



Department of
Education

Virtual Education Report

School Year 2016-17

Tennessee Department of Education | July 2018



Introduction

Each year, the Tennessee Department of Education releases an annual report on virtual programs and virtual public schools operating in the state. In compliance with T.C.A. § 49-16-104, the report provides information on student enrollment, academic performance, as well as funding for virtual education. Additional information regarding virtual education is available on the Tennessee Department of Education’s website.

Highlights

- In 2011, the Tennessee General Assembly enacted the **Virtual Public Schools Act**, providing local school districts the ability to establish their own virtual public school.
- Virtual schools are public schools that **“use technology to deliver a significant portion of instruction to students via the Internet in a virtual or remote setting”** (T.C.A. 49-16-203).
- As of the 2016-17 school year, there are eleven virtual schools active in Tennessee.
- **Virtual schools must comply with the same laws and rules and regulations as traditional public schools** on curriculum standards, class size, length of the school day and school year, regular student assessments, and teacher qualifications.
- School districts may manage their own virtual schools or may contract for services with nonprofit and for-profit entities. Of the eleven operational schools, nine are operated by the school districts. Tennessee Virtual Academy in Union County is operated by K-12, Inc. and Robertson County Virtual School is operated by Connections Learning.

Virtual Schools in Tennessee

Background

In 2011, the Tennessee General Assembly passed the *Virtual Public Schools Act*, authorizing school districts to establish virtual public schools. Virtual schools are public schools that “use technology to deliver a significant portion of instruction to students via the Internet in a virtual or remote setting” (T.C.A. 49-16-203). Virtual school students take all courses online, but in some cases students may receive support in a physical location. Virtual schools must comply with the same law, rules, and regulations as traditional public schools on curriculum standards, class size, length of the school day and school year, regular student assessments, and teacher qualifications.

Virtual schools must comply with the same laws, rules, and regulations as traditional public schools.

Any student who is eligible for enrollment in a Tennessee public school may enroll in a virtual school, with districts having the option to charge tuition if the student does not live within

district borders. Students have the option of enrolling full-time or part-time. Full-time students take all of their courses online through the virtual school. Part-time students take one or more courses online while enrolled in another public school.

Virtual programs in Tennessee offer a broad range of online courses and services to reach a variety of students, from struggling to gifted, who seek personalized pathways to learning opportunities. Throughout Tennessee, virtual programs take many forms including:

- **Supplemental programs:** students may enroll in individual online courses to supplement or serve as part of a full-time program in a traditional school
- **Blended learning:** combines online and face-to-face instruction mixed throughout the school day
- **Synchronous learning:** students and instructors must be online at the same time. Instruction takes place in real time at a specific set time
- **Asynchronous learning:** students may take online courses on their own schedule. Instructors provide material, lectures, tests, and assignments that can be accessed at any time

Students with unique learning needs, including disabilities and limited English proficiency, may enroll and participate in a virtual school. Virtual schools are required to provide the services included in each special education student’s Individual Education Program (IEP).

Virtual School Information

School			
Bradley County Virtual School	Bradley County	April 20, 2012	3-12
Hamilton County Virtual School	Hamilton County	January 31, 2012	K-12
Memphis Virtual School	Shelby County	July 1, 2013	6-12
Metro Nashville Virtual School	Davidson County	July 1, 2011	5-12
Robertson County Virtual School	Robertson County	July 1, 2012	7-12
Tennessee Online Public School	Bristol City	November 21, 2011	9-12

School	District	Date Opened	Grades Served
Tennessee Virtual Academy	Union County	July 1, 2011	K-8
Tennessee Virtual On-Line School	Wilson County	January 1, 2012	K-12
VITAL: Upper Cumberland e-Learning Network	Putnam County	July 19, 2011	K-12
Tennessee Virtual Learning Academy	Washington County	July 1, 2014	9-12
E. B. Wilson	Sumner County	August 1, 2013	9-12

Table 1. Full-Time Active Virtual Schools in Tennessee (2016-17 School Year)

Overall Student Enrollment

School	Enrollment					
	SY 11-12	SY 12-13	SY 13-14	SY 14-15	SY 15-16	SY 16-17
Bradley County Virtual School	Not Opened	34	69	85	70	48
Hamilton County Virtual School	Not Opened	22	26	19	30	27
Memphis Virtual School	Not Opened	111	150	97	102	168
Metro Nashville Virtual School	16	85	89	140	122	97

School	Enrollment					
	SY 11-12	SY 12-13	SY 13-14	SY 14-15	SY 15-16	SY 16-17
Robertson County Virtual School	Not Opened	19	19	25	38	38
Tennessee Online Public School	Not Opened	58	138	222	208	222
Tennessee Virtual Academy	1,749	3,014	2,676	1,379	634	733
Tennessee Virtual On-Line School	Not Opened	18	29	31	35	39
VITAL: Upper Cumberland e-Learning Network	Not Opened	Not Opened	Not Opened	9	7	4
Tennessee Virtual Learning Academy	Not Opened	Not Opened	Not Opened	Not Opened	10	6
E.B. Wilson	*	9	20	53	81	72

Table 2. Full-Time Student Enrollment

*Data not available

School Demographics

School	District	% Economically Disadvantaged Students		% Students with Disabilities	
		SCH	LEA	SCH	LEA
Bradley County Virtual School	Bradley County	6.3%	30.5%	*	11.9%
Hamilton County Virtual School	Hamilton County	3.7%	37.3%	*	12.8%
Memphis Virtual School	Shelby County	42.8%	58.6%	2.0%	12.3%
Metro Nashville Virtual School	Davidson County	30.9%	50.6%	13.4%	13.1%
Robertson County Virtual School	Robertson County	5.3%	33.4%	2.6%	15.3%
Tennessee Online Public School	Bristol City	1.4%	28.9%	3.2%	15.4%
Tennessee Virtual Academy	Union County	19.1%	34.7%	14.6%	15.5%
Tennessee Virtual On-Line School	Wilson County	12.8%	13.6%	12.8%	14.5%
VITAL: Upper Cumberland e-Learning Network	Putnam County	0.0%	34.3%	*%	16.3%
Tennessee Virtual Learning Academy	Washington County	0.0%	26.8%	*	15.5%
E.B. Wilson	Sumner County	0.0%	.5%	12.5%	14.6%

Table 3. Virtual School Student Characteristics (2016-17 School Year)

* Data not available

Attendance and Graduation

School	K- 8 Attendance Rate		K-8 Promotion Rate		High School Attendance Rate		High School Graduation Rate	
	SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA
Bradley County Virtual School	100%	95.2%	*	99.5%	100%	94.9%	100%	91.7%
Hamilton County Virtual School	100%	96.3%	100%	98.8%	100%	94.1%	0%	84.6%
Memphis Virtual School	93.3%	95.2%	92.9%	95.3%	90.2%	92.6%	35.9%	79.6%
Metro Nashville Virtual School	100%	94.8%	*	99.5%	100%	91.0%	64.3%	80.3%
Robertson County Virtual School	100%	95.9%	100%	99.5%	100%	95.5%	100%	96.9%
Tennessee Online Public School	**	95.4%	**	98.8%	95.7%	93.5%	100%	93.2%
Tennessee Virtual Academy	95.5%	94.7%	*	*	**	89.8%	**	87.1%
Tennessee Virtual On-Line School	100%	96.3%	100%	99.7%	91.9%	92.9%	100%	96.2%
VITAL: Upper Cumberland e-	100%	95.9%	100%	99.3%	*	95.3%	*	92.4%

Learning Network								
Tennessee Virtual Learning Academy	**	95.0%	**	98.6%	90%	91.4%	100%	92.8%
E.B. Wilson	**	96.3%	**	99.5%	100%	95.4%	95.7%	94.7%

Table 5. Virtual School Student Attendance and Promotion Rates (2016-17 School Year)

*Data not available

**School does not service grade levels

Student Mobility & Attrition

Student mobility refers to the number of students who leave the school after Oct. 1 divided by total enrollment of the school. **Attrition rate** is the difference between the number of students who enter and exit after Oct. 1. Student mobility and attrition rates appear high for virtual schools; however, this is expected since they enroll students for multiple reasons, including many virtual school that do not require enrollment for a full school year.

School	District	Entering Enrollment	Exit Enrollment	Mobility Rate	Attrition Rate
Bradley County Virtual School	Bradley County	9	10	-1.59	-2.08
Hamilton County Virtual School	Hamilton County	9	6	7.89	11.11
Memphis Virtual School	Shelby County	54	110	-21.62	-36.84
Metro Nashville Virtual School	Davidson County	32	33	-0.71	-1.03

School	District	Entering Enrollment	Exit Enrollment	Mobility Rate	Attrition Rate
Robertson County Virtual School	Robertson County	6	7	-2.27	-2.63
Tennessee Online Public School	Bristol City	28	39	-4.09	-4.95
Tennessee Virtual Academy	Union County	132	154	-2.24	-3
Tennessee Virtual On-Line School	Wilson County	44	28	19.05	41.03
VITAL: Upper Cumberland e-Learning Network	Putnam County	1	1	0	0
Tennessee Virtual Learning Academy	Washington County	8	1	43.75	116.67
E. B. Wilson	Sumner County	50	7	34.96	59.72

Table 7. Virtual School Student Mobility and Attrition Rates (2016-17 School Year)

Accountability

Virtual schools are public schools created by a school district and, therefore, are subject to the same accountability laws, rules, and regulations as any other public school in Tennessee. The *Virtual Public Schools Act* specifically states that virtual school students shall be subject to the regular assessments in language arts, math, science, and social studies. Like each traditional public school, virtual school accountability data is published as part of the state Report Card and available for public review.

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The General Assembly placed additional accountability measures on virtual schools in 2013 focusing on student achievement growth, as represented by the Tennessee Value-Added Assessment System (TVAAS). TVAAS composites are reported on a 1-5 scale and are one-year scores. If a virtual school demonstrates student achievement growth at a level 1 of “significantly below expectations” for any three consecutive years of the school’s operation, the commissioner of education has the authority to enforce an enrollment cap or direct the district to close the school.



Figure 1: Explanation of TVAAS Levels

The table below shows TVAAS scores for virtual schools. In many cases TVAAS scores are not available. This is because class size tends to be lower in virtual school classrooms. In order to calculate a TVAAS score, there must be at least 10 valid tests. For virtual schools with available TVAAS scores, the scores are generally lower than the scores of the districts. The virtual school’s performance may be related to their high mobility and attrition rates since many virtual schools serve students who enroll for short periods of time.

Student Achievement Growth

School	District	Literacy		Numeracy		Literacy and Numeracy		Science		Social Studies		Overall Composite	
		SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA
Bradley County Virtual School	Bradley County	*	3	1	5	1	5	3	5	*	5	1	5
Hamilton County Virtual School	Hamilton County	*	5	*	1	*	1	*	1	*	1	*	1
Memphis Virtual School	Shelby County	3	1	2	1	2	1	2	1	2	1	1	1
Metro Nashville Virtual School	Davidson County	3	3	3	1	3	1	1	4	3	1	2	1
Robertson County Virtual School	Robertson County	*	1	*	5	*	3	*	1	3	1	3	1

School	District	Literacy		Numeracy		Literacy and Numeracy		Science		Social Studies		Overall Composite	
		SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA
Tennessee Online Public School	Bristol City	5	3	4	2	5	3	1	3	3	5	3	4
Tennessee Virtual Academy	Union County	3	3	1	1	1	1	3	1	*	2	1	1
Tennessee Virtual On-Line School	Wilson County	2	1	1	5	1	5	1	2	3	1	1	3
VITAL: Upper Cumberland e-Learning Network	Putnam County	*	5	*	5	*	5	*	3	*	5	*	5
Tennessee Virtual Learning Academy	Washington County	*	5	*	5	*	5	*	3	*	5	*	5
E.B. Wilson	Sumner County	3	3	1	5	1	5	3	5	*	3	1	5

Table 8. Virtual Schools TVAAS Scores (School year 2016-17)

*Indicates school had insufficient data to generate TVAAS scores in this subject

Funding

Virtual schools are funded the same way as traditional public schools are funded. Per T.C.A. § 49-16-204, “a virtual school shall be provided resources as any other public school in the state. State funding allocations per basic education program (BEP) are district-based and not based on individual schools.” School districts can also use BEP funds from both local and state sources to implement and operate their virtual education programs. Districts are encouraged to apply for grants and accept donations to help fund their virtual education programs. The table below includes per-pupil expenditure for each school.

School	State Funds Generated
Bradley County Virtual School	\$412,214.40
Hamilton County Virtual School	\$269,130.60
Memphis Virtual School	\$2,015,244.00
Metro Nashville Virtual School	\$1,211,268.10
Robertson County Virtual School	\$346,286.40
Tennessee Online Public School	\$2,289,375.00
Tennessee Virtual Academy	\$6,403,121.50
Tennessee Virtual On-Line School	\$326,831.70
VITAL: Upper Cumberland e-Learning Network	\$36,304.40
Tennessee Virtual Learning Academy	\$53,863.20
E.B. Wilson	\$639,856.80

Virtual School and Programs Improvement Efforts

Key Lever	Improvement Effort
<p>Curriculum</p>	<ul style="list-style-type: none"> • Online Digital Content: The increased availability of online content, including full courseware and unbundled resources (such as Khan Academy), is being utilized in various ways (credit recovery, remediation, advancement, etc.) based on student needs. • Open Education Resources: Freely accessible and openly licensed content for teaching and learning are being examined and potentially adopted due to both cost and their non-static nature, which is critical in a constantly evolving virtual learning environment.
<p>Talent</p>	<ul style="list-style-type: none"> • Teacher Support/Development: Teaching in a virtual environment requires a unique skillset. Recognizing this reality, schools and programs provide tailored professional development to better equip them for success on issues such as student engagement and education technology. • Teachers as Facilitators: In blended learning environments, the teacher often switches teacher roles from deliverer of content to facilitator of instruction. Through this structure, students receive instruction via education technology and the educator provides on-demand support to struggling or quickly advancing students to ensure they move at their own pace. • Algebra I/Integrated Math I Blended Learning Pilot: During the 2016-17 school year, the department launched the two-year Algebra I/Integrated Math I Blended Learning Pilot. The first-year report provides findings on student achievement, teacher instructional practices, and recommendations for further implementation. Based on the report, introducing blended learning was most successful when teachers received regular, personalized coaching.
<p>Time</p>	<ul style="list-style-type: none"> • Homebound/Disciplinary Students: Utilization of virtual school programs for students who are unable to attend on traditional campus, ensuring that their education continues, regardless of circumstance. • Response to Instruction and Intervention (RTI2): Creation of support structure (on-site tutoring, different class, etc.) where students can receive necessary support to ensure they continue to move forward at appropriate pace.

<p>Learning Environment</p>	<ul style="list-style-type: none"> • Emerging Education Technologies: As technology rapidly proliferates, schools and programs are quickly identifying, adopting, and adapting to their capabilities. This includes incorporation of learning management systems that enhance students' physical and virtual learning experiences.
<p>Competency-Based</p>	<ul style="list-style-type: none"> • Mastery-Based Learning: The department is exploring ways to shift the paradigm between time in class to mastery of content in order to garner student ownership and enable them to move at their own pace.
<p>Policy</p>	<ul style="list-style-type: none"> • Course Access Program Act: The amended legislation outlines parameters for the course access catalog and guidelines for student enrollment for the 2018-19 school year.