



Virtual Education Report

July 2014

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Introduction

Virtual Programs

In 2008, the Tennessee General Assembly sought to, “provide school districts and students in all grades with a broader range of educational opportunities through effective use of technology.” Through this legislation, the state board of education promulgated policies and guidelines for the operation of virtual education programs, including those operated by the department of education. In order to help spur their development, the legislature gave local education agencies the authority to utilize basic education program (BEP) funds to implement their virtual programs in addition to encouraging the pursuit and acceptance of grants and/or other donations, particularly in the startup phase. Participation in a virtual program is left to the discretion of the local education agency.

Throughout Tennessee, there are many virtual programs taking many forms, including a/synchronous, intra and inter-district, and fully online/blended. Notable programs include Putnam County VITAL (Virtual Instruction to Accentuate Learning) and the Northeast Tennessee College and Career Ready Consortium (NETCO), which received a five year, \$21 million i3 grant from the United States Department of Education.

Virtual Schools

In 2011, the General Assembly expanded upon previous efforts and enacted the Virtual Public Schools Act, which sought to provide local education agencies alternative choices to offer additional educational resources in an effort to improve academic achievement. The Act, later amended in 2013, provides local education agencies the ability to establish a virtual public school, with access to all of the same resources afforded to other public schools. In addition, the Act details such items as student and family offerings; resource support; teacher quality; enrollment; evaluation and authority to contract with certain entities.

As of this report, there are eight virtual schools in operation throughout Tennessee.

Specific statutory language relative to virtual education programs and the Virtual Public Schools Act may be found in Tennessee Code Annotated, Title 49, Chapter 16.

Virtual Schools Enrollment/Demographics

(Overall Student Enrollment)

Table 1: Virtual School Enrollment					
School	LEA	Date Opened	Grades Served	Enrollment	
				SY 11-12	SY 12-13
Bradley County Virtual School	Bradley County	4/20/2012	3-12	N/A	34
Hamilton County Virtual School	Hamilton County	1/31/2012	K-12	N/A	22
Memphis Virtual School	Shelby County	7/1/2013	6-12	N/A	111
Metro Nashville Virtual School	Davidson County	7/1/2011	1-12	16	85
Robertson County Virtual School	Robertson County	7/1/2012	7-12	N/A	19
Tennessee Online Public School	Bristol City	11/21/2011	9-12	N/A	58
Tennessee Virtual Academy	Union County	7/1/2011	1-8	1,749	3,014
Tennessee Virtual On-Line School	Wilson County	1/1/2012	1-12	N/A	18

Virtual Schools Enrollment/Demographics

(By Student Characteristics)

Table 2: Virtual School Demographics (by student characteristics) for SY 2012 - 2013

School	LEA	% Free or Reduced Price Lunch		% Students with Disabilities		% English Learner	
		SCH	LEA	SCH	LEA	SCH	LEA
Bradley County Virtual School	Bradley County	50.7	54.8	*	10.9	*	1.7
Hamilton County Virtual School	Hamilton County	*	58.8	*	12.7	*	4.9
Memphis Virtual School	Shelby County	42.3	84.3	*	12.6	*	7.6
Metro Nashville Virtual School	Davidson County	36.5	72.4	*	12.0	*	14.7
Robertson County Virtual School	Robertson County	*	50.3	*	15.3	*	5.7
Tennessee Online Public School	Bristol City	*	52.3	*	16.3	*	1.6
Tennessee Virtual Academy	Union County	8.5	73.1	8.5	10.5	*	0.3
Tennessee Virtual On-Line School	Wilson County	*	29.5	*	13.7	*	2.0

NOTE: * Not available for publication due to student count (n < 10)

Virtual Schools Enrollment/Demographics (By Race)

Table 3: Virtual Schools Demographics (by race) for SY 2012 - 2013

School	LEA	% White		% Black/ African- American		% Hispanic or Latino		% Asian		% Native American/Ala skan	
		SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA
Bradley County Virtual School	Bradley County	91.2	91.9	*	3.6	*	3.7	*	0.5	*	0.2
Hamilton County Virtual School	Hamilton County	100	58.4	*	31.2	*	7.7	*	2.3	*	0.3
Memphis Virtual School	Shelby County	10.8	7.1	82.0	81.7	*	9.6	*	1.4	*	0.1
Metro Nashville Virtual School	Davidson County	69.4	31.8	24.7	45.3	*	18.6	*	4.0	*	0.2
Robertson County Virtual School	Robertson County	100	77.9	*	11.0	*	10.1	*	0.7	*	0.2
Tennessee Online Public School	Bristol City	89.7	90.2	*	5.5	*	2.7	*	1.0	*	0.4
Tennessee Virtual Academy	Union County	79.4	88.6	13.7	7.1	4.8	3.1	1.2	0.7	0.8	0.5
Tennessee Virtual On-Line School	Wilson County	83.3	85.9	13.7	7.9	*	3.7	*	2.0	*	0.3

NOTE: * Not available for publication due to student count (n < 10)

Virtual Schools Enrollment/Demographics

(Student Mobility and Attrition Rate)

Student mobility refers to the number of students who transferred (enter minus exit school after October 1) divided by the number of students who were enrolled at the end of the 2012 – 2013 school year. For example, if 50 kids entered the school while 25 exited after October 1 and the school had a final enrollment of 100, the student mobility rate would be 25%.

Attrition rate is the number of students who transferred (enter minus exit school after October 1) divided by the total number of students enrolled at the beginning of school. For example, if 100 kids were enrolled at the start of the year and 15 kids entered and 5 exited, the student attrition rate would be 10%.

Student mobility and attrition rates appear high for virtual schools; however, this is expected since they enroll students for multiple reasons, including many that don't require enrollment for a full school year. These could include medical issues, family support during hardship, bullying or other issues related to interest in removal from traditional public school, family travel, etc.

Table 4: Virtual Schools Student Mobility and Attrition Rates for SY 2012 - 2013

School	LEA	% Mobility	% Attrition
Bradley County Virtual School	Bradley County	95%	9%
Hamilton County Virtual School	Hamilton County	68%	- 5%
Memphis Virtual School	Shelby County	182%	16%
Metro Nashville Virtual School	Davidson County	120%	- 21%
Robertson County Virtual School	Robertson County	56%	- 21%
Tennessee Online Public School	Bristol City	48%	41%
Tennessee Virtual Academy	Union County	46%	0%
Tennessee Virtual On-Line School	Wilson County	48%	44%

Virtual Schools Student Performance

Virtual schools are public schools created by an LEA and, therefore, are subject to the same accountability laws, rules and regulations as any other public school in Tennessee. The Virtual 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.

In addition to the accountability and intervention options for traditional public schools, the General Assembly placed additional accountability measures on virtual schools in 2013 focusing on student achievement growth. If a virtual school demonstrates student achievement growth at a level of “significantly below expectations” for any three consecutive years of the school’s operation, as represented by the Tennessee Value-Added Assessment System (TVAAS), the commissioner of education has the authority to enforce an enrollment cap or direct the LEA to close the school.

Virtual Schools Performance (Achievement)

Percent Proficient or Advanced on Tennessee Comprehensive Assessment Program (TCAP)

Table 5: Virtual School Performance (compared to LEA) for SY 2012 - 2013

School	LEA	Math		Reading Language Arts	
		SCH	LEA	SCH	LEA
Bradley County Virtual School	Bradley County	*	50.5%	*	54.1%
Hamilton County Virtual School	Hamilton County	*	54.2%	*	46.8%
Memphis Virtual School	Shelby County	*	33.0%	*	29.1%
Metro Nashville Virtual School	Davidson County	N/A	42.5%	N/A	39.9%
Robertson County Virtual School	Robertson County	*	54.7%	*	50.9%
Tennessee Online Public School	Bristol City	N/A	58.4%	N/A	54.6%
Tennessee Virtual Academy	Union County	18.7%	25.8%	37.5%	34.1%
Tennessee Virtual On-Line School	Wilson County	*	61.1%	*	63.7%

1. **NOTE:** Data for LEAs excludes students enrolled in virtual school
2. **NOTE:** * Not available for publication due to student count (n < 30)
3. **NOTE:** N/A = Not Applicable

Virtual Schools Performance (Achievement)

Percent Proficient or Advanced on End-of-Course Exam (EOC)

Table 6: Virtual School Performance (compared to LEA) for SY 2012 - 2013

School	LEA	Algebra I		Algebra II	
		SCH	LEA	SCH	LEA
Bradley County Virtual School	Bradley County	*	68.4%	*	47.7%
Hamilton County Virtual School	Hamilton County	N/A	49.3%	*	36.7%
Memphis Virtual School	Shelby County	*	38.0%	*	17.4%
Metro Nashville Virtual School	Davidson County	*	51.4%	*	24.2%
Robertson County Virtual School	Robertson County	*	68.9%	*	35.0%
Tennessee Online Public School	Bristol City	9.7%	65.8%	*	58.6%
Tennessee Virtual Academy	Union County	N/A	68.9%	N/A	33.9%
Tennessee Virtual On-Line School	Wilson County	*	70.2%	*	60.8%

1. **NOTE:** Data for LEAs excludes students enrolled in virtual school
2. **NOTE:** * Not available for publication due to student count (n < 30)
3. **NOTE:** N/A = Not Applicable

Virtual Schools Performance (Achievement)

Percent Proficient or Advanced on End-of-Course Exam (EOC)

Table 7: Virtual School Performance (compared to LEA) for SY 2012 - 2013

School	LEA	English II		English III	
		SCH	LEA	SCH	LEA
Bradley County Virtual School	Bradley County	*	60.5%	*	42.5%
Hamilton County Virtual School	Hamilton County	*	55.4%	*	36.5%
Memphis Virtual School	Shelby County	*	35.2%	*	17.8%
Metro Nashville Virtual School	Davidson County	*	47.4%	*	25.3%
Robertson County Virtual School	Robertson County	*	57.9%	*	44.3%
Tennessee Online Public School	Bristol City	*	74.0%	*	54.1%
Tennessee Virtual Academy	Union County	N/A	51.0%	N/A	27.1%
Tennessee Virtual On-Line School	Wilson County	*	72.1%	*	43.7%

1. **NOTE:** Data for LEAs excludes students enrolled in virtual school
2. **NOTE:** * Not available for publication due to student count (n < 30)
3. **NOTE:** N/A = Not Applicable

Virtual Schools Student Performance (Growth)

Growth on Tennessee Value Added Assessment System (TVAAS)

Table 8: Virtual Schools TVAAS Scores (compared to LEA) for SY 2012 - 2013

School	LEA	Literacy		Numeracy		Literacy and Numeracy		Composite	
		SCH	LEA	SCH	LEA	SCH	LEA	SCH	LEA
Bradley County Virtual School	Bradley County	2	5	1	5	1	5	1	5
Hamilton County Virtual School	Hamilton County	*	1	*	5	*	5	*	5
Memphis Virtual School	Shelby County	3	1	1	5	1	5	1	5
Metro Nashville Virtual School	Davidson County	3	1	*	5	3	1	2	3
Robertson County Virtual School	Robertson County	*	2	*	5	*	5	*	5
Tennessee Online Public School	Bristol City	3	2	1	5	1	5	1	5
Tennessee Virtual Academy	Union County	1	1	1	1	1	1	1	1
Tennessee Virtual On-Line School	Wilson County	*	5	*	5	*	5	*	5

Tennessee utilizes a value-added assessment system to measure district, school, and teacher impact on students' academic progress. Progress is reported via levels as indicated below:

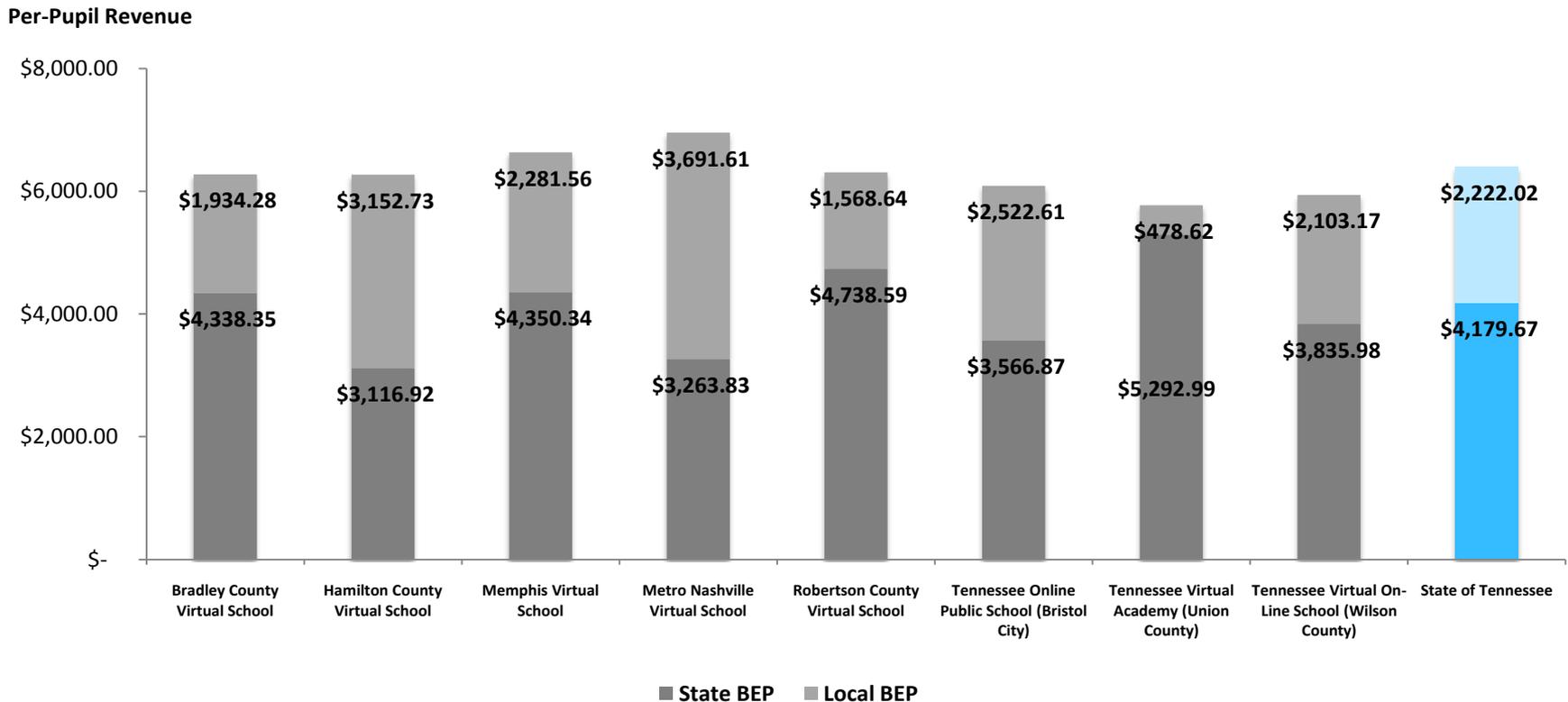
- **Level 1:** Significantly below expectations (in red)
- **Level 2:** Below expectations (in blue)
- **Level 3:** At expectations (in green)
- **Level 4:** Above expectations (in orange)
- **Level 5:** Significantly above expectations (in purple)

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

Virtual Schools Funding

(LEA Per-Pupil Revenue – Basic Education Program)

Figure 1: LEA Per-Pupil Revenue (State and Local Basic Education Program (BEP) Funds)



NOTE: Based on FY14. Per TCA § 49-16-204, a virtual school shall be provided resources as any other public school in the state. State funding allocations per the BEP are district-based and not based on individual schools. Local governments may allocate additional resources to schools.

Virtual Schools/Programs Improvement Efforts

Virtual schools and programs are at the leading edge of innovation throughout Tennessee. Due to numerous opportunities and constraints (heightened student learning expectations, misalignment between supply and demand of quality instructional opportunities, increased abilities of and access to emerging technologies, etc.), they have tried new initiatives and approaches. These efforts provide a window into not only what’s possible, but what is on the horizon.

Student experiences in virtual schools/programs varies, including:

- **Fully online schools:** students take all courses online. In some cases, students may receive support a physical location, but are not required to attend classes in physical school buildings.
- **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.

Table 9 identifies levers that virtual schools/programs have to ensure they continually improve and provide students a rigorous education, regardless of their experience.

Key Lever	Description
Curriculum	What students should know and be able to do and instructional resources (digital, print, etc.) to support their learning
Time	Mindset that learning happens not just in school, but anywhere, anytime 24/7
Talent	Utilize staff in new and creative ways in virtual environments
Learning Environment	Design of instructional space of where students learn
Competency-Based	How students show what they know (formative, summative) throughout instructional process

Virtual Schools/Programs Improvement Efforts

Table 10: Key Levers for Virtual School/Program Success (part I)

Key Lever	Virtual School/Program Improvement Efforts
<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, education technology, etc. • Teachers as Facilitators: In blended learning environments, switching teacher role 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.

Virtual Schools/Programs Improvement Efforts

Table 10: Key Levers for Virtual School/Program Success (part II)

Key Lever	Virtual School/Program Improvement Efforts
Time	<ul style="list-style-type: none"> • Homebound/Disciplinatory Students: Utilization of virtual school programs for students that 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.
Learning Environment	<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, etc. that enhance students' physical and virtual learning experience.
Competency-Based	<ul style="list-style-type: none"> • Mastery-Based Learning: While there are limited examples at this point, teachers and leaders have expressed interest in shifting 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.

For more information, contact:
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