during this study, representatives from the state of Nevada reached out to the Department to learn about Ohio's method for funding e-schools and how to model its system after Ohio.
- **Clear purposes must be identified when considering changes to the e-school funding model.** Throughout the course of this study, the Department heard a variety of interests expressed relative to e-school funding. Schools are interested in making the documentation requirement for generating funding less onerous while being able to consistently receive full-time funding for a continuously enrolled student. Some policymakers have articulated an interest in holding e-schools to a higher standard and ensuring that payment is made only for real learning by students.
- **Funding systems must be auditable**. On the topic of accountability, the most important consideration for the Auditor of State's Office — regardless of system — is a uniform and consistent method for auditing against the funding model. Because state foundation funding represents the primary revenue source for online community schools, there will always be a need to confirm the basis on which state funding is generated. A shift from funding based on documented learning opportunities to funding based on course completion does not alleviate an auditing need. It simply changes the data and information needed to support the audit process.
- **Funding simplicity and funding accountability are inversely related.** The state could establish a funding mechanism that was relatively simple and straightforward, with limited data reporting or documentation maintained by the school. However, the greater the simplicity, the less accountability the state and taxpayers would receive. The recent historical trend has been to seek greater accountability relative to e-school funding.
- **Durational-based funding is challenging and often does not lead to full funding.** The primary challenge identified by e-schools is a result of the move to greater accountability. The biggest challenge is the concept of durational-based funding and the ability to generate full funding for each full-time enrolled student. The data in **Table 3** illustrates the phenomenon that creates this frustration, showing that e-schools generate FTE funding for 63.2% of the total number of students who enroll in e-schools during the course of a year. Smaller e-schools, primarily DOPR schools, are challenged by the need for data systems to track learning opportunities and the ability to engage students for a full 920 hours of learning opportunities across the school year.
- **E-schools have upfront fixed costs.** There is an upfront fixed cost associated with enrolling a student in an e-school. This includes the cost of the computer, internet, software licensing fees and staff time related to enrollment and orientation. This makes any funding model — enrollment, completion, participation — difficult for schools with highly mobile populations. It was not within the scope of this study for the Department to determine what amount would be reasonable for such fixed costs.

- **Most completion models serve part-time students.** The completion-based models in other states primarily support students participating in online learning on a part-time basis. While both Florida and New Hampshire have full-time e-school students, the largest population served is on a part-time basis. The part-time nature of students reduces concerns about how a completion-based funding system impacts students with disabilities, English learners, economically disadvantaged students and at-risk student populations, since students engaged in part-time online education continue to receive any supplemental services from their traditional public school districts. Similarly, it was interesting to note that states like Utah and Minnesota have completion-based funding only for part-time e-school students, and students attending e-schools full-time generate funding in the same way as students attending brick-and-mortar schools.

COMPETENCY-BASED FUNDING FINDINGS AND FEASIBILITY

The National Center for Innovation in Education found that *competency-based funding* in primary and secondary education finance is not practiced in the United States. States that have implemented elements of performance-based funding have done so as *completion-based funding*.[18] Competency-based funding is performance-based funding where the focus is narrowed to ensuring students master content and skills. This is a much different approach than the current practice of funding FTEs.

Competency-based funding suggests the use of a competency-based education model. While Ohio has studied and piloted competency-based education, a structure for widespread implementation does not exist. Even New Hampshire, which is a nationwide leader in competency-based education, uses a completion-based funding model for its online education. Moreover, Ohio has little oversight in the curriculum and instructional materials used by schools.

If Ohio wanted to pursue a competency-based model, Ohio would need the ability to measure mastery at the end of a course. A standard way to do that would be through a content exam. As discussed above, Ohio has content exams in English language arts and mathematics in grades 3-8 and a variety of high school end-of-course exams for key courses. However, to provide a uniform measure, Ohio would need to provide a content exam for each course. This would require Ohio to purchase and provide an assessment for each course an e-school may choose to offer. Ohio may be able to use off-the-shelf vendor assessments for many courses. If not, Ohio may need to develop its own assessments. This would be a very costly endeavor for the state and only apply to a relatively small population of public school students.

Finally, with a competency-based funding model, the assessment system would need to be available on-demand. Allowing a high school student to take the American History assessment at any point during the school year rather than during prescribed testing windows also would increase the cost of the existing assessment system.

While there are other challenges and considerations within the broader performance-based funding model, the Department does not recommend or find feasibility in moving to a competency-based funding model at this time.

However, in the interest of introducing some amount of performance-based funding into Ohio's e-school funding model, the state could contemplate a hybrid approach. This approach would use the current durational time data, and the FTE that emerges from it as the foundation. Then, for any student whose funded FTE is less than the enrolled FTE, an additional amount of time (for example, 0.1 FTE) could be claimed for students scoring proficient or better on any state test. The payment to the e-school for any student would still be limited to 1.0 FTE regardless of the computed value of the additional FTE.

[18] National Center for Innovation in Education's Low-Stakes Completion-Based Funding

Using a 0.1 FTE supplement for illustrative purposes, such a hybrid approach would allow a student in grades 3, 4, 6 and 7 to generate 0.2 FTE based on performance on state tests, 0.3 FTE in grades 4 and 6, and up to 0.5 FTE across required high school end-of-course exams. This approach could give Ohio some experience with performance-based funding and support further examination of such a funding model. Attempting to structure this hybrid approach would require careful consideration of many issues similar to those listed in the next section relative to a completion-based funding model.

A hybrid approach also could be structured as a limiter on funding rather than a supplement. In other words, payment for any student would be limited to some threshold amount in the case where the student did not achieve a certain performance level on a state test (for example, basic or above). By way of illustration, an e-school would not be paid any more than a set threshold (for example, 0.75 FTE) for any student who did not score at the level of basic or above.

Neither of these hybrid approaches were identified from the other states reviewed for this study or from any stakeholder input.

COMPLETION-BASED FUNDING MODEL FINDINGS AND CONSIDERATIONS

If it was determined that maintaining Ohio's current e-school funding system was unacceptable, and there was a desire to provide more flexibility and ease for e-schools to claim funding for students, Ohio could begin to move to a completion-based funding model. However, the state would have to wrestle with the likelihood that there will be a wide range of definitions for what constitutes "completion." There would be a number of other issues that would need to be addressed, including the following:

- **Definitions:** The state would have to develop a clear set of definitions, including a definition for completion, to support a completion-based model. The state also would have to ensure that definitions could be consistently and fairly applied across Ohio's multiple e-schools.
- **Assessment and accountability for completion:** The state will need to determine whether some sort of assessment will be required to support course completion. It also will need to determine how the concept of "course completion" applies in elementary and middle school settings.
- **Student mobility:** The state will need to determine how to address the circumstances in which students begin a course but do not complete it. Similarly, determinations will need to be made for how to fund a student who begins a course in one school and then completes it elsewhere. Allowing partial funding for partial course completion would add significant complexity.
- **Unintended consequences:** Lessons from the past suggest that Ohio needs to be considerate of potential unintended consequences. A completion-based funding model may create incentives for schools to place pressure on students and teachers to rush through courses to reach course completion rather than supporting the real acquisition of learning.
- **Costs for student engagement or outreach:** Ohio would need to address the extent to which student engagement and outreach activities would be funded as part of a completion-based model.
- **Timing of payments:** Since completion data would be available at the end of the year, the state would need to determine how schools would be paid throughout the year.
- **Partial completion:** Ohio would need to determine whether it would divide "completion" into subunits (for example, lessons or modules). If so, it would then need to determine a methodology for doing this consistently and for placing a funding value on them.
- **Course limitations:** The state would need to determine whether there should be any limitation on the types of courses and whether courses would need to be approved by the state in order to trigger funding.

Given the considerations listed, there would need to be a significant amount of discussion to develop the specificity needed for an operational completion-based funding system. Even then, some of the challenges to creating such a system may be challenging to overcome, especially to the extent that they require some level of standardization of course descriptions or modularization. For this reason, the Department does not recommend or find feasibility in moving to a competency-based funding model at this time.

FEASIBILITY OF IMPLEMENTATION

If Ohio were to choose to adopt a competency-based or completion-based funding model, it would need to develop plans and actions to address key implementation considerations, including those outlined below.

Timing: First and foremost, moving to a different funding model will require significant work for both the Department and e-schools. Ideally, to implement a different model for the 2021-2022 school year, legislation would need to be in place no later than July 2020 to allow sufficient time for policy and rule development and IT systems updates. A shift in funding approach will, at a minimum, require e-schools and their student information systems to interface with EMIS in a different way. New reporting elements and structures around existing course reporting requirements would also be needed. It is critical for the operational infrastructure, reporting environment and oversight authority to be fully developed prior to the start of the school year of implementation. Mid-year changes are never welcome by either the Department or schools.

Course approval and limits: In the interest of oversight, the Department should have an approval process for courses offered at e-schools for completion-based funding. This would represent a new function for the Department and require additional staff and support to appropriately review and authorize the various courses. Florida, Texas and Utah have some level of course approval for e-schools. It is critical to have some type of validation that courses are comparable across all 14 e-schools. Following initial approval, there should be a periodic review.

Utah publishes an annual report on the providers that participate in the part-time, completion-based model for students. The Department recommends something that goes beyond passive reporting of information. Additionally, the Department recommends the completion-based model provide different funding amounts based on the type of course, as Utah and Minnesota have implemented, or limits to the number of elective courses a student can generate funding for in a given year. Both Texas and New Hampshire expressed concern over some of the courses submitted for payment; including a significant number of physical education courses.

Finally, the Department recommends funding based on passing a course and receiving credit. This goes beyond finishing the course, as required in Minnesota, but is not as precise as funding partial completion like Utah or New Hampshire. With a more developed system and greater insight into courses, it may be possible to move to funding based on partial course completion, however, the Department believes there is significant variance between the structure and pace of courses at e-schools across the state. If Ohio moves to course-completion, it should first start with funding full courses.

Oversight and accountability systems: Moving to a completion-based model will still necessitate strong oversight and a thorough accountability system. Beyond course approval, it is important that the Department have the opportunity to review and monitor compliance. For completion-based funding, this would involve reviewing evidence of course completion, which may require expertise beyond that of the Office of Budget and School Funding and the School Finance area coordinators who conduct FTE reviews at community schools under the current model. What is unclear is what type of oversight may be needed to safeguard against a teacher or school reporting a student as completing a course and earning credit to generate funding. This is not something the Department found addressed in our research or discussions and would require further study and attention prior to implementation.

Funding a mobile student population: It is not clear how e-schools would be financially impacted by moving to a completion-based or competency-based funding model. Most e-schools in the state have mobility rates of more than 50%. It is very likely that e-schools would receive no funding for some students who are only enrolled for a portion of the year. Completion-based funding does not support partial participation without completion, and so creates a high-stakes situation. For example, when a student served by an e-school for more than half of the year leaves without finishing a course, the student would generate $0 for the e-school.

Despite a mobile population, the Department would recommend layering an enrollment requirement that exists in Florida and Texas on top of the completion funding. A student should only be able to generate a full FTE if the student was both enrolled for the majority of the year (between October and February in Florida) and completed five courses. Under a completion-based approach, the Department does not recommend splitting funding between two different e-schools should a student enroll in more than one during a school year.

Managing cash flow/advancing payment: Under a course completion model, schools would not generate funding until a student completes a course. This is particularly true if Ohio were to only pay based on course completion — like in Texas, Florida and Minnesota — and not based on partial course work — like Utah and New Hampshire. Both Texas and Florida fund schools based on estimates and reconcile funding at the end of the year. In some ways, this is not unlike how schools in Ohio currently are funded. Funding does not occur until the end of the year when a student's total documented learning opportunities are known and reported.

From a feasibility standpoint, Ohio could allow schools to estimate course completion and reconcile at the end of the year. If the state relied on course completion, this data would be available no later than a school's final reporting of documented learning opportunities, which is typically around late July after the end of the school year. If the state used assessment data, this reconciliation process may be further delayed. (Note that Ohio had faced challenges in the past with estimated payments, including advances to new community schools that failed to open. The state has worked to minimize significant advances.) The Department would expect e-schools to pay close attention, monitor and report student anticipated completions during the school year to minimize large year-end adjustments. The risk of overpayments certainly can be mitigated, although there is a higher likelihood for larger reconciliations during the first few years of any new system.

Pilot completion-based funding: Finally, from a feasibility standpoint, the legislature should consider piloting completion-based funding before shifting the entire e-school sector to the new model. Such a significant shift in funding will no doubt have unintended consequences. While unintended consequences can be mitigated by learning more from states like Florida and Texas, it would be beneficial to deploy completion-based funding at one or two e-schools before expanding sector-wide. While the funding system could be simulated and modeled, a pilot would be the best way to test a new funding model.

ISSUES FOR FURTHER STUDY

During the course of the study, the Department identified issues that fall outside the legislative directive of the study. However, because they were identified by stakeholders during the study or emerged during discussions with other states and the research portion of the study, the Department wishes to articulate them. These policy implications highlight issues that deserve further review and, in some cases, possible administrative or legislative action.

Part-time e-school students: In nearly every other state examined during the study, there was significant student participation in online education on a part-time basis, with students concurrently enrolled at traditional public schools and online education providers. This approach allows students to access courses of study that may not be available at their home school districts without the need to change schools or move. Ohio has some opportunities for dual enrollment (career-technical education and College Credit Plus), but the practice of dual enrollment between a traditional district and a community school for general education courses is not permitted.

New Hampshire and Florida, the two states most often associated with completion-based funding, primarily serve students on a part-time basis. Other states, like Utah and Minnesota, have approached completion-based funding with students enrolled in a part-time option. For students participating part time, the responsibility of the online provider is exclusively to the course in which the student is enrolled. In many states, the resident district maintains the primary responsibility for the education of the student, especially in terms of additional services. It also eliminates the need to provide funding above a base course completion amount.

Unfortunately, Ohio's e-school sector has emerged primarily comprised of community schools that serve students full-time. It is difficult to contemplate a more significant integration of traditional public schools and e-schools based on part-time student participation. That said, it may be worth further conversations about how to enable this type of integration in favor of providing students with more learning opportunities and options.

Limits to enrollment: A discussion about e-school funding often moves to a discussion of the types of students who are best suited for the e-school environment. Because e-schools are public schools, they do not have the ability to selectively admit or deny enrollment to students. E-school leaders know the challenge of accepting all students, even when it may be apparent that an online environment is not a good fit, while also dedicating resources and attention to these same students in an attempt to engage them.

Under both Ohio's existing documented learning opportunities model or a completion-based model, e-schools will continue to experience frustration and struggle to generate funding for these students. On one hand, the student is not engaged or progressing in any type of learning, so why should the state provide funding to the e-school. On the other hand, the e-school has, at minimum, provided a computer and internet access to the student and has other costs associated with enrollment and attempting to motivate student participation. Ohio law[19] now includes a requirement that e-schools offer an orientation to students. This may result in certain students self-selecting out of the e-school environment. Additionally, the requirement to withdraw students for non-attendance was reduced from 105 hours to 72 hours in 2018.

[19] ORC 3314.271

The Thomas B. Fordham Institute also has addressed this topic and offered recommendations.[20] These include the following:

- Allow schools to steer students away from e-schools;
- Restrict students from re-enrolling in e-schools for a defined period of time if they have been withdrawn because of consecutive unexcused absences;
- Allow schools to establish stricter engagement policies that would permit schools to withdraw non-participating students sooner than the current law requires.

Finally, limiting enrollment in e-schools to certain grade levels can be further explored. New Hampshire and Texas, two states that fund based on completion, limit enrollment to grades 6-12 and 3-12, respectively. The data in **Table 2** suggests most students in e-schools are in secondary school grades. This issue deserves further discussion, particularly for DOPR e-schools.

Funding student start-up and engagement activities: A primary concern expressed by e-school leaders is the upfront costs associated with enrolling students and the disconnect between the work schools do to engage students and the payment structure based on documented learning opportunities. One suggestion was to continue using the current system of funding e-schools based on the student enrollment period and student participation in documented learning opportunities with two modifications:

- Provide a minimum level of funding for each student regardless of the documented learning opportunities or length of enrollment;
- Broaden the time e-schools can claim for funding to include services provided by teachers, social workers and other school personnel who do not fit within the current definition of documented learning opportunities.

Both modifications may allow e-schools to generate additional funding. However, lawmakers should consider oversight and precautionary measures in both situations to prevent potential abuse.

Enrollment/completion hybrid funding model: Connected with modifications to the existing system, a small number of DOPR e-schools advocate for a hybrid model of funding based on enrollment plus supplements. Led by the Greater Ohio Virtual School, the proposal would provide a minimum level of funding for each student upon enrollment (which would not be provided should a student withdraw and re-enroll in the same year), with additional funding for both student engagement and documented learning opportunities and performance-based course-completion. Under the proposal, no student could generate full funding without at least some documented learning opportunities and some course completion.

The hybrid model would do four things:

- Address concerns expressed by all e-school leaders on the up-front costs associated with enrolling students;
- Introduce an element of performance into the funding model;
- Maintain a portion of funding based on how much work students actually complete; and
- Provide, in total, additional funding to the e-school sector.

This approach would generate full funding for the student who completes all required coursework and passes the class without demonstrating 920 hours but would not penalize the school for a student who demonstrated participation all year yet failed to pass the class or advance to the next grade. With the base funding alone, this proposal would have the impact of providing additional financial support to e-schools.

[20] https://fordhaminstitute.org/ohio/commentary/testimony-given-joint-legislative-committee-e-school-funding-112918

It is worth nothing that this proposal would add additional reporting and administrative requirements for e-schools. In addition to maintaining the documented learning opportunity system, schools would also have to comply with a course completion reporting system. (See the discussion above in the section entitled "Completion-Based Funding Model: Findings and Considerations.")

Funding through district deductions. Regardless of the actions that might be taken in the interest of improving e-school funding in Ohio, it should be noted that many of the e-schools in the state are interested in higher enrollments and higher payments. It is beyond the purpose of this study to conclude whether higher enrollments and higher payments are appropriate or not. However, in the context of Ohio's current funding approach, which deducts payments for community schools from the state funds paid to traditional school districts, higher enrollments and higher payments will result in higher deductions from local districts. This would likely cause increased tension between the community school sector and the traditional public education sector. Ohio will continue to experience this tension as long as the state's current approach of deducting funding from payments to traditional school districts remains in place.

DOPR e-school funding: Finally, during this study, feedback from the Dropout Prevention and Recovery e-schools generally diverged from that of regular education e-schools. As noted in the findings section above, the DOPR e-schools focused on both the challenges of reporting documented learning opportunities and serving the at-risk populations of students that DOPR e-schools engage. It is unclear if the frustration is more closely tied to the small size of most DOPR e-schools or challenges associated with serving at-risk populations. Nevertheless, the idea of differentiated funding for DOPR e-schools and regular education e-schools emerged. DOPR e-schools already have a different accountability system than other community schools and traditional districts, so there is precedent for differential treatment. However, if such an approach is viewed as beneficial, the Department would encourage caution and urge attention in designing the approach to ensure any differentiation in funding does not create an incentive for e-schools to seek a DOPR designation based on financial considerations.

CONCLUSION

The Ohio Department of Education appreciates the opportunity to help inform Ohio's policy deliberations as part of the collective and continuing pursuit of a fair and reasonable regulatory environment for the operation of community schools in general and e-schools in particular.

The recommendations provided in this report are the informed opinions of the Ohio Department of Education. The Department looks forward to further discussions and building consensus on how Ohio e-schools should be funded. Conversations about this work will, no doubt, continue in the interest of ensuring every learning opportunity for students in Ohio is a quality one that is focused on helping each child achieve future success.

APPENDIX 1

Below is a detailed examination of how each state the Department reviewed funds online education. States are not organized alphabetically, but rather arrayed from those that fund students in a manner closely aligned to Ohio's current structure to those that fund students based on completion.

ARIZONA

Of the states reviewed, Arizona has a system that is most like Ohio's.
Arizona's online schools are funded based on documented learning opportunities.

- Students can enroll in online education on a full-time or part-time basis. This dual enrollment is an option afforded to students in every other state examined, but one not available to students in Ohio.
- The maximum amount of funding a student can generate across all schools is limited to 1.0 FTE.
- Parents and/or students log time based on work completed each day, which supplements time tracked within school learning management systems. This includes both computer and non-computer time.
- No funding is attached to competency or completion.
- Daily minutes of attendance are provided to the state daily, and schools are paid on actual time reported to the state each month. While the first few months of each school year are paid based on estimates, funding is based on the engagement of students.
- The number of required hours for earning one FTE varies for different grade levels (kindergarten, 356 hours; grades 1-3, 712 hours; grades 4-8, 890 hours; grades 9-12, 900 hours). Ohio requires that community schools provide a minimum 920 hours of instruction for full-time students in grades K-12.

IDAHO

In Idaho, each student in attendance at an online school is funded based on either the actual hours of attendance converted to Average Daily Attendance (ADA) or the percentage of coursework completed, whichever is more advantageous to the school. Schools must choose one option or the other for the entire school. In other words, schools cannot choose to fund some students based on attendance and other students based on completion.

- Students can enroll in online education on a full-time or part-time basis.
- The maximum amount of funding a student can generate across all schools is limited to 1.0 FTE.
- There are two snapshots of ADA, and the more advantageous for the school is used to determine funding: one is from the first day of school through the first Friday in November, and second is the best 28 weeks of the entire school year. ADA is calculated in either full- or half-day increments. Students are in full attendance (1.0) when they are participating for four or more hours; half-day attendance (0.5) is when they participate for 2.5 hours; and no attendance (0) is when they participate less than 2.5 hours on a specific day. Each day in each snapshot is averaged to determine each student's ADA — a number between 0 and 1.
- Idaho only allows an online school to claim attendance during the school's reported calendar. This generally excludes hours students are engaged in learning opportunities during the weekend and outside of normal business hours and represents a more restrictive standard than Ohio.
- Schools that choose course completion funding track time in minutes toward completion of the course. There is no statewide definition of what a course is, and schools can select their own standards and determine what completion means. Elementary and secondary students have different requirements. For a student to be counted as full-time at the high school level, the student must take six courses. In elementary school, for example, math class consists of 180 lessons.

MINNESOTA

Minnesota uses a performance-based model for some students enrolled in online charter schools. While students have multiple avenues to engage in online education, including multi-district programs and district-run schools, the analysis below focuses on students in online charter schools.

- Students can enroll in online education on a full-time or part-time basis.

- The maximum amount of funding a student can generate across all schools is limited to 1.0 FTE. An exception to this exists for year-round alternative schools, where the FTE can be as high as 1.2. These alternative schools appear to be similar to the DOPR model in Ohio.
- Online schools serving full-time students generate funding based on enrollment. Funding for full-time students is provided without any consideration of documented learning opportunities. Online schools are required to withdraw students after 15 days of non-participation.
- Part-time students, however, only generate funding based on course completion. The provision of part-time online education, however, is somewhat restricted. Before enrollment, the student's resident district must approve the student's participation. Under this model, funding is provided to the school following course completion. Course completion here does not require a student to pass the course. Upon finishing the course, funding is transferred from the resident district to the provider. The amount paid to the online charter school for each course is determined by the credit hour value of the course.
- Based on the Department's research, statewide participation in part-time, completion-based e-schools are very limited.
- For students enrolled full-time, supplemental funding is provided based on certain student characteristics, including economically disadvantaged students and students with disabilities. For students participating in the part-time program, the student remains the responsibility of the resident district, and no supplemental funding follows the student in the part-time course.

UTAH

Utah allows for the operation of online schools on a full-time or part-time basis. Full-time students are funded based on enrollment. For part-time students, similar to Minnesota, Utah has a performance-based model in place.

- Students can enroll in online education on a full-time or part-time basis.
- The maximum amount of funding a student can generate in a year across all schools is limited to 1.0 FTE. Students may only exceed this limit when an acceleration plan and notice of early graduation is filed with the state.
- Full-time online school students are funded based on enrollment in the same way any other school in the state is funded, and there is no distinction between students in online and brick-and-mortar charter schools in terms of the types and amounts of funding students generate.
- Students wishing to supplement the educational opportunities at their traditional school districts are afforded the opportunity to participate part-time in the Utah Statewide Online Education Program (SOEP).
- The state operates two separate authorizing environments — one for schools providing full-time educational options and a second for providers participating in the SOEP. For the latter, providers and courses are reviewed and approved on an annual basis. This includes reporting on the completion rates of students participating in these programs and success on state assessments. Not all online charter schools that serve students on a full-time basis seek approval to offer coursework through the SOEP.
- Online schools serving part-time students in the SOEP are funded based on course completion. The SOEP sets a payment schedule for courses. The course withdrawal period is up to 20 days after the course begins, 25% of the course fee upon completion of the first half of the course and the remaining 50% of the online course fee if the full course is completed within 12 months. If a student does not complete a course within 12 months, online learning providers still receive 30% of the course fee if the student completes the course before graduation.
- When a student completes a course, the student's resident district is responsible for payment from the amount of funding generated by the student at the resident district. While funding transfers to the SOEP provider based on the course amount, because the student is only participating part-time and remains enrolled at the resident district, there is no supplemental funding provided to the SOEP provider. The student remains the primary responsibility of the resident district for educational and related services.
- In the 2018-2019 school year, six schools were approved as online providers for the completion-based model. However, most students who participate in online education programs do so on a full-time basis.

NEW HAMPSHIRE

New Hampshire is one of the states the Department was required to examine for this study. New Hampshire is a very small state, with a population slightly larger than Franklin County (Ohio), and approximately 180,000 public school students. The state is unique in that online education is offered through a single provider. The Virtual Learning Academy Charter School (VLACS) is funded through New Hampshire's Education Trust Fund, which solely exists to benefit New Hampshire's charter schools. Funding for the online charter school comes directly from the state rather than through a transfer from the resident school district.

- Students can enroll in online education on a full-time or part-time basis. However, the availability of a full-time option is more recent. When VLACS first opened in 2008, it was created as a supplemental education option for students. As a result, VLACS continues to serve students primarily on a part-time basis. Of the approximately 12,000 students enrolled at VLACS, only 300 are full time.
- Unlike the limits placed on students in other states discussed above, students who participate on a part-time basis at VLACS can generate a full FTE at their resident school districts and additional funding at VLACS. Students are allowed to generate more than 1.0 FTE if they enroll in and complete more than 6 credit hours.
- Participation in VLACS is limited to students in grades 6-12.
- For part-time students, each full-credit course completion allows VLACS to generate the equivalent of one-sixth of $5,700 (FY19). Supplemental funding based on specific student characteristics is not provided. As is the case in other states, the resident district remains primarily responsible for the student's education and related services.
- VLACS reports the number of courses and partial courses completed by students. There is no limit to the time a student may take to complete a course. As New Hampshire has moved toward a competency-based education model, VLACS is able to report data as students master course competencies. Ultimately, funding is provided based on completion of a course, where completion equates to mastery of specific competencies.
- To address cash flow challenges related to completion-based funding, the New Hampshire Department of Education forward-funds estimated completions and reconciles funding at the end of the fiscal year.
- Courses offered by VLACS are aligned to state academic content standards, however, the New Hampshire Department of Education does not have an oversight mechanism to validate the course completion reporting.
- As mentioned above, a full-time option was recently added. Those students who are participating full time are funded on an enrollment basis in the same manner as other students in brick-and-mortar schools in the state. To be considered a full-time student at VLACS, one must be enrolled in courses totaling 6 credits.

TEXAS

Like both Utah and Minnesota, Texas has different funding for part-time and full-time students. However, unlike these states, students who enroll on a full-time basis are funded based on course completion. Students who participate on a part-time basis generate funding based on enrollment.

- Students can enroll in online education on a full-time or part-time basis.
- The maximum amount of funding a student can generate across all schools is limited to 1.0 FTE.
- Online education is limited to students in grades 3-12.
- For students participating on a part-time basis, participation in online education occurs at the traditional district — not in a home or non-classroom setting. As a result, funding is based on enrollment. Texas uses Average Daily Attendance (ADA) over a six-week period to determine funding for traditional school districts.
- For students participating on a full-time basis, the online provider can generate full funding for a student upon successful completion of eight semester courses or four year-long courses. Unlike Utah, there is no partial funding. Students only generate funding upon successful completion of a course. In Texas, this means passing the course, not simply completing the coursework.

- While funding is provided based on course completion, online schools generate estimated funding all year. It is only after the end of the school year, when schools report completion data, that a full reconciliation can occur. Any adjustments are recovered from the following year's funding. While this method addresses cash flow challenges that schools would otherwise face, it also creates a situation of larger, unexpected repayments if students do not complete courses.
- All courses offered through the Texas Virtual School Network (TxVSN) must meet the state curriculum requirements, known as the Texas Essential Knowledge and Skills.
- Finally, while funding for full-time students is based on course completion, performance-based funding is only applied to the base funding amount. Online schools generate supplemental funding for students with disabilities, economically disadvantaged students, English learners and other students, without regard to course completion.

FLORIDA

The final state examined in this study is Florida. Florida is often highlighted as a leader in performance-based funding, like New Hampshire, and is one of the states the legislature directed the Department to examine in this study. Florida funds online education exclusively based on course completion. Online education in the state of Florida began with the Florida Virtual School (FLVS) more than 20 years ago. For many years, FLVS was a supplemental, part-time option for traditional public school students, homeschool students and students in nonpublic schools. It also was the only online education option for students in Florida. Students enrolled for a variety of reasons, including the desire for acceleration and credit recovery.

It is important to understand that Florida's online school funding system changed in 2013. Prior to this change, the funding mechanism for FLVS was through an appropriation in the state budget with funding provided to FLVS based on course completion. A student was considered full-time if the student enrolled in six credits. As a result, FLVS generated the equivalent of one-sixth FTE funding for each course a student completed. Like New Hampshire, students could generate more than 1.0 FTE between both their resident school districts and the FLVS. In 2013, the funding model changed. The current funding model is discussed below.

- School districts in Florida are required to offer students three options for online education. Many districts use the FLVS as one but also contract with private providers of online education (including providers that operate in other states as online charter schools) or district-developed programs.
- Students can enroll in online education on a full-time or part-time basis. Most students who participate in online education programs in Florida, including FLVS, do so on a part-time basis.
- When Florida created choice in the online education space, the law also was changed to limit the maximum amount of funding a student could generate across all schools to 1.0 FTE. A full-time equivalent student enrolled in the virtual school continues to consist of six full-credit course completions (9-12) or the prescribed level of content that counts toward promotion to the next grade (K-8). However, funding for course completion is now split between the resident school district and the online education provider. Moreover, if the student takes more than six courses, each additional course increases the denominator to calculate the cost of each completed course. For example, if a student takes eight courses between the resident district and FLVS, each course is only funded at 1/8 the full-time equivalent amount rather than 1/6.
- Florida requires successful course completion for state funding purposes. There is no partial funding provided based on a portion of a course completed.
- In addition to course completion, the state of Florida has overlaid an enrollment requirement. Students must be enrolled during two state student survey periods (October and February respectively) to generate full-time equivalency funding. Students are limited in the amount of funding they can generate through course completion if they are enrolled for a partial year. This secondary requirement prevents a situation where a student completes six courses in the first half of the year and receives full funding.
- Florida pays FLVS and other online education providers estimated funding throughout the year, which is reconciled following year-end reporting on course completion.

- While still a small population of the total online education population, full-time students are eligible for supplemental funding based on student demographics in the same way full-time students are at traditional districts. Part-time students, however, continue to receive additional services from their resident districts.

The changes to the manner in which Florida funds online education had several impacts. First, limiting funding to 1.0 FTE reduced the amount that each course generated for students taking more than six courses. For FLVS, as students took more courses in a single year, the amount each course generated in funding diminished. Next, because funding for FLVS was through a transfer rather than direct funding, the change created a disincentive for traditional public schools to promote online education or create an alternative to FLVS. This disincentive also impacted funding for FLVS.

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