Tennessee Community Colleges Take Innovative Approach to Remediate High School Math Students.

**OVERVIEW**

What started as a pilot at Chattanooga State Community College and a local high school has grown to a statewide initiative at all 13 community colleges and 184 high schools across the state of Tennessee. This program, called Seamless Alignment and Integrated Learning Support (SAILS), is unique in its goal to prepare students for college-level math courses while still in high school.
CHALLENGES

Nearly 70% of students entering community colleges across Tennessee require at least one but oftentimes two semesters of developmental math classes. Students are spending up to one year enrolled in non-credit bearing courses without making progress toward graduation. At some community colleges across the country, less than 25% of students needing remediation upon entering college earn a certificate or degree after eight years. With so many students unprepared for college-level math courses and the resultant higher drop-out rates, community colleges in Tennessee were looking for ways to help students better prepare for the rigors of college academics. The Tennessee Higher Education Commission, in partnership with the Tennessee Board of Regents and the Tennessee Department of Education, were looking for a solution to raise college completion levels.

“Our focus is on student learning and success. The whole time we are getting reports from Pearson we are reviewing them, we are talking to teachers and it is all about if the students are learning and if they are doing well. When they get to Cleveland State Community College are they going to be successful?”

— Karen Wyrick
Head of Math Department,
Cleveland State Community College

70%
The percentage of students entering community colleges across Tennessee require at least two semesters of developmental math

65%
Chattanooga State’s success percentage rate increase. Two years prior was 48%
In 2008, when John Squires was a math professor at Cleveland State Community College, he used Pearson’s MyMathLab® to help remediate first-time freshmen entering college. A few years later when he moved to Chattanooga State Community College he used MyMathLab there too. At both institutions developmental math courses were redesigned with great results. Cleveland State’s success rate increased from 50 to 69% and as a result enrollment in college math grew from 450 to 850 students. Chattanooga State’s success rate increased from 48 to 65%, which helped college math enrollment grow more than 40%. Math enrollment now exceeds developmental math and has consistently for eight semesters.

Because of the success at Chattanooga, Professor Squires sought to bring remediation to the high school level to prepare students before they graduated. In spring 2012, Red Bank High School partnered with Chattanooga State and they created a developmental math class designed for seniors who scored below 19 on the math portion of the ACT test. Using MyMathLab in a blended learning format, students completed modules at their own pace and sought teacher help when needed. This initial pilot went well with two-thirds of the 24 students completing the course. SAILS was launched and soon expanded.

In fall 2012, three other community colleges—Northeast, Jackson and Cleveland—started informal pilots and Chattanooga continued to expand its program. During this time, John Squires, Dr. Robert Denn, and Dr. Kim McCormick of Chattanooga State proposed the idea for a formal pilot to the Tennessee Higher Education Commission. The project was approved and through funding from the agency, the statewide implementation began during fall 2013. The scope of the official SAILS pilot included all 13 community colleges and 120 high schools.

Because of MyMathLab’s transparency and reporting functions, teachers, principals and community college leaders can easily monitor student progress and identify issues. “Teamwork is critical for the success of the program. Pearson’s MyMathLab allows for complete transparency. This helps with teamwork because we can all see what is going on. So if there is a problem I can see it instantly along with the high school teacher, field coordinator and even the principal. It helps with accountability and better planning,” explains Squires, math department head at Chattanooga State Community College.

“A $1.1 million grant from the governor’s office is expected to save $6 million in tuition and books for students in the program.”

— John Squires  
Head of Math Department,  
Chattanooga State Community College

“The SAILS math program enabled us to graduate 100% of our regular education students “college-ready” in math. Because of this program and other college-related initiatives, our school boasted the highest college-going rate in our school’s history.”

— Carmen Andrews  
Assistant Principal and College Access Coordinator,  
Meigs County High School
RESULTS

At Chattanooga State Community College after the success of the original pilot at Red Bank High School the program was expanded to include 200 high school students. After the first year of using MyMathLab, 83% of the students who graduated high school were college ready in math. Approximately 25% of those students completed bridge math classes early and were able to complete a college level math course during their final semester in high school enabling them to enter college one semester ahead in math.

At Cleveland State Community College, initially five high schools implemented SAILS, which reached 200 students. After the first year, 70% of students completed their bridge math courses and graduated college ready in math. Thirty percent completed not only the bridge math course, but also completed a college course taken as an elective in high school.

As a result of the success of SAILS, Governor Bill Haslam included funding from his “Drive to 55” initiative for a statewide scale-up. Drive to 55 seeks to raise the rate of Tennessee residents with a post-secondary credential to 55% by 2025. The Year 1 $1.124 million grant extended SAILS to all 13 community colleges, 122 high schools, and 8,500 students. During the 2013-14 school year, out of those 8,500 high school students 5,359 completed the entire course, having saved $6,297,945 in tuition and 11,471 semesters of math remediation in college. A recently approved $2.45 million infusion for the 2014-2015 academic year will now provide SAILS instruction to 79 local education agencies, 184 high schools, and 13,636 students.

“The Pearson software has helped students in the SAILS program to succeed. It is very user-friendly, and the students like MyMathLab.”

— John Squires
Head of Math Department,
Chattanooga State Community College

ENDNOTES