CASE STUDY

Fort Mill High School



A Culture of Continuous Improvement





A Culture of Continuous Improvement

This is the latest in a series of case studies highlighting best practices High Schools That Work (HSTW) network schools and districts are implementing to prepare students better for further studies and careers.

Fort Mill High School is in Fort Mill, South Carolina, an outlying suburb of Charlotte, North Carolina. Fort Mill links high quality career-technical instruction to rigorous academics and effective advisement. The school has also made significant progress in putting into practice HSTW's key priorities for continuous school improvement:

- The school curriculum is organized into four schools of study: Art and Humanities, Business and Information Technology, Engineering and Integrated Technologies, and Health and Human Services.
- Fort Mill High School has established support systems to assist all students in meeting standards and succeeding in their studies.
- The school has increased graduation requirements from 20 credits to 24 credits; it boasts a graduation rate of more than 90 percent.
- The school is promoting Advanced Placement (AP) classes to students and their parents/guardians. The percentages of students enrolling in AP courses and passing AP exams are increasing.
- Fort Mill has expanded its stable of career-technical course offerings, taught by a mix of traditional path certified teachers and industry professionals.
- The school has expanded and strengthened its advisory and guidance programs to ensure all students take the right courses guiding them to future success.
- The school is implementing a ninth-grade support system to assist in the middle grades to high school transition.
- Fort Mill High School is considering joining SREB's Advance Career initiative.

Fort Mill is committed to graduating its students prepared for addressing the challenges of further study and achieving success in modern careers. All high schools can benefit by sharing the Fort Mill High School study with staff. In so doing, your school improvement team may gain insights in raising graduation rates and increasing the percentage of students ready for postsecondary studies and careers.

Sincerely, Gene Bottoms

SREB, Senior Vice President

The Setting

Fort Mill High School (FMHS) is a comprehensive public high school in Fort Mill, South Carolina. Located in the northernmost part of the state, Fort Mill borders metropolitan Charlotte, North Carolina. Over the past two decades, Fort Mill has transformed from a small mill town dominated by lifelong residents to a more suburban township comprised of Fort Mill natives and new families from around the country. FMHS serves 1,650 students in grades nine through 12. The student population is 84 percent white, 11 percent black, 4 percent Hispanic and 1 percent Asian.

Fort Mill's excellent schools, along with the steady job market offered by the town's proximity to Charlotte, have been a big lure. Over the past decade, FMHS has perennially been among the highest achieving schools in South Carolina in terms of graduation rates, percentage of graduating class attending two- or four-year colleges, percentage of students passing state accountability end of course (EOC) exams, percentage of students passing Advanced Placement (AP) exams, and several other indicators of academic achievement.

In 2012, the Southern Regional Education Board (SREB) identified Fort Mill High School as one of 16 High Schools That Work (HSTW) sites in the nation to receive a Platinum High Achievement Award. The award is presented to model HSTW sites that deeply implement the HSTW design, teach students a rigorous curriculum and meet high achievement standards.

Becoming a HSTW Site and Jump-Starting Improvement Efforts

The school's achievements are noteworthy, but stellar accomplishments can also bring a danger of allowing complacency to gain a foothold within the school culture. The staff made a commitment to push the school to the next level. In 1993 it became part of the HSTW network and adopted HSTW's 10 Key Practices and Goals for Continuous Improvement as the school reform models. (See Appendices A and B.) The school set out to put in place a more rigorous academic curriculum and increase student access to higher quality studies.

HSTW conducted Technical Assistance Visits (TAVs) where an external team of educators and community members reviewed school data; interviewed leaders, teachers and students; and observed classroom instruction before providing a report of findings and recommendations for improvement. The TAVs cited several areas FMHS needed to address to continuously improve and establish a culture of high expectation. Over several years, FMHS moved forward to make progress on several identified goals.

- Increase academic assistance opportunities.
- Raise graduation requirements.
- Enrich career-technical studies.
- Set higher expectations.
- Improve guidance.
- Support students throughout the transition to high school.

Increasing Academic Assistance Opportunities

Fort Mill High School established several support systems to help students succeed including a tutorial program.

One of the most important initiatives FMHS undertook to cement its dedication to a culture of continuous improvement was establishing academic supports to better meet the needs of all students. The TAV reports highlighted a need for FMHS to develop an extra help center and establish reteaching and relearning policies.

FMHS developed several supports for students: a mastery algebra program that provides multiple extra-help sessions; the "The Power of I" redo/reteach and relearn policy; a biweekly afterschool extra help and peer tutoring center; and a ninth-grade transition program for academically at-risk students.

Mastery Algebra I

The Mastery Algebra I course was created in response to the alarming percentage of students failing Algebra I — more than 30 percent by the fall of 1998. FMHS sought guidance from HSTW and was introduced to the mastery model. Staff observed several schools that successfully implemented a mastery program and then established FMHS' own Mastery Algebra I course.

In this course, students must master each unit with a minimum grade of 77. If this score is not achieved, students are provided with ongoing tutoring of non-mastered skills until mastery of the unit's key concepts has been achieved. The non-mastery score is then averaged with the new mastery score, and the averaged score replaces the previous grade.

The actual application of this practice has required a great deal of work from students, teachers and parents. When students fail to earn a mastery score on a unit exam, they must make arrangements for additional instruction outside of the instructional school day. This requires teachers to be available before and after school as well as during students' lunch times.

Student commitment and parental support have been integral parts of this course. As one Mastery Algebra I teacher, Brad Mercer, noted, "The mastery approach doesn't allow students to fall through the cracks or just be passed on to the next course. Its structure also keeps students on task and lends itself to improving communication between students, parents and teachers."

The importance of ensuring these students have a strong support system is further amplified by the introduction of an Algebra I EOC exam. The South Carolina State Department of Education requires all students enrolled in Algebra I to take an EOC exam that counts 20 percent of students' final grades. The mastery approach has helped students perform well on this exam.

Former ninth-grade counselor Caryn Scroggs observed, "Remediation policies and other programs targeting academically at-risk students have made a noticeable difference in reducing the retention of ninth-grade students, especially Mastery Algebra I. This is extremely important considering data have shown that students who repeat the ninth grade are exponentially less likely to graduate from high school."

"The Power of I"

While Algebra I remains the only course with a formalized reteach/relearn process directly integrated into the curriculum, FMHS teachers have received professional development on another work redo program — "The Power of I". This policy was introduced in 2009 and advocates a similar, although somewhat more informal, approach to remediating substandard work.



Teachers are encouraged to give students a grade of incomplete — or "I" — rather than a more detrimental grade for missing or failing work. By replacing these otherwise destructive scores with grades of incomplete, ownership of relearning is shifted to the student, and a sense of urgency for redoing work or correcting deficiencies is created.

This program is much more flexible and adaptable to each teacher's individual curriculum but the goal is the same — students need to take advantage of academic assistance opportunities to improve their understanding of key concepts rather than accepting a low grade and moving ahead with new course work. "Students know that failure does not have to be an option and that they are accountable for all work. They walk away knowing that learning from their mistakes is a valuable life lesson," said math teacher Shelia Wise.

Homework Center

The FMHS homework center in the library was established in 2008 as a means of providing extra help through peer tutoring and teacher assistance on an ongoing basis. Twice a week on Tuesdays and Thursdays from 3:30 p.m. to 5 p.m. the homework center is staffed by two teachers, one certified in either math or science and another certified in either English or social studies. It's abuzz with students each time it operates — about 40 students attend each week. Students come seeking help with homework, studying for assessments and studying for their core content-area courses.

"Students know that failure does not have to be an option and that they are accountable for all work."

The homework center is also staffed by three to five honors or AP students who provide peer tutoring in their areas of academic strengths. AP calculus students often volunteer to provide assistance in Algebra I and geometry. Students remain eager to serve as peer tutors because it gives them an opportunity to earn public service points for the Beta Club.

Raising Graduation Requirements

FMHS has increased graduation requirements from 20 credits to 24 credits and has an on-time graduation rate of more than 90 percent.

Over the past 12 years, changes have been made to increase requirements necessary for earning an FMHS diploma. In 2000, in compliance with state requirements and local school board policy, FMHS students were only required to earn 20 credits to graduate. Since that time FMHS has set higher expectations for students by increasing the units of math and science credits required.

Students are also required to complete High School 101— a course designed to support the transition to high school by covering campus orientation, comprehensive health education, career exploration, technology trainings, study habits and test-taking skills.

In addition, FMHS students must also earn a credit in at least one career and technical education (CATE) or foreign language course. This upgraded curriculum was specifically designed to better prepare students for college and the workforce.

Currently FMHS students must earn 24 credits to graduate; however, the vast majority exceeds the minimum requirements for graduation, and more than a simple majority earned 32 credits. (See Table 1.)

FMHS students can also earn the Fort Mill High School diploma of distinction by earning four credits in each core content area — English, math, social studies, and science — while keeping a minimum 3.0 grade-point average. For this diploma, students must also successfully complete High School 101 and 11 other courses for a total of 28 credits.

Table 1: Fort Mill High School Graduation Requirements, 2000 and 2012								
Class of 2000	Unit(s)	Class of 2012	Unit(s)					
English	4	English	4					
Math	3	Math	4					
Science	2	Science	3					
U.S. History and Constitution	1	U.S. History and Constitution	1					
Government/Economics	1	Government/Economics	1					
Other Social Studies	1	Other Social Studies	1					
Physical Education or JROTC	1	Physical Education or JROTC	1					
Keyboarding applications	1	Computer science/intro to computers	1					
Electives	6	Career-tech or foreign language	1					
		High School 101	1					
		Electives	6					
	20 total units		24 total units					

Enriching Career-Technical Studies

In accordance with the HSTW 10 Key Practices framework, FMHS developed a multitude of CATE offerings across several thematic majors. These courses are divided into career clusters representing pathways that help students navigate a range of career options and are taught in the context of careers to make them more meaningful and relevant to students. (See Table 2.)

These courses are taught by a mix of traditional path certified teachers and industry professionals. The students enrolled in CATE classes are in grades nine through 12 and range from academically at-risk students to AP students and Beta Club members. Several of the programs, such as animal science, graphic communication and health science technology offer nationally recognized industry assessments.

Table 2. Fort Mill High School CATE Course Offerings and Corresponding Career Clusters							
CAREER CLUSTER	COURSES/CAREER PATHWAYS						
Arts, A/V Technology & Communication	Audiovisual Technology Digital Art and Design Graphic Communications						
Agriculture, Food & Natural Resources	Animal Science Horticulture						
Architecture & Construction	Computer Assisted Drafting						
Business Management & Administration	Business Information Management General Management Operations Management						
Finance	Accounting						
Health Science	Biomedical Science Health Science Technology Sports Medicine						
Hospitality and Tourism	Culinary Arts						
Human Services	Early Childhood Education						
Information Technology (IT)	Networking Systems Programming and Software Development						
Marketing, Sales and Service	Marketing Management						
Science, Technology, Engineering and Math (STEM)	Pre-engineering						

Setting Higher Expectations

Students are challenged to go beyond the minimum requirements and take rigorous academic courses, AP courses and dual credit courses.

Going Beyond Minimum Requirements

As part of FMHS' commitment to setting higher expectations, students are actively encouraged to exceed minimum requirements for graduation and to take a rigorous academic course load during their senior year. The minimum requirements for a South Carolina diploma stipulate that students must earn four English and math credits. This would allow students who completed English I and/or Algebra I in the middle grades to opt for a schedule without English or math during their senior year. Citing the importance of

challenging students academically, FMHS requires all seniors to take English and math their senior year.

AP Day

While FMHS boasts of AP passing percentages that routinely rank among the highest in the state, the percentage of students enrolled in AP courses led the faculty and administration to the conclusion there were significant numbers of students capable of passing AP courses who were not enrolling in them. In response, FMHS launched a schoolwide campaign that included students, teachers, and parents working together to identify more students not challenging themselves with AP courses.

FMHS' efforts culminated in an "AP Day" where head principal Dee Christopher met with rising 10th, 11th and 12th-grade classes individually to stress the merits of AP course work. Current AP students were given a free t-shirt

identifying them as being enrolled in at least one AP course, and they were encouraged to talk with their peers about the benefits of AP classes. Parents of prospective AP students were invited to attend a special information session to learn more about the AP courses available and speak with the AP instructors.

The school's efforts paid off. Between 2007 and 2012 the percentage of FMHS students enrolled in AP course work increased from 13 percent to 38 percent. Perhaps more impressive still was the percentage of students passing AP exams also steadily increased over this time, peaking in 2012 at 95percent. (See Table 3.)

Table 3: FMHS Students Taking AP Exams 2007 to 2012										
	2011-2012 2010-2011 2009-2010 2008-2009 2007-2008 2006-200									
Total number of exams given	290	204	193	166	165*	203*				
Percentage of students taking AP exams	38%	29%	21%	19%	17%	13%				
Percentage of students scoring a 3 or higher	95	93	84	94	89	93				

Source: College Board

Dual Credit Courses

Working in tandem with York Technical College, University of South Carolina Lancaster and Winthrop University, FMHS is able to offer three dual credit courses. These courses provide students the opportunity to earn three to six hours of college credit at little or no cost — in addition to Carnegie units which count toward a high school diploma.

Two of the partnering postsecondary schools offer tuition assistance, which covers most of the costs associated with the courses, to all students who are American citizens. Each one of these courses is offered in a one semester or 90-day setting and takes a different path toward college credit than found in AP courses. These classes award credit based on passing the overall class rather than one cumulative assessment.

Instructors of these courses have found the different approach offered by dual credit courses attracts both traditional AP students as well as other students who might not otherwise have an opportunity to earn college credit. Providing a variety of choices in upper-level course offerings has encouraged a more diverse, and in turn, larger group of students engaging in challenging courses.

Schools of Study, Career Clusters, and Major Completers

Students at FMHS are challenged to be not only high school graduates but also career cluster program completers.

The school's entire curriculum is organized into four schools

of study — Art and Humanities, Business and Information Technology, Engineering and Integrated Technologies, and Health and Human Services. Within each of these schools of study are 15 career clusters, and these clusters are further subdivided into 35 individual majors.

A comprehensive program of study, updated yearly by the Fort Mill School District (FMSD), is provided to each ninth-grader and is explained in detail to students through High School 101 classes. The purpose of this curriculum is to align the school's course offerings so students can select the most appropriate classes that match their academic strengths and career goals. All students must select a major before the end of their sophomore year. However, these selections are not static and may conform to the changing desires of the student.

Students, who successfully complete four classes within a given major as defined by the program of studies catalog, earn the right to wear a cord representing their school of study. In the 2011-2012 school year, there were 347 major completers — the biggest concentration in arts and humanities. Being recognized as a major completer has become a point of pride for students because it is the only academic regalia allowed during graduation other than valedictorian and salutatorian medals and Beta Club stoles. The sense of pride in one's studies within a given field has also brought increased prestige to students in trade-based CATE classes. This special recognition has placed students completing the automotive technology major on the same playing field as students completing the AP major.

^{*} The drop in total number of exams from the 2006-2007 school year to the 2007-2008 school year was due to the decrease in number of students coinciding with the opening of the Fort Mill School District's second high school.

Improving Guidance

Providing quality advisement meant FMHS needed to redistribute duties and make counselors more accessible.

Administrators taking on some guidance counselors' duties

Over the past decade, FMHS' guidance department has seen a great deal of change. Significant attrition due to retirements and personnel reallocation has dramatically changed the face of the guidance department. For most of the early 2000s, the guidance department had five counselors, four of whom divided the 10th, 11th, and 12th grade student body into equal alphabetical caseloads and one who solely served ninth-graders.

In 2009, the counselor allotment was reduced by one full-time counselor. Providing quality advisement that was focused on post-high school entry into the military, workforce, or two-and four-year college setting remained the steadfast goal of the department, however the rising number of students on counselor caseloads became problematic for preserving a personalized counseling approach.

The largest challenge to achieving the goal was the time constraints caused by Individual Graduation Plan (IGP) meetings. These legally mandated meetings required counselors, teachers and students meet each year to review course selections and post-graduation plans. Seeing that these meetings were the embodiment of their overarching goal — personal counseling focused on college and career preparedness — the counselors determined that changes would be needed.

Counselors and the administration decided to reassign testing coordination for the EOC exam and the High School Assessment Program (HSAP) to assistant principals. This freed up counselors to collaborate with students and their families regarding post-high school plans as well as provide individual counseling.

Making Counselors More Accessible

Counselors also made a point to make themselves more accessible to students, especially during non-instruction time, hoping more students would be willing to utilize the guidance office as a resource. Counselors manned a station in the student lunch room and answered student questions ranging from scholarships to mental health issues. Similarly, counselors began taking turns opening the guidance office early to be more accommodating to students arriving at

school well before the typical school day began. Students, parents and faculty members view the added availability as a big success.

Counselors also increased their availability by providing more classroom guidance sessions. The ninth-grade counselor meets with every freshman through classroom guidance in High School 101 classes. The rewards are immediate. Students are better informed about curriculum requirements and programs offered by the high school, which in turn lead to more effective IGP meetings.

Similarly, counselors for upper-class students meet with senior-level classes to discuss applying to college and applying for scholarships. The positive rapport between counselors, students and teachers was immediate and obvious.



Supporting Students throughout the Transition to High School

Helping students transition from eighth grade to high school involved curriculum changes and a framework that allowed for an isolated ninth-grade academic area plus interaction with upper classmen.

The transition from the eighth grade to ninth grade is perhaps the most challenging and highly consequential shift during a student's high school years. FMHS established a ninth-grade transition model to assist students facing new challenges as first-time high school students. The school created a ninth-grade support system but not a formal school within a school for ninth-graders.

In 2000, FMHS annexed a wing of classrooms from an adjacent elementary school. Ninth-grade core classes, guidance counselors, assistant principal offices, computer lab and special education classrooms were located in this wing.

This design created a space that allowed ninth-graders to be in an isolated academic area, but it still allowed for interaction with older students during specific times such as class changes, multi-grade electives and lunch. This reflected the faculty's concern that isolating freshmen from interacting with upperclassmen would ultimately delay their maturation process and delay learning the culture and values associated with "the Fort Mill way."

High School 101

The faculty and administration made curriculum changes, facility redesign and strategic staffing decisions to provide support to ninth-graders during their transition. Chief among the curriculum changes was making High School 101 a graduation requirement. While the course had been a strongly recommended elective for all ninth-graders, it was made a requirement for all students by order of the FMSD school board beginning in 2000.

High School 101 department chair Bethann Rohaly describes the curriculum as, "...giving students the knowledge and critical thinking skills to become successful individually as well as academically." High School 101 was used as a tool not only to meet state health education requirements and introduce students to the various classes, clubs, and organizations open to them, but also to teach effective study and note-taking skills.

Targeting At-Risk Ninth-Graders

Bridges Algebra I and Bridges English I target at-risk ninth grade students, as identified by Measure of Academic Process (MAP) exam scores. These classes allow students with a history of academic struggles to engage in yearlong math and English courses during their freshmen year. In the fall, each Bridges student enrolls in an elective math and English course designed to establish foundations in key concepts that would be taught in the spring when students enroll in their actual Algebra I and English I courses.

Bridges students remain with the same class and same instructor for both courses to build a supportive and judgment-free learning environment. Former Bridges math teacher Annemarie Dowd observed, "It is surprising how successful Bridges students go on to be in upper-level math courses after spending the extra time establishing a firm foundation through the yearlong Bridges courses." Special education inclusion teacher Lynn Redmond found that, "many students take their first tentative step onto the 'bridges' we have built for them as freshmen." She later witnessed those same students building and customizing their own 'bridge' to success. This program has been hugely successful and has been observed by other schools wishing to increase the percentage of students passing Algebra I and English I courses.

High School 101

"... giving students the knowledge and critical thinking skills to become successful individually as well as academically"

Other supports were created to incorporate parents into the ninth-grade transition:

- Ninth-Grade Curriculum Fair Each February parents of rising ninth-grade students are invited to an informational session about middle grades to high school transition.
- Freshmen Orientation Each August before students report for the upcoming school year, student council and faculty members lead guided campus tours for ninth-graders and their parents. Following the tours, ninth-grade students gain familiarity by running through their first semester schedule and meeting each of their teachers.
- Open House About three weeks after the start of school, parents are invited to meet with their students' teachers to review course syllabi, instructional procedures and ask questions.
- Individual Graduation Plan Meetings In the spring of students' eighth-grade year, parents, counselors and students meet to discuss course requests with respect to students' intended post-high school plans. Each following year the team reconvenes to address any changes regarding those plans and their corresponding course requests.

Indicators of Success

Fort Mill High School's effort toward continuous improvement is paying off. For years, the on-time graduation rate has exceeded 90 percent. The school has enjoyed improvements on the HSTW Assessment, increases in the percentages of students taking and passing AP exams, increases in the percentages of students passing the South Carolina exit exam, and it has consistently outperformed state averages in content-area assessments.

Improved Scores on the HSTW Assessment

In 2008 and 2012 FMHS surpassed the mean passing percentage of all HSTW sites in all subtest areas — reading, math and science — by a margin of no less than 28 percent. (See Table 4.) During that same time, FMHS dramatically increased its scores in all subtest areas.

Improved Scores on the High School Assessment Program (HSAP)

The HSAP test serves as South Carolina's high school exit exam. This exam assesses students' abilities to demonstrate minimum competencies in English/language arts and math required for earning a high school diploma. It is first administered during the spring of a student's 10th grade year and then again each semester for any student failing to pass either the English or math portion. FMHS' scores were significantly higher than the state average, and the school demonstrated mostly gains with minimal decreases. (See Table 5.)

Consistency as a Leader in Scores on South Carolina Content-Area Assessments

FMHS has consistently boasted of having the highest or one of the highest passing percentages on state contentarea assessments. Most years FMHS has outperformed the vast majority of other public schools (i.e. schools that serve all students within a given attendance zone, specifically excluding academic magnet schools, early college high schools, and other schools with selective enrollment.) From 2008 to 2012, FMHS has produced steady gains in passing percentages for students enrolled in U.S. History and the Constitution. The school has also managed to maintain passing percentages greater than 90 percent in Algebra I and English I. (See Table 6.)

Table 4: Percentages of Students Meeting the HSTW Readiness Goals — 2008 and 2012									
	Rea	ading	M	ath	Science				
	FMHS	All HSTW	FMHS	All HSTW	FMHS	All HSTW			
2008	84%	56%	86%	53%	88%	51%			
2012	93	56	93	57	95	55			

Source: 2008 and 2012 HSTW Assessment

Table 5: Percentages of Second-Year High School Students Passing the English/Language Arts and Math Subtests of the HSAP Test, 2009-2012								
	2011-2012	2010-2011	2009-2010	2008-2009				
Percentages of FMHS students passing both subtests on the first attempt	95%	96%	95%	94%				
Percentages of South Carolina students passing both subtests on the first attempt	80	79	79	76				

Source: South Carolina Annual School Report Card Summaries and South Carolina State Department of Education High School Assessment Program Test Scores report, 2009-2012

Table 6: Index Scores on South Carolina End-of-Course Exams, 2008-2012											
		2011-2012		2010-2011		2009-2010		2008-2009		2007-2008	
		FMHS	SC								
Algebra I		92%	82%	95%	82%	94%	80%	93%	77%	93%	78%
English I		92	74	91	72	93	74	93	68	90	68
Physical Science*				84	60	87	59	88	55	89	55
Biology*		94	76	95	68						
U.S. History*		85	53	83	50	75	46	73	43		

^{*} US History was not tested until 2009. The science assessment transitioned from physical science to biology in 2011.

Source: South Carolina Annual School Report Card summaries and South Carolina State Department of Education End-of-Course-Examination reports, 2008-2012

Lessons for Leaders and Teachers

The faculty and administration have seen that even schools having a history of academic achievement can build a culture of continuous improvement and affect positive change. They have learned that it is wise to ignore the old adage, "if it ain't broke, don't fix it," because all schools can improve.

High expectations should not be reserved for the intellectual elite of the school. It's pivotal to not only affect positive change for the brightest students but for all students. A rigorous curriculum can and should be a part of each and every class without regard to a class designator of assumed ability.

FMHS as a whole knows that CATE classes should not be limited to the traditional notions associated with vocational education. Rather, CATE classes should play an integral role in preparing students for challenging professions requiring science, math and problem-solving skills.

Teachers and administrators alike have come to agree that perhaps the most essential element for achieving progress for all students is providing comprehensive and effective academic support.

Challenges Ahead

Establish a Formal Mentoring Program

One of FMHS' goals is to establish a formal mentoring program that meets the unique needs of the school. The school has investigated numerous mentoring models, but has been unable to find one that meets the unique needs of the school and expectations of faculty members deeply protective of any intrusion on their instructional day. FMHS has begun to

explore developing a model that exists outside of the school day (e.g. before school, at lunch or after school).

Increasing the Use of New Technologies

The FMSD was one of the first districts in the area to purchase and equip all classrooms with SMART Boards. At the time this was one of the most revolutionary technologies available to enrich instruction. The district and high school were quick to follow up with the necessary training and ongoing professional development opportunities to ensure effective integration into the classroom. Since that time FMHS' technology innovation has slowed and at times seemed to stagnate.

In response, the administration launched initiatives to increase the use of new technologies through the creation of model "technology innovation labs." These labs are merely classrooms used to pilot new technologies, including Google Chromebooks, iPads, Kindles and Google Docs, in an environment open to observation by other teachers. This approach has prompted many teachers to reach outside their comfort zones and use technology to enhance instruction.

The challenge remaining for FMHS is moving from the use of these technologies in a few select model classrooms to full incorporation throughout the school.

Other Actions to Advance Student Learning

At the request of Gene Bottoms, senior vice president of SREB, FMHS has agreed to study four additional actions during the coming year. The first is to consider having a key member of the ninth- grade or 10th-grade faculty in language arts,

science, social studies and career-technical participate in special SREB literacy training. This training will include new strategies and tools for effectively embedding new literacy standards into core academic subjects to advance students' ability to read a range of text — including technical and scientific documents. This will not only advance their reading achievement and the abilities to express their understandings in writing, but it will also advance their achievement in English, social studies and science.

Second, the school will consider having a team of at least two math teachers — algebra and geometry — and maybe even encourage a feeder middle grades school to have two teachers participate in a special SERB workshop that focuses on using formative assessment lessons. This workshop is designed to advance students' abilities to reason, understand and apply math concepts in upper middle grades math classes and in grades nine and 10.

Third, FMHS will study the potential of adopting one of SREB's Advanced Career ¹ curricula either in partnership with a technical center or at FMHS school for next year.

Finally, the school will consider implementing a senior transition literacy class or senior transition math class during the 2013-2014 school year or the 2014-2015 school year for students who need special instruction to be ready for further study without remedial courses.

Support Systems That Make Change Possible

While members of all stakeholder groups at FMHS were largely responsible for creating the positive changes, these transformations did not happen without the support of state, district and HSTW actions, policies and services.

- The state requires participation in a reform model such as HSTW, frequently revises standards, and provides school-specific data comparison of benchmark measures of school performance on school report cards.
- The **district** provides the means for professional development opportunities, provides district-level personnel to oversee coordination of CATE programs, and supports school-based decision-making to best meet the needs of individual schools.
- HSTW provides assessment data, performs technical assistance visits, establishes a framework of 10 Key Practices to guide school reform and hosts professional development conferences.

Contact:

M. Dee Christopher, Fort Mill High School Principal at christopherd@fort-mill.k12.sc.us

¹ SREB's Advanced Career is a new approach to career and technical education. It is a series of intensely challenging and highly relevant courses. Seven AC pathways and curricula will be ready for adoption in fall 2014: Aerospace Engineering, Clean Energy Technology, Energy and Power, Health Informatics, Innovations in Science and Technology, Advance Manufacturing and Informatics.

Appendix A

High Schools That Work (HSTW) Key Practices

High Schools That Work (HSTW) has identified a set of Key Practices that impact student achievement by providing direction and meaning to comprehensive school improvement and student learning:

High expectations: Motivate more students to meet higher standards by integrating high expectations into classroom practices and providing frequent feedback.

Program of study: Require each student to complete an upgraded academic core and a concentration.

Academic studies: Teach more students the essential concepts of the college-preparatory curriculum by encouraging them to apply academic content and skills to real-world problems and projects.

Career-technical studies: Provide more students access to intellectually challenging career-technical studies in high-demand fields that emphasize the higher-level academic and problemsolving skills needed in the workplace and in further education.

Work-based learning: Enable students and their parents to choose from programs that integrate challenging high school studies and work-based learning and are planned by educators, employers and students.

Teachers working together: Provide crossdisciplinary teams of teachers time and support to work together to help students succeed in challenging academic and career-technical studies.

Students actively engaged: Engage students in academic and career-technical classrooms in rigorous and challenging proficient-level assignments using research-based instructional strategies and technology.

Guidance: Involve students and their parents in a guidance and advisement system that develops positive relationships and ensures completion of an accelerated program of study with an academic or career-technical concentration.

Extra help: Provide a structured system of extra help to assist students in completing accelerated programs of study with high-level academic and technical content.

Culture of continuous improvement: Use data continuously to improve school culture, organization, management, curricula and instruction to advance student learning.

Appendix B

HSTW Goals for Continuous Improvement

The mission of High Schools That Work (HSTW) is to create a culture of high expectations that motivates students to make the effort to succeed in school. To achieve this mission, HSTW has set several goals for continuous improvement:

- Increase the percentage of high school students who meet college- and career-readiness goals to at least 85 percent.
- Increase the percentage of students completing the HSTW-recommended curriculum to 85 percent.
- Increase the percentage of high school students who complete high school in four years to 90 percent.
- Advance state and local policies and leadership initiatives that sustain a continuous school improvement effort.
- Help all students leave high school with an employer certification, postsecondary credit, or the knowledge and skills needed to avoid remedial postsecondary studies.