SREB’s case study series highlight best practices High Schools That Work (HSTW) network schools and districts are implementing to better prepare students for further studies and careers. Lee's Summit West High School near Kansas City, Missouri, exemplifies what schools can achieve when they take seriously the HSTW design for continuous school improvement:

- Lee's Summit West High School has established rigorous benchmarks for all students in meeting standards and succeeding in their studies through formative assessments and challenging assignments.
- The school has upgraded programs of study and career concentrations. Nearly 200 course offerings are available to students.
- The school offers several AP programs; these include American history, European history, physics and calculus. Lee's Summit also offers 35 dual credit courses.
- Lee's Summit West has established an effective extra-help program for struggling students. After its first semester, D’s and F’s decreased by 39 percent.
- 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 considering implementing senior transition math and literacy classes to prepare students for further study without the need for remedial course work.
- Lee’s Summit West is considering joining SREB’s Advance Career initiative.

All high schools can benefit by sharing the Lee’s Summit West case 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

Lee’s Summit West (LSW) High School is in a Kansas City, Missouri, suburb with approximately 100,000 residents. In the 2012-2013 school year, it served 1,741 students in grades nine through 12. LSW boasts of a 99 percent graduation rate; 93 percent of its students are bound for college, and the average ACT score is 23 — above the national average.

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

The student population at LSW is 78 percent white, 13 percent black, 4 percent Hispanic, 2 percent Asian and 3 percent other ethnicities.

Becoming A High Schools That Work Site

As a new school opening in 2004, LSW faced challenges: a staff not always pulling together, a new principal, a new facility and students transitioning from one high school to another. The school wanted to create its own unique culture, but needed to hit the ground running and utilize practices that had been successful for others. Administrators selected HSTW to guide its school improvement efforts. LSW staff attended the HSTW Staff Development Conference and began learning about the HSTW 10 Key Practices. (See Appendix A.)

In 2006, a team from SREB conducted a Technical Assistance Visit (TAV), during which a team of teachers, administrators, school improvement coordinators and education coaches visited LSW. They reviewed data; interviewed leaders, teachers and students; and observed classroom instruction. The results of their work and feedback helped LSW identify its challenges and outline a school improvement plan.

Identifying Challenges

1. Actively engage students in the learning process.

The TAV team expressed concerns about the level of student engagement in the classroom. They reported observing low-level activities, mostly teacher-led lessons, and few opening and closing transitions. They recommended teachers differentiate instruction, increase the rigor of assignments and post objectives.

2. Require all students to complete the HSTW-recommended program of study comprising an upgraded academic core and an academic or career concentration.

The team recommended all students take four years of English, four years of mathematics, three courses of lab-based science, and three courses of social studies plus a career concentration. In addition, they thought more students needed to be enrolled in advanced courses, and more courses needed to be taught at a higher level.

“The High Schools That Work model gave Lee’s Summit West the guidance and examples that were needed to increase student achievement, build relationships and develop a collaborative learning community.”

3. High expectations for all students.

The team observed expectations were higher for students in advanced classes than for those in regular classes. They suggested common assessments be used to create data documenting achievement of all students.

4. Provide students with extra help and extra time.

The TAV team also noticed there was no extra help or built-in tutoring time. They also cited little evidence of interventions to forestall student failure.

5. Strengthen guidance and advisement program.

Interviews with parents indicated they felt uninformed when it came to course selection. Students reported that advisory time was not seen as valuable or relevant.
Taking on the Challenges

Engaging Students

“We focus more on learning instead of teaching.”

According to the 2006 graduate exit survey, 23 percent of seniors indicated they did not consider their course work rigorous. The staff saw this as a warning that signaled something had to change. Teachers worked to increase rigor through giving challenging assignments and frequent formative assessments. Teachers got involved in numerous professional development opportunities including local and national workshops on teaching strategies and best practices. They utilized HSTW publications and educational coaching to increase the level of expectations and engagement in classrooms.

“We focus more on learning instead of teaching,” said David Sharp, LSW principal. The idea is to focus not on trying to just cover content, but whether students are learning the content,” he said.

Teachers also provide instruction and guidance that encourage student learning. This may require teachers to differentiate their instruction based on student needs, or change their classrooms from a teacher-led environment to a student-led environment. In addition, essential standards and clear learning targets aligned with state college- and career-readiness standards indicate what students should know and be able to do.

As a result of these practices, students’ perceptions of rigor began to change. Over the next three years, the 23 percent steadily decreased, falling to 17 percent in 2009.

Upgrade Programs of Study and/or Career Concentrations

The R-7 school district raised the graduation requirements from 24 credits to 26 in the 2007-2008 school year. (See Table 1.) This encouraged students to enroll in meaningful courses, even during their senior year, instead of choosing to leave early for work or take study hall.

Nearly 200 course offerings are available at Lee’s Summit West including career-technical (CT), college preparatory, fine arts, practical arts, physical education and junior air force ROTC. Subject areas include communication arts, mathematics, science, social studies, engineering and industrial technology, family and consumer sciences, computers, business education, journalism and technology. Full special education services are available for students with disabilities.

<table>
<thead>
<tr>
<th>SUBJECT AREA</th>
<th>CREDITS</th>
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<tbody>
<tr>
<td>Communications skills (grades nine to 12)</td>
<td>4</td>
</tr>
<tr>
<td>Social studies (American history, world history, American government, modern global issues)</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
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<tr>
<td>Mathematics</td>
<td>3</td>
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<tr>
<td>Fine arts</td>
<td>1</td>
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<tr>
<td>Practical arts</td>
<td>1</td>
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<td>Physical education</td>
<td>1</td>
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<tr>
<td>Personal finance</td>
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<td>Health</td>
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<td>Electives</td>
<td>9</td>
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Several programs are designed to meet the needs of academically talented students. These include International Baccalaureate (IB), International Baccalaureate career-related certificate, Advanced Placement (AP), dual credit, honors credit, Project Lead The Way, dual enrollment, articulated credit and correspondence/online.

The International Baccalaureate program is a coordinated course of study at the junior-senior level linking the humanities, sciences, mathematics and languages. The course of study is international in nature, with the same syllabus taught and assessed in more than 90 countries. The IB diploma requires study of six IB subjects, a course in theory of knowledge, an extended essay, and extracurricular time devoted to creativity, action and service. Lee’s Summit West offers 25 IB courses.

Lee’s Summit West also offers several AP courses to provide students with avenues of study congruent with their abilities and interests. AP courses offered at Lee’s Summit West are: American history, European history, physics and calculus. Lee’s Summit West also offers 35 courses for dual credit.

“The IB program is the most rigorous college preparatory program in the world. Time and time again it has been proven that students who take IB courses not only succeed in college, they do so in less time than students who don’t take college prep courses, and even those who take AP.”

Blake Little, IB coordinator

High Expectations for All Students

“We try to push most of our students to advanced courses,” said Sharp. More than 90 percent of LSW students leave high school and go to college. With that in mind, the school focuses intensely on academic achievement. LSW has the same expectations of all students, whether it’s teaching all students to write, teaching literacy across the curriculum or having a firm policy for late assignments.

Writing and math labs have been established for students who need help. Teachers use multiple modes of instruction and differentiation to meet students’ needs. Teachers also try to strike a balance between formative assessment that happens during learning and summative assessment that happens at the end of learning.

Recognizing the Need for Extra Help/ Extra Time

Developing a Program of Student Interventions

One HSTW Key Practice calls for a system of extra help. LSW did not have a system of interventions in place to prevent student failure. The number of students making D’s and F’s was not improving. Students were not being held accountable for missing work, and there was no tutorial system. The staff and administration brainstormed a variety of ideas before designing a pyramid of interventions including the following programs:

- **Overtime**: Students who do not turn in an assignment on time in any class are assigned an extra hour of school for that day. They make a phone call to their parents, in class, explaining the situation. When students come to Overtime, they finish their work and turn it in to the supervising teacher. If students fail to attend Overtime, they are referred to the office of student administration. The result is mandatory detention time.

  **This program yielded a 39 percent decrease in D’s and F’s after the first semester of implementation.**

- **Mandatory Tutoring**: This is designed for students to get extra help during the school day. Students with low grades (D’s or F’s) or those needing tutoring can meet with their teachers during advisory time. Teachers may also require some students to take mandatory tutoring until grades improve.

- **Titan Success**: Students who are struggling due to poor grades and/or discipline-related issues may benefit from this program. Students meet each day with a mentor who is also a core area teacher. The mentor meets with students at the beginning of the day and assists with anything from homework and organization to interpersonal relationships. Students in the program know they always have an adult in the building who is there for them and ready to help them succeed.
- **Student Assistance Program:** The Student Assistance Program is designed to provide mentors for students not designated for Titan Success Program but who still need an adult mentor. Teachers identify students who may benefit from the program and assign mentors. The mentors contact students’ parents and meet individually with students to set goals for success.

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### Improving Guidance and Advisement

The guidance and advisement staff at LSW have multiple roles: establishing relationships with students, advising them on credits and courses needed for graduation and college, helping students explore post-high school options and getting parents involved in the decision-making process.

### Transitioning to High School

Counseling begins during the transition from the middle grades to high school. For a half day before the start of each school year, incoming freshmen attend freshmen transition day. "Freshmen transition day provides the staff an opportunity to do a few things: They are able to meet the incoming students in their class to start relationship building. It provides students an opportunity to learn about the large gamut of opportunities we have here at LSW (activities and clubs), and it provides the staff with an opportunity to highlight the traditions and expectations we have in our school and classroom," said Assistant Principal Jereme Hubbard.

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**“I liked freshman transition day because it gave me the chance to see how to navigate the building before the first day of school. Going from a small school of 500 to a school of 1,700 was a big change, so it was nice to practice before everybody got there.”**

— Brett, LSW Student

### Transitioning to College and Careers

A number of programs have been developed to help students transition from high school to postsecondary advanced training, college and careers:

- **Career-Technical:** Students from LSW have the opportunity to access course work at nearby CT centers. Programs offered include digital media technology, nursing, biomedicine, advertising, auto collision and repair, climate and energy control, cosmetology, culinary arts and law enforcement.

- **Career Day:** LSW also hosts an annual career day. This is an opportunity for students to hear from professionals who share what they do and what’s required to enter their professions.

- **College Fair:** Students have the opportunity to visit a college fair and gather information from colleges and universities.

- **Advisory:** Instructors with juniors and seniors review information on college and career readiness, postsecondary planning, scholarships, financial aid information, ACT testing preparation and more.

- **Career Pathways:** As sophomores, students at LSW make some decisions about what career pathways they are interested in and develop a plan for high school course work that supports the pathways. Students are not locked into the pathways, but planning does give them an idea of what classes to take to support their interests. Pathways include:
  - Arts and Communications
  - Business Management and Technology
  - Health Services
  - Human Services
  - Industrial and Engineering Technology
  - Natural Resources

LSW has consistently had a high percentage of students taking CT courses. The placement rate was 96 percent in the 2012-2013 school year, about 94 percent in 2011, 92 percent in 2010, 93 percent in 2009 and 87 percent in 2008.

### Parents in the Mix, Not on the Sidelines

LSW also gives parents an opportunity to connect with the staff and to be involved in the guidance process. Each year parents come for spring enrollment conferences. They meet with their students’ advisers to ask questions and confirm enrollment options. The results: fewer schedule changes and more students taking rigorous course work through their senior year.
Parents are also informed about students’ academic progress via internal and external communication. They are invited to parents’ night to review information about what assessment data mean for their students. All assessment information is shared with students and parents so that all key stakeholders possess the necessary information for each student to succeed.

Vision Teams Impacting School Culture and Improvement

Each staff member at LSW serves on a vision team. The teams use each individual’s strengths to improve the organizational health of the school and turn shared intentions into reality. The teams are deeply rooted in the professional learning community (PLC) structure.

Lee’s Summit West Vision Teams

- **Diversity:** The diversity team is responsible for supporting all students and staff at LSW and making individuals of all backgrounds feel welcomed and accepted. They also help raise awareness and cultural uniqueness. Vision statements:
  - Recognize that we live, learn and look differently.
  - Create a culture of respect and acceptance by supporting individual differences and uniqueness.
  - Ensure that each student feels safe, accepted and celebrated.

  **Application:** The diversity team leads multiple diversity activities including the annual Spring Diversity Assembly. In this assembly, students from various cultures and religious backgrounds present their unique traditions to the school.

- **Academic Achievement:** The purpose of this vision team is to develop a learning environment at LSW that supports all teachers and students in their goals and helps them to achieve at their personal best. Vision statements:
  - Develop independent and reflective thinkers.
  - Empower students to be involved in their learning and assessment of such learning.
  - Develop positive relationships among students, staff and parents.
  - Inspire a supportive and encouraging learning environment.

  **Application:** Programs such as overtime and extra help were created from this vision team.

- **Literacy/21st-Century Skills:** This vision team is intended to help support teachers and students as they work toward developing 21st-century skills and help students achieve their postsecondary plans. Vision statements:
  - Reflect a culture in which each student will read and write for purpose and for pleasure.
  - Ensure that each student demonstrates the ability to apply 21st-century skills now and in the future.

  **Application:** This team works continuously to develop a resource guide for teachers using technology with practical ideas and activities. The team also created a 21st-century skills vocabulary database to help teachers use common technology language with their students.

- **Professional Learning Communities/Professional Development:** This team helps with collaboration and teacher training and development. Vision statements:
  - Ensure all members of the learning community promote and uphold the development, implementation and support of district and building initiatives.
  - Develop high-performing collaborative teams to better support each student.

  **Application:** This vision team helps teachers find opportunities to grow and learn through training workshops or other professional development opportunities.

- **Intervention:** The intervention team is responsible for creating and making interventions available and useful for students. Vision statements:
  - Create an intervention system that connects all components and is accessible and effective for each student.
  - Integrate interventions into the school day on a regular basis.

  **Application:** Programs of intervention such as Titan Success and the Student Assistance Program are supported here, along with other intervention programs like Overtime and extra help. LSW also maintains a before- and after-school math tutoring session and an after-school writing lab.
**Community:** This group is responsible for developing and maintaining relationship among staff, parents and community. Vision statements:

- Continue to foster and build relationships, and work collaboratively with local businesses, colleges, individuals and parents.
- Work collaboratively with community leaders to provide resources that enable Lee’s Summit West to offer exemplary academic and co-curricular programs.

**Application:** Develop partnerships between the school and local businesses. This includes career day opportunities as well as collaborative lesson planning and presentations with local business representatives. This vision team also organizes events to help staff develop relationships with one another.

### Using Data to Drive Instruction

Knowing where students are academically and where they need to be is imperative if students are to improve. LSW uses data to help map students' next steps and design meaningful, challenging assignments to get students college- and career-ready. The school uses ACT scores, HSTW Assessment results, end-of-course (EOC) exams and the Missouri Assessment Program (MAP) results along with student and staff surveys to accumulate data to inform improvement.

The focus on improving ACT scores has led to an infusion of ACT professional development. Each teacher is responsible for contributing to the development of skills necessary to be successful on the ACT, and each teacher is trained on strategies to increase student achievement.

### Getting Results

Lee’s Summit West High School takes great pride in the academic achievement of its students. They have scored among the highest levels in Missouri on EOC exams. The percentages of students scoring in the top two mastery levels of Proficient to Advanced speaks to the strong academic program at the school. In 2010, 2011 and 2012, more than 90 percent of LSW students taking the communication arts exam scored Proficient or Advanced. In mathematics over those same years, more than 72 percent of students scored Proficient or Advanced. (See Table 2.) While commendable, the faculty and staff continue to make it their goal for 100 percent of students to be Proficient.

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<thead>
<tr>
<th>Table 2. End of Course Exam Results: Percentage of students scoring in the top two levels — Proficient and Advanced</th>
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<tbody>
<tr>
<td><strong>Year</strong></td>
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<tr>
<td>2008-2009</td>
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<td>2009-2010</td>
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<td>2011-2012</td>
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<td>2012-2013</td>
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* Indicates that the exam was not given that year.

Source: Missouri Department of Elementary and Secondary Education
Lee’s Summit West High School’s composite ACT score was a 23 in 2012, and 23.7 in 2011 — both years’ scores were well above the state average of 21.6 and the national average of 21.1. (See Table 3.)

Lee’s Summit West students have access to a well spiraled, rigorous curriculum paired with strong instruction, which have been shown to correlate to high ACT scores. Additionally, LSW offers practice ACT exams and ACT preparation programs for students beginning in grade nine.

Achievement from implementing a school Improvement plan aligned with the HSTW Key Practices have paid off. In 2012, LSW students took the HSTW Assessment, and it showed 83 percent of students met the HSTW readiness goals in reading; 80 percent in math and 73 percent in science. Consistent gains were made in all subject areas from the 2010 Assessment. (See Table 4.) Students who meet the readiness goals are likely prepared for postsecondary studies and careers.

Goals for the Future

Balanced Assessment and Continuous Improvement

Beginning in 2011, the Lee’s Summit R-7 (LSR-7) school district began a balanced assessment initiative. As a part of the district’s five-year plan, curricula at every level are being revised to reflect essential standards and learning targets for each course.

Recently, in an ongoing effort to maximize instruction, the district has trained each staff member in balanced assessment foundational training. Curricula writing teams are also working to develop formative and summative assessments as a part of each course. The writing teams are to identify instructional activities and resources and align with 21st-century skills.

LSW also wants to create an instructional response based upon formative and summative assessment data. This will allow staff to provide effective intervention strategies to assist students as they progress toward their learning goals.

Increase Student Achievement, Exam Scores

The school values continuous improvement and hopes to improve performance in teaching, learning, collaboration time and assessments. The school will work to improve student achievement in all areas including ACT scores, EOC exam mastery, and having fewer students needing interventions and more students completing high-level course work.

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<thead>
<tr>
<th>Table 3. ACT Results</th>
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<tr>
<td><strong>Lee’s Summit West High</strong></td>
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<tr>
<td><strong>2008</strong></td>
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<tr>
<td>Percentage of Graduates Taking the ACT</td>
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<td>Composite ACT Score</td>
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Source: ACT

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<th>Table 4. Percentages of Students Meeting HSTW Readiness Goals</th>
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<tbody>
<tr>
<td><strong>LSW 2012</strong></td>
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<tr>
<td>Reading</td>
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<tr>
<td>Mathematics</td>
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<tr>
<td>Science</td>
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Source: 2012 High Schools That Work Assessment
New Literacy and Math Strategies

At the request of Gene Bottoms, SREB senior vice president, LSW has agreed to study four additional actions during the coming year. The first is to consider having a key member of the ninth- or 10th-grade faculty in language arts, science, social studies and CT 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’ abilities to read a range of texts — including technical and scientific documents. This will not only advance their reading achievement and abilities to express their understanding 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 representing algebra and geometry and maybe even encourage a feeder middle grades school to have two teachers participate in a special SERB workshop focusing on formative assessment lessons. This would advance students’ abilities to reason, understand and apply math concepts in upper middle grades math classes and in grades nine and 10.

Third, LSW will study the potential of adopting one of SREB’s Advanced Career curricula either in partnership with a technical center or at LSW next year.

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

Contact:
David Sharp
davidsharp@leesummit.k12.mo.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 Key Practices

**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 problem-solving 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 cross-disciplinary 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 continually to improve school culture, organization, management, curriculum and instruction to advance student learning.