

# Virtual Education Report 2015

#### Introduction

- Each year, the Tennessee Department of Education produces 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.





# **Virtual Schools**

#### Virtual Schools

- 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).
- Virtual school students take all courses online. In some cases, students may receive support in a physical location, but they are not required to attend classes in physical school buildings.
- As of the 2014-15 school year, there have been ten virtual schools established in Tennessee, with eight schools operational.
- 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 eight operational schools, seven are operated by the school districts. Tennessee Virtual Academy in Union County is operated by K-12, Inc.



# **Enrollment and Demographics**

- Any student who is eligible for enrollment in a Tennessee public school may enroll in a virtual school.
  - Districts have the option of charging tuition to a student who does not currently 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.
- Students with special 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.





# Enrollment Demographics

### **Overall Student Enrollment**

**Table 1: Virtual School Enrollment** 

| School                           | District         | Data Onemad | Grades | Enrollment |          |          |          |  |  |  |
|----------------------------------|------------------|-------------|--------|------------|----------|----------|----------|--|--|--|
|                                  | District         | Date Opened | Served | SY 11-12   | SY 12-13 | SY 13-14 | SY 14-15 |  |  |  |
| Bradley County Virtual School    | Bradley County   | 4/20/2012   | 3-12   | N/A        | 34       | 69       | 85       |  |  |  |
| Hamilton County Virtual School   | Hamilton County  | 1/31/2012   | K-12   | N/A        | 22       | 26       | 19       |  |  |  |
| Memphis Virtual School           | Shelby County    | 7/1/2013    | 6-12   | N/A        | 111      | 150      | 97       |  |  |  |
| Metro Nashville Virtual School   | Davidson County  | 7/1/2011    | 1-12   | 16         | 85       | 89       | 140      |  |  |  |
| Robertson County Virtual School  | Robertson County | 7/1/2012    | 7-12   | N/A        | 19       | 19       | 25       |  |  |  |
| Tennessee Online Public School   | Bristol City     | 11/21/2011  | 9-12   | N/A        | 58       | 138      | 222      |  |  |  |
| Tennessee Virtual Academy        | Union County     | 7/1/2011    | 1-8    | 1,749      | 3,014    | 2,676    | 1,379    |  |  |  |
| Tennessee Virtual On-Line School | Wilson County    | 1/1/2012    | 1-12   | N/A        | 18       | 29       | 31       |  |  |  |

# **School Demographics**

| Table 2: Virtual School Student Characteristics for SY 2013-14 |                  |                               |      |                        |      |                   |      |  |  |  |  |
|--|------------------|-------------------------------|------|------------------------|------|-------------------|------|--|--|--|--|
| School   | District         | % Free or<br>Reduced<br>Lunch |      | % Studer<br>Disabiliti |      | % English Learner |      |  |  |  |  |
|  |                  | SCH                           | LEA  | SCH                    | LEA  | SCH               | LEA  |  |  |  |  |
| Bradley County Virtual School                                  | Bradley County   | 100                           | 55.2 | 2.9                    | 11.2 | *                 | 1.5  |  |  |  |  |
| Hamilton County Virtual School                                 | Hamilton County  | *                             | 58.7 | *                      | 13.2 | *                 | 4.5  |  |  |  |  |
| Memphis Virtual School   | Shelby County    | 100                           | 68.9 | 4.7                    | 13.3 | 3.3               | 6.6  |  |  |  |  |
| Metro Nashville Virtual School                                 | Davidson County  | 100                           | 72.7 | 4.5                    | 12.4 | *                 | 15.3 |  |  |  |  |
| Robertson County Virtual School                                | Robertson County | *                             | 51.2 | *                      | 15.7 | *                 | 6.2  |  |  |  |  |
| Tennessee Online Public School                                 | Bristol City     | 100                           | 53.3 | 5.8                    | 16.2 | *                 | 1.2  |  |  |  |  |
| Tennessee Virtual Academy                                      | Union County     | 100                           | 66.9 | 12.2                   | 12.9 | *                 | 0.2  |  |  |  |  |
| Tennessee Virtual On-Line School                               | Wilson County    | *                             | 30.3 | *                      | 14.3 | *                 | 2.1  |  |  |  |  |

**Note:** \* Not available for publication due to student count (n < 10). Report will be updated with data from the 2014-15 school year when it becomes available.



# Attendance and Graduation

| Table : Virtual School Attendance and Graduation Rates for SY 2013-14 |                  |           |                |      |               |                   |                    |                                |       |  |  |
|---|------------------|-----------|----------------|------|---------------|-------------------|--------------------|--------------------------------|-------|--|--|
| School  | District         | K- 8 Atte | endance<br>ite |      | motion<br>ite | High S<br>Attenda | School<br>nce Rate | High School<br>Attendance Rate |       |  |  |
|   |                  | SCH       | LEA            | SCH  | LEA           | SCH               | LEA                | SCH                            | LEA   |  |  |
| Bradley County Virtual School   | Bradley County   | 100%      | 95.6%          | 100% | 99.3%         | 92.5%             | 93.7%              | 87%                            | 93.1% |  |  |
| Hamilton County Virtual School  | Hamilton County  | 100%      | 96.2%          | 90%  | 97.9%         | 100%              | 92.6%              | 20%                            | 82.6% |  |  |
| Memphis Virtual School  | Shelby County    | 90.9%     | 95%            | *    | 95.1%         | 84.6%             | 92.8%              | 18.6%                          | 74.6% |  |  |
| Metro Nashville Virtual School  | Davidson County  | *         | 95.5%          | *    | 98.9%         | 94.4%             | 92.1%              | 54.5%                          | 78.7% |  |  |
| Robertson County Virtual School                                       | Robertson County | 100%      | 96.5%          | 100% | 71.9%         | 100%              | 95.2%              | 100%                           | 95.1% |  |  |
| Tennessee Online Public School  | Bristol City     | *         | 95.7%          | *    | 97.2%         | 91.4%             | 93.7%              | 80.8%                          | 88.7% |  |  |
| Tennessee Virtual Academy   | Union County     | 100%      | 97.4%          | 100% | 100%          | *                 | 93.5%              | *                              | 87.1% |  |  |
| Tennessee Virtual On-Line School                                      | Wilson County    | 100%      | 96.5%          | *    | 99.4%         | 100%              | 94.4%              | *                              | 96.3% |  |  |

Note: \* Data not available.

Report will be updated with data from the 2014-15 school year when it becomes available.



# **Student Mobility & Attrition**

- Student mobility refers to the number of students who transferred (enter minus exit school after
  Oct. 1) divided by the number of students who were enrolled at the end of the 2012–13 school year.
  - For example, if 50 students entered the school while 25 students exited after October 1 and the school had a final enrollment of 100 students, the student mobility rate would be 25%.
- Attrition rate is the number of students who transferred (enter minus exit school after Oct. 1)
  divided by the total number of students enrolled at the beginning of school.
  - For example, if 100 students were enrolled at the start of the year and 15 students entered and 5 students 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.

| Table : Virtual School Student Mobility and Attrition Rates for SY 2013-14 |                  |            |             |  |  |  |  |  |  |  |
|--|------------------|------------|-------------|--|--|--|--|--|--|--|
| School   | LEA              | % Mobility | % Attrition |  |  |  |  |  |  |  |
| Bradley County Virtual School  | Bradley County   | 33%        | 10%         |  |  |  |  |  |  |  |
| Hamilton County Virtual School   | Hamilton County  | 68%        | -27%        |  |  |  |  |  |  |  |
| Memphis Virtual School   | Shelby County    | 182%       | -23%        |  |  |  |  |  |  |  |
| Metro Nashville Virtual School   | Davidson County  | 124%       | -6%         |  |  |  |  |  |  |  |
| Robertson County Virtual School  | Robertson County | 53%        | 0           |  |  |  |  |  |  |  |
| Tennessee Online Public School   | Bristol City     | 48%        | 3%          |  |  |  |  |  |  |  |
| Tennessee Virtual Academy  | Union County     | 52%        | -31%        |  |  |  |  |  |  |  |
| Tennessee Virtual On-Line School   | Wilson County    | 160%       | -48%        |  |  |  |  |  |  |  |

Note: Report will be updated with data from the 2014-15 school year when it becomes available.





# Academic Performance

# 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.
- 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 district to close the school.



#### **Historical Student Growth**

- Level 1: Significantly below expectations
- Level 2: Below expectations
- Level 3: At expectations
- Level 4: Above expectations
- Level 5: Significantly above expectations

#### **Table: Virtual Schools Historic TVAAS Scores**

| School                           |                  | Literacy    |             |             | Numeracy    |             |             |             | Numeracy & Literacy |             |             |             | Composite   |             |             |             |             |
|----------------------------------|------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                  | District         | SY<br>11-12 | SY<br>12-13 | SY<br>13-14 | SY<br>14-15 | SY<br>11-12 | SY<br>12-13 | SY<br>13-14 | SY<br>14-15         | SY<br>11-12 | SY<br>12-13 | SY<br>13-14 | SY<br>14-15 | SY<br>11-12 | SY<br>12-13 | SY<br>13-14 | SY<br>14-15 |
| Bradley County Virtual School    | Bradley County   | **          | 2           | 3           | З           | **          | 1           | 1           | 1                   | **          | 1           | 2           | 1           | **          | 1           | 1           | 1           |
| Hamilton County Virtual School   | Hamilton County  | **          | *           | *           | *           | *           | *           | *           | *                   | *           | *           | *           | *           | *           | *           | *           | *           |
| Memphis Virtual School           | Shelby County    | **          | 3           | 3           | 2           | **          | 1           | 1           | 1                   | **          | 1           | 1           | 1           | **          | 1           | 1           | 1           |
| Metro Nashville Virtual School   | Davidson County  | 3           | 3           | 4           | 3           | 1           | *           | 2           | 2                   | 1           | 3           | 3           | 3           | 1           | 2           | 2           | 2           |
| Robertson County Virtual School  | Robertson County | **          | *           | *           | *           | *           | *           | *           | *                   | *           | *           | *           | *           | *           | *           | *           | *           |
| Tennessee Online Public School   | Bristol City     | **          | 3           | 4           | 5           | **          | 1           | 2           | 1                   | **          | 1           | 3           | 3           | **          | 1           | 3           | 3           |
| Tennessee Virtual Academy        | Union County     | 1           | 1           | 1           | 3           | 1           | 1           | 1           | 1                   | 1           | 1           | 1           | 1           | 1           | 1           | 1           | 1           |
| Tennessee Virtual On-Line School | Wilson County    | **          | *           | *           | *           | *           | *           | *           | *                   | *           | *           | *           | *           | *           | *           | *           | *           |

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



#### **Student Growth**

- Level 1: Significantly below expectations
- Level 2: Below expectations
- Level 3: At expectations
- Level 4: Above expectations
- **Level 5:** Significantly above expectations

Table: Virtual schools TVAAS scores compared to Districts' TVAAS scores for SY 2014-15

**Union County** 

Wilson County

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| Table : Virtual Schools TVAAS Scores compared to bistriets TVAAS Scores for \$1,2014 15 |                  |      |      |     |       |     |                 |           |     |  |  |  |
|---|------------------|------|------|-----|-------|-----|-----------------|-----------|-----|--|--|--|
| School  | District         | Lite | racy | Num | eracy |     | cy and<br>eracy | Composite |     |  |  |  |
|   |                  | SCH  | LEA  | SCH | LEA   | SCH | LEA             | SCH       | LEA |  |  |  |
| Bradley County Virtual School   | Bradley County   | 3    | 5    | 1   | 5     | 1   | 5               | 1         | 5   |  |  |  |
| Hamilton County Virtual School  | Hamilton County  | *    | 1    | *   | 1     | *   | 1               | *         | 1   |  |  |  |
| Memphis Virtual School  | Shelby County    | 2    | 5    | 1   | 5     | 1   | 5               | 1         | 5   |  |  |  |
| Metro Nashville Virtual School  | Davidson County  | 3    | 5    | 2   | 1     | 3   | 3               | 2         | 5   |  |  |  |
| Robertson County Virtual School   | Robertson County | *    | 5    | *   | 3     | *   | 5               | *         | 3   |  |  |  |
| Tennessee Online Public School  | Bristol City     | 5    | 5    | 1   | 3     | 3   | 4               | 3         | 3   |  |  |  |
|   |                  |      |      |     |       |     |                 |           |     |  |  |  |

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



Tennessee Virtual Academy

Tennessee Virtual On-Line School



# Funding

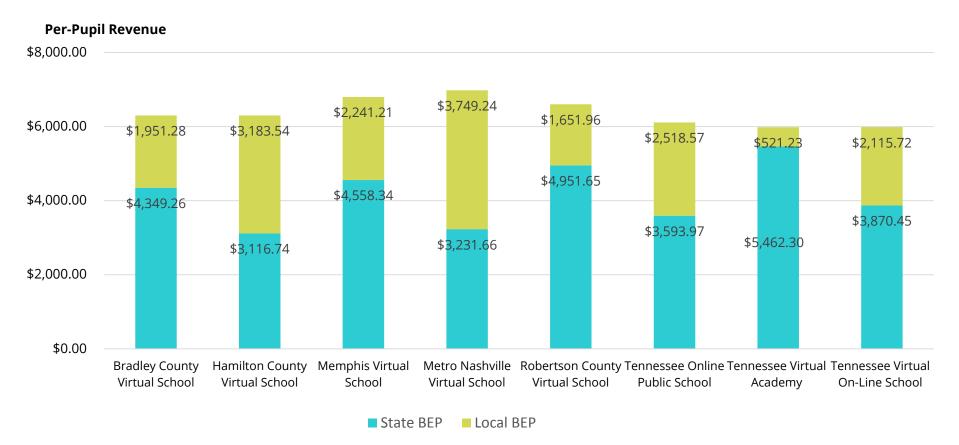
# Funding

- 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 also encouraged to apply for grants and accept donations to help fund their virtual education programs.



# Funding

Figure 1: FY15 District Per-Pupil Revenue (State and Local Basic Education Program (BEP) Funds)







# Virtual Education Programs

# Virtual Programs

- 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



### Case Study - VITAL

- The Putnam County Virtual Instruction to Accentuate Learning (VITAL) online program is one of the most successful online programs in the state and has gained national recognition for innovation in online learning.
- VITAL began in 2008, primarily as a small, online creditrecovery program. Over the years, Putnam County has grown the program by added blended-learning components and expanding online course offerings.
- VITAL courses combine online course content, an online highly qualified teacher, and an onsite facilitator. This approach ensures that each student has personal attention in a face-toface environment, as well as access to a teacher who is a subject matter expert.
- In 2011, the Putnam County School Board made history by requiring successful online completion of the VITAL Personal Finance for graduation.



# Case Study - VITAL

- District leaders believe that VITAL is improving student achievement in multiple areas. In particular, the program has produced impressive student gains in credit intervention and credit recovery at Cookeville High School.
  - When the district first launched VITAL, failure rates declined by one third in the first semester and have remained at this level ever since.
  - During the 2013–14 school year, 45 out of 52 students assigned to participate in smart lunch received credits in courses that they would have otherwise failed. Between credits saved through credit intervention and credit recovery, VITAL has saved or recovered more than 300 course credits.
  - This program has played a key role in increasing Cookeville High School's graduation rate from 86% to 94%, and the district's graduation rate from 86% to 92.6%, between 2008 and 2014.



#### Conclusion

- Tennessee students have access to more types of digital learning than ever before. Digital learning options are available in a rapidly expanding range of forms, including, fully online schools, blended courses, supplemental courses, and digital content.
- These virtual education opportunities are meeting individual student needs by providing flexible, technology-based learning that allows them to maximize their potential to serve and participate productively in a global society.

