

More Than 20 Years as a High Schools That Work Site

William Byrd High School (WBHS) in Vinton, Virginia, is a dynamic place for learning and preparing students for college and careers. General track courses have been eliminated. Hundreds of students take Algebra II even though it's not a state requirement. Students participate in cooperative education. Parents are deeply engaged in helping students select programs of study. Ninety percent of students graduate on time, and 83 percent go on to postsecondary study.

For decades two constants stand out at WBHS: leadership and utilization of the High Schools That Work (HSTW) instructional model. The school has had only two principals in the past 50 years. **Richard Turner** has been leading the school since 1999, but his stint began in 1992 when he was the assistant principal. The previous principal, **Bob Patterson's** tenure lasted 34 years.



Richard Turner, Principal
William Byrd High School

WBHS has been a High Schools That Work (HSTW) site for more than 20 years, adopting the HSTW instructional Goals and Key Practices in 1994 as its model to raise student achievement and graduation rates. HSTW is a nationally-respected school improvement initiative of the Southern Regional Education Board (SREB) committed to preparing students for the rigors and challenges of college and careers. Its networks of schools have grown to more than 1,300 sites in 30 states.

WBHS is a comprehensive high school in the Roanoke County Public Schools System. In the 2014-15 school year, it serves 1,170 students. Less than 5 percent are minorities; 15 percent are special education students, and 26 percent receive free or reduced-price lunches. The median income is \$50,900.

Turner describes WBHS as a high-performing school, but it's had its challenges. In 1994 when WBHS first became a HSTW site, Turner said 300 students were taking low-level general track courses, and 40 students graduated unprepared for college or a career.

School administrators immediately realized the need to get students into higher-level academic classes and career and technical education (CTE) classes.

A year later, HSTW sent consultants to the school for a Technical Assistance Visit to assess the school's strengths and weaknesses. As a result, all low-level classes were eliminated, enrollment in Algebra II doubled, block scheduling was added, extra help programs were put in place, counseling and advisement escalated and five major programs of study were created to nudge students to start thinking early about their futures and put them on career paths.

Guidance, Advisement and One-Day Registration

"Being a high-performing school starts with our program of study and our one-day registration process," according to Turner. Without reservation, Turner and **Betty Semones**, the HSTW coordinator at WBHS who has been affiliated with the school for more than 20 years, say HSTW's emphasis on guidance and advisement has benefited the school significantly and prompted staff to look at ways to improve guidance initiatives.



Betty Semones, HSTW Coordinator
William Byrd High School

One undertaking that has been remarkably successful is the school's one-day registration, which takes place every February. All rising 10th-, 11th- and 12th- grade students are registered that day. Rising ninth-grade students are registered on two evenings following the same guidance and advisement system.

Parents and their children meet with teacher-advisers who help students plan the next four years. "They chose classes to prepare them for further education and employment. That drives students to take higher-level course," says Turner.

Students select a program of study and several electives that complement their selection. Students are counseled on courses, credits required, career fields and personality types that match each program of study.

Teachers work with parents and students encouraging them to select the right courses to increase academic rigor and the abilities of students to one day become gainfully employed.

Students are assured they may change their career path during



William Byrd High School, One-Day Registration, February 2015

any future registration process. In 2015, 80 percent of parents participated in one-day registration.

Even though one-day registration happens in February, teachers start informing students in September during their homeroom class periods about programs of student and electives.

Five Programs of Study

Input from the business community helped determine the programs of study offered at WBHS. Data from a business and industry needs Survey of 670 area businesses and input from a business advisory committee and the local tech prep consortium assisted in identifying the programs in place now, which were matched with Virginia Western Community College programs.

The five programs of study are:

- Business and Marketing
- Communication, Arts and Media
- Engineering, Industrial and Scientific Technology (including construction)
- Environment and Natural Resources
- Health, Human and Public Services

Even though students are not locked into a program, it's a big decision, and parents and teachers help them decide which program of study to focus on during their high school years.

Eliminating Low-Level Classes

Semones praises HSTW for helping the school to “raise the bar.” Teachers push students to take higher levels of English, math and science, and “our students are coming out more educated, more well-rounded,” said Semones.

HSTW recommended curriculum consists of the following:

Reading: Four or more courses in college-preparatory English/language arts

Math: Four or more college-preparatory mathematics courses including Algebra I, geometry, Algebra II and a higher-level mathematics course

Science: Three or more courses in science including at least two or more college-preparatory courses in biology, chemistry, anatomy, physiology or physics/applied physics.

Percentages of WBHS Students Completing the HSTW-Recommended Curriculum

Indicators	2014	2014
English/language arts	41%	19%
Mathematics	81	76
Science	62	26

Source: HSTW Implementation Summary

The Algebra Factor

Turner said due to the school's collaborative relationship with the local community college, he became aware that students who do not complete Algebra II in high school tend to need math remediation in college; and unfortunately, the success rate in those classes isn't good. Therefore, WBHS had a big push to get students into Algebra II. For the 2015-16 class, 77 percent of students are expected to have taken Algebra II upon graduation, and those who successfully complete the class tend to be successful in college math classes. Additionally, 70 percent of students in the feeder middle grades school take Algebra I.

Block Scheduling

Turner notes WBHS was an early innovator to implementing block schedules based on guidance from HSTW. “We felt we needed to restructure our day to help our students achieve more success and prepare for further education and employment. Block scheduling allows us to provide more individual help for our students,” he says. WBHS instituted block scheduling in 2002 and it's still around. Currently WBHS is on an A/B schedule with four 90 minute blocks on alternating days. Algebra I and some geometry classes are double blocked, meeting each day. AP (Advanced Placement) classes also meet each day. Increased student engagement, additional time for projects and labs, more in-depth study of material, as well as less materials and homework to focus on each day are a few benefits of this schedule to the students.

CTE Courses

Career and technical education (CTE) courses provide students with the academic, technical and employability skills needed to succeed in postsecondary studies and the workforce. CTE programs at WBHS include business and information technology, computer science and technology, family and consumer sciences, marketing, technology education and Air Force JROTC.

Students may also attend an off-site CTE center, Burton Center for Arts and Technology, which offers courses not available at the five county high schools in the areas of technology and the arts.

Students attending usually take four to six classes at their home high school, and can take classes ranging from art, computer science and technology, English, family and consumer sciences, mathematics, performing arts, science, technology education, and trade and industrial programs.

Work-Based Learning

“We are a specialty center for business and marketing,” explains Turner, and students get valuable, hands-on training through the school’s cooperative education program through various marketing and business courses. Cooperative education allows students to gain classroom content that is relevant to the work world. Also known as co-op, students choosing this method (about 100 students at WBHS) of instruction have a part-time job where they are able to apply the material they have learned in the classroom.

“We try to match the students’ career interest with the part-time job,” says Jill Harris, marketing teacher and co-op coordinator. For example, students enrolled in sports and entertainment marketing have been placed in jobs at a local golf course or equestrian center; students interested in fashion marketing have been placed in jobs at retail stores such as Kohl’s or Old Navy, Harris notes.

“The contacts, work experience and knowledge they gain are invaluable,” she insists. Students receive two credits for a co-op

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— Jill Harris, co-op coordinator

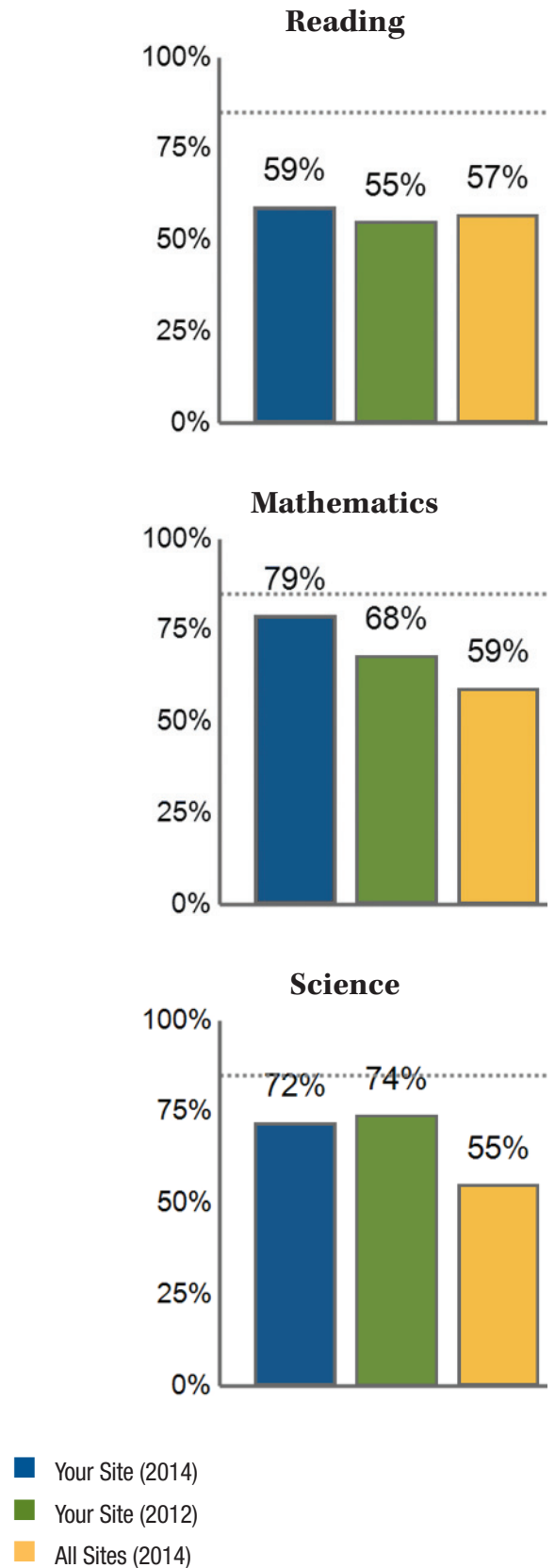
marketing class. But the skills they learn are just as important, including time management, customer relations and the importance of being dependable.

Success stories abound. Harris said some students who have gone through the program and graduated from college have secured impressive jobs such as working in media relations for the Philadelphia Eagles, in the marketing area of Virginia Tech’s athletic department or working for Ralph Lauren clothing company in New York.

Impressive Student Achievement

High Schools That Work is a data-driven, research-based school improvement initiative. Using assessment and survey tools, participating schools can establish baseline data, identify areas for improvement and track progress over time. In the 2014 HSTW Assessment, WBHS met readiness goals in reading, math and science. Students who meet these goals are likely prepared for postsecondary studies and careers. The data also show an 11 point increase in students’ math scores from 2012 to 2014. (See Figure 1.) Likewise WBHS consistently meets accountability standards in Virginia based on one-year and three-year averages. See Figure 2.

Figure 1: WBHS Percentages of Students Meeting HSTW Readiness Goals



Source: HSTW Implementation Summary

Figure 2: WBHS Meets State Accountability Benchmarks

Subject	Accreditation Benchmark	2012-13		2013-14		2014-15	
		1 Year	3 Year	1 Year	3 Year	1 Year	3 Year
English	75	95	95	91	94	91	92
Mathematics	70	62	82	77	77	81	73
Science	70	89	89	91	89	89	90
History	70	93	92	87	91	89	89

Source: Virginia Department of Education

HSTW Annual Staff Development Conference

For 28 years, HSTW has hosted a summer staff development conference for teachers, principals and counselors. It's one of the most comprehensive school improvement events in the nation attended by some 5,000 educators from middle grades schools, high schools and technology centers. Participants learn best practices, collaborate, network and take back strategies they can use to enhance teaching and learning.

"We have gone every year," taking a team of six to 25 people, notes Semones. She says they used to take business associates with them, adding they were a strong force in getting block scheduling, extra help and recognition programs. These programs were a direct result of individuals attending the summer conferences and seeing for themselves the benefits of such programs, Semones adds.

Each year staff members who attend the conference come back and share strategies they've learned with other teachers during teacher work days and throughout the year.