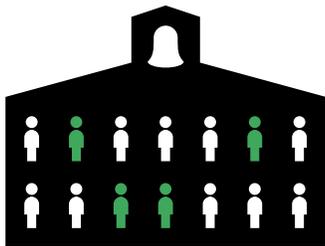


College–High School Partnerships: Dual-Enrollment and Bridge Programs



Catch them up before they're behind

At its 2014 meeting, the American Association of Community Colleges set a bold goal: to decrease by half the number of students who come to college unprepared. Ideas presented by administrators and faculty included partnerships with local school districts to offer college remedial courses to high-school students.¹

Nationwide statistics indicate that up to 80 percent of incoming college freshmen place into developmental or remedial mathematics courses. That lack of preparedness for college-level math courses is perhaps the foremost barrier to success in college. Students who repeatedly fail those courses take a beating academically, financially, and in terms of self esteem.

As pressure from state and federal governments for increased graduation rates stretch incoming enrollments at both two- and four-year colleges, administrators are seeking timely and cost efficient ways to meet the widening range of their students' academic needs.

Since 2004, institutions have successfully used MyMathLab to help address this pervasive lack of college readiness, its high cost to schools and students, and its resulting low graduation rates via programs that help students earn college credit in high school and gives them the confidence and support they need to better prepare for college-level math courses.

But some educators worry that students who are “hurried through” are set up to fail. Critics point to a variety of issues, including unqualified instructors and decreased rigor.² Both the Louisiana State University Dual Enrollment and College Readiness Program and the Tennessee State SAILS Program use MyMathLab to address these potential pitfalls head-on and ensure that their students succeed beyond the dual credit course or bridge program and through to a degree.

Louisiana State University Dual Enrollment and College Readiness Program: Certified Teachers Form a Solid Foundation for Success

Traditionally, dual enrollment courses were used to offer advanced high school students more challenging coursework, while simultaneously earning them early college credits. Today, the same strategy is used at Louisiana State University (LSU) to prepare students for both dual enrollment courses and later success in college courses.

The LSU College Readiness Program offers a dual enrollment option in which high school students earn credit for both an LSU course and a high school course at the same time, while remaining on their high school campuses. In addition, the program offers the option of MyMathLab courses in grades 6 through Algebra II to teachers at participating dual enrollment schools.

The delivery model in the high school requires that students spend a third of the course time in a face-to-face classroom environment and the remaining two thirds in an on-campus computer lab environment with teacher support.

¹ “Some Colleges Try to Catch Students Up Before They’re Behind,” by Sara Lipka, April 8, 2014, *The Chronicle of Higher Education*

² “Is Faster Always Better?” by Katherine Mangan, February 17, 2014, *The Chronicle of Higher Education*

	Year 1 Summer 2006	Year 2 Summer 2007	Year 3 Summer 2008	Year 4 Summer 2009	Year 5 Summer 2010	Year 6 Summer 2011	Year 7 Summer 2012	Year 8 Summer 2013	Total
Advanced Math for Dual Enrollment	4	12	22	19	6	4	8	15	90
Algebra II		1	4	9	12	4	6	6	42
Algebra I			1	12	20	5	8	8	54
AP Calculus				19	6	5	2	3	35
Geometry					12	4	5	7	28
Eighth Grade Math					2	77	1	11	91
Seventh Grade Math					2	1	1	7	11
Sixth Grade Math					1	2		10	13

Table 1. Number of Teachers Completing the Louisiana State University College Readiness Program Workshop by Course and Semester, Summer 2006–13

To address one of the biggest criticisms of dual enrollment courses—the potential for varied quality of content—LSU has created a training program that ensures that the high school teachers are well-prepared to handle the math content, the delivery model, and the MyMathLab program. Teachers become “certified” to participate in the College Readiness Program by successfully completing a free, comprehensive, summer workshop taught by LSU faculty and high school mentor-teachers. Teachers can specialize in any of five dual enrollment courses offered or focus on any math course from 6th Grade through Algebra I.

The workshop comprises two four-day summer sessions at the LSU Math Lab and more than 20 additional hours of independent math work to be completed between the two workshop sessions. One-day follow-up workshops for those teachers doing dual enrollment courses are held at LSU at the beginning of each fall and spring semester thereafter.

Workshop sessions cover the following:

- Web-based redesign course delivery pedagogy to improve student learning
- MyMathLab use at an advanced level
- Common Core State Standards (CCSS) familiarity
- LSU math classes observations and exposure to students in the LSU Math Lab
- Access to CCSS-aligned courses in MyMathLab
- Certified mentor-teacher guidance and support

Once certified to participate in the College Readiness Program, a high school dual enrollment teacher serves as a classroom

Semester	Number of High Schools	Number of Teachers	Number of Students	Percent Earning Credit
Fall 2006	3	3	41	66%
Spring 2007	4	7	77	78%
Fall 2007	11	14	397	61%
Spring 2008	12	15	260	48%
Spring 2010	2	2	28	79%
Fall 2010	11	11	163	87%
Spring 2011	11	12	179	82%
Fall 2011	11	12	225	85%
Spring 2012	11	12	234	80%
Fall 2012	13	14	409	92%
Spring 2013	13	14	447	81%
Fall 2014	20	21	571	93%

Table 2. Dual Enrollment Success Rates, Fall 2006–14 (n=3,031)

facilitator in the high school setting with an LSU faculty member serving as an Instructor of Record. Students use MyMathLab to do the same homework, quizzes, tests, and final exams as do on-campus students enrolled in the same course.

“The LSU College Readiness Program begins preparing students as early as the 6th grade for dual enrollment math courses and then offers dual enrollment courses to high school students. Students who participate in the program enter college better prepared for success in advanced college coursework, which in turn improves college retention and graduation rates. It is a win-win for all.”

www.math.lsu.edu/programs/CollegeReadiness

Tennessee State SAILS Program: Supporting Students Reaps Ongoing Academic Success

In spring 2012, faculty from four of Tennessee's community colleges sat down with teachers at local high schools and created a free program of dual enrollment, summer session math labs for high school seniors who are likely to place into remedial math after high school (based on Math ACT scores below 19). Far more than simply a stop-gap measure, the Seamless Alignment and Integrated Learning Support (SAILS) program is a highly strategic response to the one of the State's greatest educational challenges: the high cost of remedial education and its effect on certificate and degree rates:

- Statewide, 71 percent of students entering community college required at least one remedial level course. [fall 2010/11]
- Ninety-five percent of Chattanooga State Community College students placed in remedial math upon matriculation took more than three years to obtain a certificate or degree. [fall 2010/11]
- In fall 2012, 11,000 TBR CC students paid for remedial math courses that did not count toward graduation—a \$12,364,000 cost to the students and taxpayers.

The SAILS program answers to critics who accuse bridge programs of reduced rigor and lack of student support by building bridges between the higher education and high school communities and surrounding students with one-on-one support.

The program aligns and embeds Tennessee Board of Regents college developmental competencies with Tennessee Department of Education bridge math standards. To ensure uniformity and quality, content and assessments are delivered online.

Students are supported through a blended learning model of MyMathLab instruction plus individual assistance from high school teachers to give students the help they need both at school and at home. Classes meet in a computer classroom at least 50 percent of the time; many classes meet in computer lab 100 percent of the time.

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. If there is a problem I instantly see it along with the high school teacher, field coordinator, and principal. It promotes accountability and better planning," explains Squires, math department head at Chattanooga State Community College.

Mastery learning is a key component of the SAILS program and helps ensure that students receive a proper foundation for success in college. Students are required to complete all assignments and must demonstrate mastery of all competency concepts and skills before progressing to the next competency. Results so far indicate the program is a success.

Students are supported through a blended learning model of MyMathLab instruction plus individual assistance from high school teachers to give students the help they need both at school and at home.

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 percent of the students who graduated high school were college ready in math. Approximately 25 percent 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 percent of students completed their bridge math courses and graduated college ready in math. A full 30 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 state-wide 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 more than 5,600 completed the entire course, having saved \$6.4 million in tuition and books and 11,471 semesters of math remediation in college. A recently approved \$2.45 million infusion for the 2014/15 academic year will now provide SAILS instruction to 79 local education agencies, 184 high schools, and 13,636 students.

<http://bit.ly/SAILSChattState>