JOBS FOR THE FUTURE

STUDY OF EARLY ASSESSMENT AND EARLY INTERVENTION MODELS AUTHORIZED BY HOUSE BILL 3468, 82ND TEXAS LEGISLATURE, 2011

PREPARED BY JOBS FOR THE FUTURE

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TABLE OF CONTENTS

INTRODUCTION

The Texas legislature has played a prominent role in guiding the state's efforts to strengthen students' college readiness and success. House Bill 3468, enacted by the 82nd Texas Legislature, Regular Session directs the Texas Education Agency, in consultation with the Texas Higher Education Coordinating Board, to conduct a study of best practices for and existing programs offering early assessments of high school students to determine college readiness, identify any deficiencies in college readiness, and provide intervention to address any deficiencies before high school graduation.

This report draws on four sources of information:

- A summary of research on early assessment and intervention programs;
- A profile of early assessment and intervention policies and practices in four states, obtained through a review of online documents and telephone interviews with key informants, including state department of education staff, institutions of higher education staff, and high school administrators;
- A sample of early assessment and intervention practices at Texas higher education institutions, obtained through telephone interviews; and
- The results of an online survey of Texas higher education institutions about the extent to which campuses are working with high schools to offer early assessments and interventions.

Jobs for the Future is providing this information to help inform Texas policymakers, educators and stakeholders about the policy actions, key design elements, and the resources needed to promote and implement a responsive, cost-effective, statewide early assessment/early intervention program. This approach should be viewed as a potential action step to address the goal and objectives set forth in the state's P-16 College Readiness and Success Strategic Action Plan *to ensure that every Texas student is prepared by their P-12 education to be college-ready when exiting high school and has the skills to successfully compete in a global economy.*

The report begins with three recommendations for Texas policymakers, based on national evidence, as well as the level of activity and past state-level work on these issues in Texas. These recommendations reflect the research sections of the report, which begin with an overview of national policies and practices showing encouraging results as a growing number of states implement comprehensive strategies to: ensure that high school students graduate prepared to take credit-bearing courses toward a postsecondary degree; reduce the need for remedial education; and improve college completion rates.

We then present an analysis of early assessment/intervention programs, identifying their common elements across states and distilling the choice points and challenges that policymakers will face in each of these areas when designing a statewide program.

The portrait of Texas that follows describes the strong policy foundation for building a statewide early assessment and intervention program. Profiles of local programs and practices at San Jacinto College, Houston Community College System, Austin Community College, Alamo Community College System, El Paso Community College, and South Texas College reflect a sample of early assessment activities identified in the state by JFF. They illustrate the different approaches that colleges have taken in assessing college readiness before enrollment in postsecondary education. Through a brief survey sent to the state's 50 community colleges, JFF also gleaned the extent to which institutions assess high school students for college readiness and provide support. The survey indicated that many colleges are supporting elements of such efforts.

The concluding section looks at early assessment approaches in California, Florida, Kentucky, and Virginia. These state case studies cover such topics as program design, local implementation, the guidance students receive based on test results as well as early intervention actions by schools, professional development for high school teachers, the state enabling authority, and costs and funding sources, as well as the evidence regarding the success of each approach.

SUMMARY OF RECOMMENDATIONS

National programs in statewide early assessment/early intervention are relatively young. The oldest is California's Early Assessment Program, begun a decade ago. While early results from California's EAP are promising and suggest which program components are likely to matter, they do not provide definitive evidence about efficacy in terms of statewide impact on college readiness. And other states—which have adopted and adapted aspects of California's program—are just beginning to collect data.

Texas school districts and higher education institutions are working collaboratively to facilitate a range of opportunities to enhance the readiness of high school students for postsecondary education. We find evidence that some key components of early assessment and intervention approaches have shown promise in other states. For greater impact and coherence, Texas policymakers will need to build on these practices at the local level, while providing guidance and support. Given the nature of the encouraging, though inconclusive, national evidence, as well as the level of activity and past state-level work on these issues in Texas, we offer the following recommendations for future policy direction and action:

- State policymakers should seek to align the closely related provisions of Texas Education Code Sec. 28.014 and Sec. 39.025 (b-2), which have charged the commissioner of education with 1) developing courses for students at the twelfth-grade level who do not meet college-readiness standards on an end-of-course assessment to prepare such students for success in entry-level college courses; and 2) mandating that districts require students who upon completing grade 11 are unlikely to achieve cumulative score requirements for one or more subjects needed to earn a high school diploma to enroll in corresponding content-area college preparatory courses.[1]
- State policymakers should extend funding for the 2013-2014 biennium to enable the Texas Education Agency to oversee and complete work begun in 2009 to facilitate implementation of a college preparatory course in English language arts and resume development of a college preparatory course in mathematics.
- State policymakers should seek to fully assess the effectiveness of college-readiness program pilots and other on-the-ground early assessment/intervention practices for their potential for replication.

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[1] States that have implemented 4th year courses have had to make decisions about format, content and delivery, which include determinations about whether courses fulfill curriculum and/or graduation requirements (see page 11).

OVERVIEW OF NATIONAL POLICIES AND PRACTICE

With the national focus on college and career readiness, a growing number of states are implementing comprehensive strategies to ensure that high school students graduate prepared to take credit-bearing courses toward a postsecondary degree, reduce the need for remedial education, and improve college completion rates.

Due in part to a misalignment between high school graduation requirements and college entrance standards and expectations, far too many students arrive at college with academic deficiencies that must be remedied before they can get on track to earning a postsecondary credential or degree. Research has found that students who take remedial courses are more likely to drop out of college without earning a degree. Data from Complete College America's 2012 Remediation Report underscore the pressing need to improve college preparedness and degree completion in Texas. The report found 51 percent of students entering a two-year college in Texas enrolled in remediation. Of those, only 30 percent complete remediation and 5.8 percent graduate in three years. African-American, Hispanic, and low-income students are even more likely to falter.

Providing high school students with early signals about their level of college readiness, along with courses and supports to mitigate skills gaps before they graduate, is a relatively new concept. In 2003, California State University, in collaboration with the California Department of Education and the state's public schools pioneered an early warning system that is now considered a national model. The Early Assessment Program gauges high school students' academic preparation for college and established a course that underprepared high school seniors can take to help them reach proficiency.

Kentucky requires all students to take the ACT in the 11th grade. Test scores are used to identify students who would benefit from academic supports (e.g., transitional courses; accelerated learning through dual enrollment and AP courses). Florida high school students who do not score high enough on end-of-course exams in 10th grade reading and math must take the state's Postsecondary Education Readiness Test (P.E.R.T.). A student who scores below college-ready must enroll in and complete postsecondary preparatory instruction prior to high school graduation. Virginia has developed new senior-year capstone courses for students who have completed the coursework to graduate but fall short of mastering state college and career performance expectations.

Strategies to address gaps in college readiness are also taking hold in some Texas communities where school districts and community colleges have partnered to

implement programs to help students make better transitions into postsecondary education. These include: alignment of their respective systems; administration of a common assessment that gauges student's readiness for college and placement in courses and academic assistance; and remedial or advanced coursework to enrich the senior year of high school.

ENCOURAGING RESULTS

Research suggests that providing high school students with early information about their preparedness for college-level work improves their college-going behavior and reduces their need for remediation. A study of California's Early Assessment Program found participation reduces the average student's probability of needing remediation at California State University by 6.1 percentage points in English and 4.1 percentage points in mathematics. Some states report anecdotally that early assessments also appear to influence what courses students take in their senior year.

Virtually no research has been conducted on the effectiveness of combining early assessments with transitional courses. Though not well documented, local school leaders report positive effects of both early assessment and early interventions. Anecdotal evidence in Kentucky suggests that requiring all high school juniors to sit for the ACT is increasing academic rigor, strengthening teacher practice, and prompting students who had not considered college as an option to enroll after graduation. Moreover, after completing senior-year transitional courses, a significant number of students are meeting benchmarks on college placement exams. Further research is needed to assess the efficacy of early assessment/interventions into the first two years of college.

ANALYSIS OF EARLY ASSESSMENT/INTERVENTION PROGRAMS

A shared understanding of and vision for college-ready expectations between secondary and postsecondary systems lay the groundwork for implementing statewide strategies to strengthen student transitions from high school to college. The adoption of a single-set of college-and-career readiness standards that are jointly developed provides the foundation for this work. We have identified the common elements of early assessment/early intervention programs across states. This evaluation distills the choice points and challenges that policymakers will face when designing a statewide program.

HIGH SCHOOL STUDENTS ARE ASSESSED (NO LATER THAN THE JUNIOR YEAR) FOR COLLEGE READINESS BASED ON STATEWIDE POSTSECONDARY READINESS STANDARDS.

In some states, legislative action spurred a college- and career-ready agenda that mandates postsecondary readiness testing of high school students prior to graduation. Such was the case in Kentucky, one of ten states to require all eleventh-grade students to take the ACT. ACT scores signal whether a Kentucky high school student is on track to graduate college ready, and the score is used for college admission and scholarship opportunities. Schools and districts are also held accountable for the number of students who are considered ready for college and career. Such high stakes put pressure on districts to explain readiness gaps. Because the ACT test does not have diagnostic capabilities, some high schools administer an additional assessment to pinpoint student academic strengths and weaknesses, which can create an additional expense and testing overload.

Florida developed its own common placement test, which is customized to the state's Postsecondary Readiness Competencies. At the outset, only students who failed to meet benchmark on end-of-course assessments in the tenth-grade and expressed postsecondary intent were required to take the P.E.R.T. The mandate was later expanded to include all students who showed gaps in readiness. The initial design of the P.E.R.T. included diagnostic capabilities, but the feature was not incorporated into the placement exam because it would have made the test too long. Test development was said to be labor intensive and required extensive and ongoing collaboration between the K-12 and postsecondary systems.

California's Early Assessment Program, an initiative of the California university system, opted to build on an existing testing instrument. Rather than incur the cost of developing and administering additional tests to assess readiness, optional questions were added to

the mandatory California Standards Test in eleventh-grade English and math. CSU saw increases in participation in the early assessment program when districts realized there was no ramification for their accountability rating. However, because completion of the additional test items is voluntary, there is no imperative to ensure that students most in need of interventions participate.

Ensuring performance benchmarks are set at levels that empirically predict success in first-year credit-bearing college course work has been cited as a challenge in both Florida and California.

Though assessment design and delivery varied, one clear benefit of students taking a placement test in high school was the ability to identify and remediate deficiencies before graduation. Early assessments also influenced the rigor of senior-year course taking. States also indicated that by taking a college placement test, some students, especially those who would be first in their family to attend college, saw themselves as college material. It should be noted that absent proper orientation and preparation, high school students might not take the placement test seriously, which could lead to an inaccurate read of their skills and result in unnecessary remediation.

While standardization of an early assessment strategy has been an effective approach in some states, state-led, mandate-heavy initiatives often encounter local resistance, especially if they further strain school budgets.

Guiding Questions

Should an early assessment have diagnostic capabilities?

While a diagnostic component would permit teachers to target instruction to specific competencies not yet mastered by a student, the tradeoff is that diagnostic tests need to incorporate more questions. This results in longer tests that typically cost more to build and administer.

Could an existing test be augmented to provide information about a student's readiness for college-level coursework? Could a trusted national placement test be administered for this purpose?

Adding test items to an existing state test is less expensive and can help mitigate testing fatigue. However, this approach requires the close collaboration of K-12 and college faculty to ensure the test reflects both high school and college placement standards. National placement tests can be more costly to administer, but they are widely accepted and used by postsecondary institutions across the nation for college admission and placement.

STUDENTS WHO ARE ASSESSED AS NOT MEETING POSTSECONDARY READINESS STANDARDS RECEIVE SUPPORTS AND INTERVENTIONS TO ADDRESS DEFICIENCIES BEFORE GRADUATION.

SUCH INTERVENTIONS MAY INCLUDE, BUT ARE NOT LIMITED TO, COLLEGE PREPARATORY COURSES, DEVELOPMENTAL EDUCATION, SUMMER BRIDGE PROGRAMS, COLLEGE READINESS PROGRAMS, AND DUAL ENROLLMENT.

California, Florida, Kentucky, and Virginia are among the states that have instituted senior-year interventions, which include courses focused on college preparation. Statewide teams of secondary and postsecondary educators, including faculty and content experts, assisted high schools in designing, developing, and deploying college preparatory or transitional courses. Each state has taken a slightly different approach, and they have made adjustments as weaknesses surfaced.

While Kentucky and Florida require high schools to offer transitional courses, Virginia's senior-year capstone courses, which satisfy graduation requirements, are optional for schools and students. As a result, not all students who might benefit from extra coursework to master Virginia's college and career expectations have access to the courses.

Statutory mandates in Kentucky and Florida, which require students who score below college-readiness benchmarks to complete transitional courses, have met resistance from parents. They argue that the courses reduce their children's access to senior-year electives or that they are unnecessary because their children do not plan to attend college.

Providing flexibility for the design and delivery of courses also has advantages and challenges. In Kentucky, transitional courses may be offered as a one-semester, credit-bearing course, an intervention for students before or after school, a supplement to existing courses, or a course in which students have flexible entry and exit based on pre-assessment scores. However, the use of multiple options has made it difficult for the state to collect data to assess the quality and effectiveness of the various models.

Other considerations are whether transitional courses should be credit-bearing and whether they should fulfill graduation requirements.

Guiding Questions

Should the design and delivery of transitional courses be prescribed by the state or should schools be permitted to customize course designs and deployment to for local use?

While flexibility can make it easier for schools to staff, schedule, and obtain buy-in from parents, course variability can make it difficult for states to evaluate and scale up best practices.

Should high school students who pass transitional courses require re-testing?

Exempting students who succeed in these courses from further placement testing if they enroll in a college within two years of completion can demonstrate the validity of the coursework and provides an incentive for students to do well in the courses. On the other hand, requiring re-testing can provide policymakers with more immediate numerical data to evaluate program success, but this can also add to the cost of a program.

HIGH SCHOOL AND POSTSECONDARY FACULTY MUST BE EQUAL PARTNERS IN DESIGNING, EVALUATING, AND REVISING TRANSITIONAL COURSES TO ENSURE THAT SUCCESSFUL COMPLETION FULFILLS THE REQUIREMENT OF A COLLEGE PLACEMENT EXAM.

TECHNICAL ASSISTANCE AND PROFESSIONAL DEVELOPMENT ARE PROVIDED TO EDUCATORS, INCLUDING ADMINISTRATORS AND GUIDANCE COUNSELORS.

Collaboration between high schools and colleges will help ensure that course competencies were linked explicitly to college-ready expectations. Work groups should include content specialists and faculty who teach developmental courses. Among the challenges cited are different academic year calendars and the need for resources to pay for substitute teachers.

Resources to support implementation of assessments and the delivery of transitional courses were viewed as essential to the success of these programs. In Florida and Virginia, college faculty helped train high school teachers. Webinars, train the trainer workshops, professional learning communities, and online resources should be utilized.

Guiding Questions

If this collaboration is important to program design, development, and deployment, how can the state help facilitate and support such activities?

The state may want to provide guidance, resources, or other technical assistance.

Will implementation of program require statutory or regulatory action? If so, how will state ensure local innovation is not stymied?

EARLY ASSESSMENT DATA ARE REPORTED AND INCLUDED AS A POSTSECONDARY-READINESS MEASURE IN THE STATEWIDE ACCOUNTABILITY SYSTEM, AND INTERVENTIONS ARE EVALUATED.

In a time of constrained resources, it is vital that states invest in programs that are cost effective and produce results. Kentucky's accountability system includes a college/career-readiness component that holds schools and districts accountable for the percentage of students who are considered ready for college and or careers based on their ACT scores. California took the opposite approach, finding districts were more receptive to participating in the Early Assessment Program because they were not held accountable for results.

Evaluation of the effectiveness of transitional courses is at a very nascent stage. High schools in Kentucky voluntarily report the number of students enrolled in transitional courses. However, as noted, the variability of course formats makes it difficult to monitor the impact of this intervention. That said, state education officials believe college placement tests taken after the completion of transitional courses will shed light on their effectiveness. Florida collects data on student outcomes and plans to track student progress into first-year college courses. Virginia's capstone courses have a prescribed course code, which will enable the state to track students and assess the impact of courses on student enrollment, success, and persistence in postsecondary education. However, the Virginia Department of Education will not be able to track capstone embedded in English 12.

Guiding Questions

Should early assessment scores be integrated into school accountability systems as a measure of college and career readiness?

Broadening the measures of college and career readiness to include early assessment tests scores provides schools, students, and parents with a more complete picture of

student achievement. However, schools may be reluctant to offer a program for fear of getting penalized in an accountability system.

How can a state use its accountability system to incentivize student participation?

States can provide schools and districts with special recognition or other rewards for increasing the number of students who score college ready.

PORTRAIT OF TEXAS

Texas has a strong foundation on which to build a statewide early assessment and intervention program. High school and college faculty have defined what students must know and be able to do to graduate from high school prepared to succeed in entry-level courses at public postsecondary institutions through the College and Career Readiness Standards that have been incorporated into the content standards, the Texas Essential Knowledge and Skills. The state also has standardized postsecondary placement statewide to conform to the new standards.

Moreover, the State of Texas Assessments of Academic Readiness assessments in Algebra II and English III embed college-ready content standards and establish cut scores that indicate college and career readiness and guarantee that students who meet this standard will be placed in entry-level, credit-bearing college courses in Texas public colleges and universities.

While the in-development Texas Success Initiative diagnostic and placement assessment does not include an early assessment component, it is anticipated that the test will foster enhanced alignment of K-12 and higher education expectations through data collection and reporting that could provide valuable information about student readiness. A survey of community colleges conducted by JFF found a number of campuses are currently working with school districts in their service areas to administer college placement exams (primarily the ACCUPLACER) to high school students (see below).

The Texas legislature has demonstrated strong support for college-readiness activities (e.g., early college high schools; dual-credit courses). State lawmakers further sought to improve college preparation through adoption of HB 2237 of the 80th Texas Legislature (2007) and SB 1031 80th Texas Legislature (2007). The legislation included provisions calling for the development of college preparatory courses in mathematics, science, social studies, and English language arts; these would be designed for students at the twelfth-grade level who do not meet college-readiness standards on a required end-of-course assessment.

Due to capacity constraints, work begun in 2009 to develop mathematics and English language arts senior-year college preparatory courses that could be offered in a classroom or online setting stalled. In collaboration with the Southern Regional Education Board, vertical teams of Texas high school teachers and higher education faculty completed the design of six units, which included lessons and assessment rubrics for an ELA course that could be offered as a one-semester or full-year course.

The math course was in a more preliminary stage of development when the project was put on hold.

Under the plan, students who passed the English III and Algebra II end-of-course assessments but were not quite college ready were to be offered a college prep course during the senior year. The courses and accompanying professional development were to be made available to high schools through Project Share, the Texas Education Agency's online learning community.

More recently, the legislature, through a state budget line item (General Appropriation Act 2012-13 Biennium), provided the University of Texas at Austin with $3 million to establish a statewide program to create modular courses. The courses may be deployed as dual-credit courses to improve college readiness, reduce the need for developmental education, and improve student success

In addition, funding was provided for a new "College for All initiative. The program, being piloted in eight high schools, incorporates some of the design features of an early college high school into the high school experience to prepare students to meet the standards for college enrollment through successful completion of a Texas Success Initiative (TSI) assessment.

Eighty school districts and charter schools competed for a grant funded through the General Appropriations Act, Article III, Rider 64, 82nd Texas Legislature. The goal is to ensure that all high school students will have access to at least 24 hours of college credit through dual enrollment, AP, or IB courses and receive support to complete a minimum of six hours of college credit toward a certificate or degree. High schools in the pilot must administer the TSI to all students in the tenth grade and provide academic supports, tutoring, supplemental classes (e.g., college developmental education courses), and re-test opportunities to any student who does not pass the assessment to prepare them to take college courses and earn dual credit before they graduate.

LOCAL PROGRAMS AND PRACTICES

JFF reached out to a small number of community colleges via phone and email to provide a snapshot of local-level early assessment activities. The following profiles reflect a sample of the early assessment activities we identified. They are not meant to be comprehensive; rather, we present them to describe the different approaches that some colleges have taken to assess college readiness before enrollment in postsecondary education. [2]

SAN JACINTO COLLEGE

San Jacinto College launched an early assessment program in spring 2012. The program is supported by the Gulf Coast PASS Initiative. The purpose of the program is to establish baseline college-readiness scores for students in the eighth and tenth grades; use diagnostic feedback to design interventions for students not on track to college ready; and re-test students in the eighth and tenth grades after two years of high school core curriculum courses.

San Jacinto College is partnering with the Pasadena and Sheldon independent school districts. Roughly 1,100 eighth graders and 1,100 tenth graders took the COMPASS in the spring. However, the college and the school districts determined that the spring assessment, in addition to the state's existing testing schedule, could be contributing to test fatigue for the students. Consequently, the college and district officials revised the early assessment program to decrease the testing burden on the students.

Instead of administering the COMPASS in the spring, the college and district officials decided to implement the ReadiStep, a College Board instrument, to eighth graders and the Preliminary Scholastic Aptitude Test to tenth graders in October. The ReadiStep has a diagnostic component that aligns with the PSAT, which is in turn aligned with the Scholastic Aptitude Test (SAT).

In addition to testing eighth and tenth graders in the October, eleventh graders will be tested in October and February on the PSAT or the new Texas Success Initiative assessment. Seniors will be tested in October and February with the SAT or the new TSI instrument.

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[2] A list of the contacts with whom we spoke can be found in the Appendix. Any errors, omissions or misrepresentations contained in these local profiles should be directly attributed to JFF, not to the key informants.

College and district officials plan to collaborate to design interventions for students whose scores this fall indicate they are not on track to be college ready over the next two years. These discussions have begun in advance of receiving the assessment results.

There are two other important components of San Jacinto College's early assessment program: the Vertical Alignment Team and the College Transition Team. San Jacinto College and its service area districts have created a vertical alignment team, with discipline-specific high school and college faculty collaborating regularly to align the curriculum and performance expectations to smooth the transition from high school to college. The college has also partnered with area middle school and high school counselors to create a college transitions team that collaborates to support the early assessment and early intervention activities. The college transition team also disseminates information on early assessment and interventions to students and their families.

HOUSTON COMMUNITY COLLEGE SYSTEM

Houston Community College System is implementing two major early assessment programs: the Houston Pathways Initiative and the Gulf Coast Partners Achieving Student Success (PASS). These initiatives fund the system's early assessment partnerships with the Houston and Spring Branch independent school districts. The college system administered the COMPASS test to 800 high school juniors through the HPI. Most of these students' assessment results place them in the lowest levels of developmental math.

Students enroll in a four-week intensive developmental education intervention that is co-designed by high school and college faculty. After the intervention, the students are re-tested to assess whether or not they have made academic gains. Most of the students who take the intensive developmental education intervention can not avoid developmental education completely upon re-testing. However, many of them place out of the lowest levels of developmental education after completing the intervention. A smaller number of students post even greater improvement gains.

Houston Community College System joined Gulf Coast PASS in summer 2012. As part of the early assessment work, the system developed and launched a website that contains test preparation resources to assist students as they prepare to take the COMPASS. The website features a broad range of strategies to help students score college proficient. Support materials include tutorials in reading, writing, and math as well as faculty-designed assessments and review materials. Information and transparency on the placement testing process is an important component of the program. The program informs the students of the high stakes of the assessment exams

and shows them how preparation for the readiness assessment can help them avoid the time and expense of developmental education.

In both the HPI and Gulf Coast PASS Initiatives, the system engages high school and college faculty in core academic areas (e.g., math, English, biology, history) to align the curriculum and performance expectations and increase student readiness for freshman-level college instruction.

In fall 2012, HCCS began referring students, depending on their assessment results, to a four-week intensive course—PREM (prepare for Math) or PRER (prepare for reading/writing)—to improve their assessment scores and then re-test as a strategy to reduce the amount of time the students spend in developmental education. In addition, the system offers a one-week prep course, PREP, which provides 16 hours of student access to free tutoring via Pearson's My Foundations Lab software. This program is funded through the Gulf Coast PASS Initiative.

HCCS's early assessment efforts include dual enrollment and early college programs. In addition to its dual enrollment programming, the system is partnering with Houston Independent School District to create career academies with six high schools that offer AAS programs in high-demand fields. In addition, HCCS has partnered with Houston Independent School District and Alief Independent School district to create five early college high schools. HCCS partners with the districts to begin preparing students in the ninth grade to be "college ready" to begin taking college-level courses. The early college students earn an average of 48 semester credit hours by the time they graduate from high school.

AUSTIN COMMUNITY COLLEGE

Three Austin Community College programs have early assessment components: Early College High School, Early College Start, and College Connections. Each offers a TSI-approved assessment to high school students for related but for slightly different purposes. Early College High School provides the assessment to middle school students who can earn tuition-free college credit and high school credit simultaneously, culminating in a high school diploma and up to 60 college credits or an Associate's degree. Early College Start provides the TSI assessment to high school juniors and seniors who wish to demonstrate academic readiness to earn college credit while they are still in high school through the state's dual enrollment policy. The College Connection program provides an early assessment for high school seniors before they enroll in college (Austin Community College or any other postsecondary institution). The college covers all of the early assessment fees.

The College Connection Program is the most relevant to early assessment for the purposes of preventing the need for developmental education. The program was created to address the education achievement and educational attainment gaps across race, ethnicity, income, and regions within Texas, as identified in the state's strategic plan for higher education, *Closing the Gaps by 2015*. The purpose of the program is to reach out to high school students to smooth the transition from high school to college. Early placement testing is a key component of the program. The College Connection program, which includes credit recovery programs, partners with 25 school districts and serves 63 high schools. The program distributes an "Assessment Booster Packet" to participating high schools. The booster packet includes information about the placement testing process, such as examples of the freshman-level college content that students will encounter on the placement test. High school counselors or college and career advisors distribute the assessment booster packet to high school seniors, notify them of the assessment tests they will be required to take should they choose to enroll in a postsecondary institution after graduation, provide information on what the test covers, and provide dates where the assessment can be taken early.

In 2011-2012, Austin Community College administered the Texas Success Initiative assessment to 7,349 high school seniors at least once in their high school careers prior to their graduation in 2012. The next steps depend on the students' scores. High school juniors and seniors whose assessment scores indicate they are college ready can take dual enrollment courses in the subjects for which they have demonstrated readiness. These students' scores exempt them from further testing for college readiness, and the program allows them to have their assessment results reported to colleges and universities other than Austin Community College for free. Students who score on the "bubble," meaning that they are just below the college proficiency standard, are advised on where they need more preparation. And students whose scores indicate that they need developmental education are advised on the developmental education coursework they will need to complete based on their major.

Austin Community College offers bridge programming for students who are assessed early but who do not meet readiness requirements for the students who indicate that they will attend the college. Few high school students take this option. Austin Community College also partners with Austin Partners in Education, an organization that provides tutoring services for students that need remediation.

Austin Community College has just migrated to ACCUPLACER for high school TSI Assessment in place of COMPASS in preparation for the fall 2013 shift to the new Texas TSI Assessment. HB 3468 and SB 162 changes to Texas Success Initiative rules are leading Austin Community College to make significant changes by fall 2013. For example, the college is developing a 30-minute module that all students will have to take

prior to taking the state assessment. This module will meet the intent of the revised Texas Higher Education Coordinating Board rules, which call for pre-assessment activities, including practice tests with feedback of sample test questions in all disciplinary areas and innovative developmental education options, including course-pairing, non-course-based, modular, and other unconventional interventions. The new module will be available for students in high schools as well as students accessing the college through traditional campus-based enrollment.

ALAMO COMMUNITY COLLEGE SYSTEM

Alamo Community College System's College Connections program reaches out to high school students and informs them about the college and the enrollment process. However, Colleges Connections is not a formal early assessment program; rather, it informs students about placement testing as a part of the college admissions process.

In addition to College Connections, Alamo Community College System is implementing MyMap, My Monitoring Academic Progress, a new technology tool that has implications for early assessment. Launched in fall 2012, it is a tool with which all students will interface as they enroll in one of the system's colleges. The MyMap system monitors students' progress from the point the students enter college all the way until they complete their studies and enter the labor market or transfer to a four-year institution. The MyMap college-intake process informs students about importance of placement and provides resources in advance of student enrollment.

Prospective students are required to complete online modules as part of the Apply Texas admission application. Students who are not exempt from being assessed for college readiness must take a module that informs them about the placement test and provides review materials for use before taking the assessment. The module has two purposes. First, it informs students of the importance of the placement tests and encourages them to take the test seriously. Second, it provides an overview of the content the students will encounter on the assessment. This dual strategy attempts to reduce the high-stakes nature of the placement test and improve the odds of improved results by transparency and better preparation. In the future, the system plans to make the placement test module available to high school students.

EL PASO COMMUNITY COLLEGE

El Paso Community College has an early assessment program called PREP, Pre-testing/Re-testing Education Program. A multifaceted program, PREP provides assessment, counseling, advising, and related services that assist students, including high school, GED, and adult education students, enter the college for the first time. The

primary purpose is to inform students about the placement testing process, give them an indication of their readiness for freshman-level college work, and provide interventions to address academic weaknesses so that students avoid or take less developmental education.

PREP's core component is a early placement testing. The PREP informs students about the state law requiring that students be assessed before enrolling in college-level courses. It provides a detailed overview of the ACCUPLACER, the college's placement test, including the time investment, the subject areas, and the scores that students must achieve to avoid developmental education. Pre-testing workshops provide detailed information on expectations for college performance. Workshop participants get examples of the differences between pre-college and college-level content. In math, for example, students see examples that highlight the difference between arithmetic, elementary algebra, and college-level math to demonstrate the performance level students must meet for entry-level college work. The program helps students develop a comprehensive understanding of the consequences in terms of time and money should students not take the testing seriously or do all they can to prepare.

Students who determine they need additional preparation after the PREP workshop have access to pre-assessment services, including a diagnostic assessment and a plan to address each student's unique academic strengths and weaknesses. Students have access to computer-based modules and one-on-one tutoring to bring up their academic skills. The modules take an average of 12 hours to complete. PREP students are encouraged to dedicate a minimum of 9 hours of preparation in math, 6 hours in reading, and 6 hours in writing. Students can re-test after completing the academic catch-up activities. Most of the students who dedicate the recommended amount of time skip at least one level of developmental education.

PREP reports strong results. From fall 2009 to summer 2010, 65 percent of students who participated in the program improved at least one level of developmental math, 65 percent improved at least one level of developmental reading, and 47 percent improved at least one level of developmental writing. PREP now serves roughly 3,000 students.

SOUTH TEXAS COLLEGE

South Texas College's early assessment activities are a byproduct of its long-term dual enrollment and early college strategy. Since the 1990s, South Texas College has made a concerted effort to increase the number and proportion of high school students in the region who take college credit in high school. Dual enrollment has been formally identified as a key strategy to accelerate college readiness. The sustained focus on dual enrollment—and the fact that the college waives tuition and fees for dual enrollment students—has resulted in dramatic increases in the number of high school students

taking dual enrollment. From 98 dual enrollment students in 1997, the college's dual enrollment population increased to 11,000 students in 2012, coming from 52 high schools in 21 school districts. By law, students must show readiness to be eligible for dual enrollment programming. This requires that students take the placement test before graduating from high school.

South Texas College encourages students to participate in dual enrollment through courses, academies, and early colleges. Rising juniors are eligible to enroll in dual-credit courses if they demonstrate college readiness on the tenth-grade TAKS or establish readiness on a TSI-approved assessment. By law, students who meet the criteria are eligible to take up to two courses per semester. Eligible high school juniors who want to earn an Associate's degree from South Texas College can enroll in any of five dual enrollment academies. These are two-year, career-related programs; the student enrolls in the high school during the morning and the college in the afternoon. Dual enrollment academy students can earn an Associate's degree by the end of the senior year of high school. Finally, South Texas College supports 15 early college high schools where high school freshmen who meet eligibility criteria can earn up to two years of college credit or an Associate's degree upon graduation from high school.

To ensure that students are eligible for dual enrollment by the time they are in high school, South Texas College has a robust outreach strategy. Its early assessment efforts begin with outreach to elementary and middle schools to encourage a college-going culture. Outreach programs include College for Kids and Teens and Academic Camps. These partnerships with local districts provide summer programming for students and feature a rigorous curriculum that meets the Texas Knowledge and Skills standards. Some of the students use the opportunity to build the academic foundation that will make them eligible for dual enrollment and early college opportunities upon entry into high school.

South Texas College also partners with the regional university and 32 high schools in 14 school districts to sponsor college connection programming that assists high school seniors with becoming familiar with the college admissions process. As a part of the program, high school seniors get information about placement testing and college readiness.

TEXAS SURVEY RESULTS

JFF sent a brief survey to the state's 50 community colleges to glean the extent to which colleges in Texas assess high school students for college readiness and support.[3] The survey was not designed to characterize the status of early assessment-related activity in the state definitively, given the limited sample, brevity of the survey, and short timeframe provided for responses. However, the results do indicate that many colleges may be supporting elements of such efforts. The state may find it worthwhile to find out more about these efforts and consider how to spread approaches that are deemed promising.

Of the 50 colleges surveyed, 37 (74 percent) responded, representing institutions from all regions of the state except for the High Plains and Southeast. Of all respondents, 23 colleges (62 percent) indicated that they work with school districts to administer college placement exams to high school students. The number of districts with which they partner to administer the tests ranges from 1 to 20 or more, and the number of students reported to take the exams annually ranges from 200 to 5,000.

Of the 23 colleges administering early assessments, 19 provided information about the specific tests they administer: the most frequently used is the ACCUPLACER (17), and others are the THEA (3), the COMPASS (4), and the Asset (3). It appears that the most frequent use of the early assessment is to advise and place students who test at college-ready levels into college courses for dual credit (15). Other uses that more than one college reported were: to use the scores to advise students who do not score as college-ready to take particular courses at their high schools (7); to require or advise students to take a summer bridge program (5); and to require or advise students to participate in developmental education, including college study skills courses (6). Seven colleges reported offering students a special course to help students become college ready by high school graduation. The same number reported providing professional development to high school teachers to support students to become ready for non-developmental college coursework.

In sum, there are indications that a notable number of community colleges in the state are administering early placement assessments—in some cases, to large numbers of students annually—and they use scores primarily for placement into dual-credit experiences. Some, but notably fewer, colleges are engaged in strategies to intervene with students who do not score at college-ready levels.

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[3] The survey was disseminated through the leadership teams from the Developmental Education Initiative, representative of all of the state's community colleges.

STATE APPROACHES

CALIFORNIA

Program Design

In 2004, the California State University (CSU) system partnered with the California Department of Education and the State Board of Education to create the Early Assessment Program. The EAP, a voluntary program for students and schools, includes an assessment component for high school juniors, waivers from future college placement testing and guidance for students based on the results, professional development programs for high school teachers, and the development of secondary school curricula. In 2008, the state legislature authorized the California Community Colleges to voluntarily adopt the EAP as a college placement test and to task staff with carrying out program functions.

Early Assessment

As part of the required California Standards Test that all eleventh-grade public school students take, students may voluntarily answer an additional 15 test items in English and write an essay—all designed by CSU to be indicative of readiness for non-remedial coursework at any CSU campus. Students who are taking Algebra II or a higher-level math course have the option of taking an additional 15 EAP multiple choice test items in math.

The test items, developed for CSU by the Educational Testing Service, are designed to correlate with the cut scores for non-remedial coursework from the placement test administered by CSU campuses statewide. The test items have been evaluated by Achieve, Inc. (2009), which concluded that they test for critical college-ready knowledge and recommended a number of enhancements to further align the items with college-level expectations.

Although the test enables the CSU to determine whether a student is ready for college-level coursework, it is not designed to communicate detailed diagnostic information or to identify skill deficiencies that facilitate specific remedial-course placements or the targeting of interventions.

Levels of student participation on the EAP have steadily increased, growing from 71 percent of juniors taking the English portion in 2006 to 81 percent in 2010. While there has been growth in math participation, the percentages are lower overall because only some students are eligible to participate: 31 percent of juniors participated in 2006,

which rose to 38 percent in 2010 (or over 80 percent of students eligible to take the additional test items). CSU attributes increasing participation to increasing awareness and understanding among students and schools about the potential benefits of the data yielded by the EAP.

Guidance Based on Results

Students can score into one of three categories: Ready for College, Not College Ready, and Conditional. In August before their senior year, students receive a letter from the CSU notifying them of their classification (not the specific score) and given guidance:

- *Ready for College*: If they attend a CSU campus, they will be able to take college-level courses without the need for further placement testing or remediation. They are encouraged to continue taking rigorous courses during senior year.
- *Conditional*: They will be exempt from further remediation and placement testing if they take and pass specified rigorous courses during their senior year, including an optional English Reading and Writing Course developed by CSU and offered by many high schools.
- *Not College Ready*: They should continue to take college preparatory courses (known as the a-g sequence in California, as approved by the University of California), but they will not be able to forgo further placement testing or remediation if they attend CSU. In 2010, CSU created the "Early Start" program for such students. It includes a number of early remediation options, including a pre-freshman summer bridge course, online learning tools, and other regional K-12/postsecondary collaborative efforts. Starting in 2012, students who score in the "Not College Ready" category must avail themselves of these early remediation options before their freshman year at CSU.

Professional Development

CSU's EAP staff designs and conducts professional development for high school teachers whose schools voluntarily participate. The programs are overseen by EAP statewide coordinators and delivered by CSU staff—regional EAP coordinators and other CSU faculty—in conjunction with staff from county offices of education. The training is offered at no cost to schools, save for the resources they need for staff to substitute for the teachers involved in training sessions.

Professional development in English centers on training to teach the CSU-developed English Reading and Writing Course, requiring 20 hours of training for teachers to become certified. The EWRC and associated trainings are reading and writing-intensive,

based on CSU's experience that students in high school English courses are typically not required to have text-based discussions or do rigorous writing required at the college level. Professional development in math typically brings together vertical teams of math teachers from schools (e.g., algebra, geometry, Algebra II) and focuses on cognitively complex problems, the algebraic aspects of geometry, and the common mistakes that students make in college-level math.

Since the program's inception in 2004, over 7,000 teachers have participated in the EWRC training, and over 1,500 teachers have participated in math trainings. The CSU EAP staff consistently cites this aspect of the EAP program to be of great import: creating greater understanding and expectations among high school teachers about what constitutes college-readiness in English and math.

Enabling Authority

SB 946 (2008) authorized California Community Colleges to use EAP test results for assessment and placement purposes beginning in the 2009-2010 academic school year. The legislation established EAP as a voluntary program for CCC participation,

Early Intervention

CSU has created a writing and reading-intensive course known as the English Reading and Writing Course. It is the basis for its English professional development program, and over 560 high schools have adopted the course as part of their curriculum—constituting over 43 percent of comprehensive high schools in the state. The University of California, which approves all high school courses that can be counted as part of the a-g sequence of course requirements for admission into the U.C. or CSU systems, has authorized the CSU to review and approve EWRC courses proposed by high schools. As such, approved courses can be taken by high school seniors as an English elective counting for the a-g, and students whose EAP scores classify them as conditionally ready for college can forgo future placement testing and remediation if they take and pass the EWRC, an AP, or IB English course.

Some schools have begun making EWRC the default twelfth-grade English course, though the CSU encourages schools to make it only one rigorous English course option among others offered to seniors. Elements of EWRC courses have been adapted by some high school teachers for integration into pre-twelfth-grade English courses. Recognizing the need for college preparation to begin as early as possible, CSU has begun to develop English curricula for lower grade levels.

In math, no statewide curriculum development has been conducted through EAP, but some regional coordinators have led local efforts at curriculum development in math,

piloting new college preparatory math courses that can be adopted by high schools, much as the EWRC has been.

Costs and Funding Sources

The major categories of costs associated with the activities funded by the legislatively approved CSU budget include the following:

- Professional Development
  - CSU staff at the Chancellor's office—one focused on math and one on English
  - Activities and materials to design, coordinate, and deliver trainings
  - Course development
- Overall program coordination, outreach to school districts, teachers, and families, and regional delivery of professional development
  - CSU staff member at the Chancellor's Office
  - 23 regional/campus coordinators and activities
- Assessment
  - Scoring and distribution of results to students

In 2010-11, the Chancellor's office reported using $3.9 million in State General Funds for EAP (for regional outreach coordinators), in addition to its own resources to cover other costs (CSU 2011). In 2008, the California legislature authorized California Community Colleges to voluntarily use the EAP in lieu of other placement tests and to support outreach and other associated activities, but it did not authorize any associated funding for CCC. As of 2011, 49 community colleges reportedly used EAP for placement purposes (PACE 2011).

Evidence of Success

Participation on the early assessment items has grown steadily, with nearly 400,000 high school juniors taking the English portion and over 175,000 taking the math portion last year.

Still, more evidence is needed to understand whether EAP achieves its intended outcomes. There are positive signs from early research. A rigorous study conducted in

2009 provided evidence that students who take the additional test items on the EAP are 6.2 percent less likely to require remediation in English upon enrollment in CSU and 4.3 percent less likely to require it in math. However, no conclusions could be drawn about what accounted for this decrease—beyond the act of taking the assessment and receiving results—because no information was available about what students or teachers did after receiving their results.

Other research includes two studies about regional implementation of the EWRC and accompanying professional development. These showed that students completing an EWRC improved their English proficiency and that teachers participating in the trainings demonstrated increased understanding of the skills and knowledge students need to be college ready.

On the other hand, statewide figures reveal no overall increase in the percentage of students scoring at college-ready levels on the EAP and no increases statewide in the number of students requiring remediation upon entering CSU (PACE 2012). A more comprehensive evaluation of the EAP program is underway, supported by an Investing in Innovations Fund (i3) grant from the U.S. Department of Education.

Local Implementation

EAP regional and statewide coordinators report that the steady increases in participation in the EAP and associated interventions among students and schools are due to:

- Increased understanding by students and parents of the value of the information they receive as a result of taking the test;
- Increased awareness among teachers about the gap in expectations between existing curricula and college readiness—the results of the EAP often show that many students who complete a high school curriculum that makes them eligible for admission to CSU and UC are unable to bypass remedial coursework; and
- Understanding by schools that the results of the EAP would be used to support students and teachers and not be used for accountability purposes.

Reported challenges to local implementation include:

- The communication of students' test results comes too late—typically in August—for students or counselors to adjust students' schedules and place them into recommended courses. High school schedules and student selections are typically organized the previous spring and over the summer.
- Regional coordinators often cover a broad geographic area, making challenging the delivery of service to all students and districts in their regions.

- Students and families can be confused by the purposes and uses of the different tests they are required to or can take. For example, while the CSU system uses EAP results for placement purposes, they are not used to determine admission. Also, they may or may not be accepted by local community colleges, and they are not used by the University of California system.

FLORIDA

Early Assessment

With passage of SB1908 in the 2008 legislative session, Florida implemented the Florida College and Career Readiness Initiative (FCCRI), expanding administration of the postsecondary readiness assessment to high school students and providing opportunities for students with deficiencies to receive remediation during the senior year.

In October 2010, the Postsecondary Education Readiness Test replaced the College Placement Test. P.E.R.T is a customized placement exam that is aligned with the Postsecondary Readiness Competencies that Florida's faculty have identified as necessary for success in entry-level college-credit coursework and the state's new K-12 learning standards. P.E.R.T. is used both as a placement tool for all 28 public colleges (for intermediate algebra, MAT 1033, and freshman composition I, ENC 1101) and as an indicator of college readiness for high schools students. 2011 legislation expanded the administration of the placement test to *all* high school students (not just those who are college bound) scoring within specified ranges on the tenth-grade FCAT or new end-of-course exams. The legislation mandates that all students who have not met approved test scores take remedial coursework in the twelfth grade. Students who have met the college-ready cut score on the ACT, SAT, or ACCUPLACER do not have to take the P.E.R.T.

Enabling Authority

Florida Statute 1008.30, Common placement testing for public postsecondary education. http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=1000-1099/1008/Sections/1008.30.html

State Board of Education Rule 6A-10.0315, College Preparatory Testing, Placement and Instruction

Local Implementation

The P.E.R.T., a computer-based testing protocol, has led to technology challenges for some districts that have needed to purchase additional computers and increase Internet bandwidth.

Costs and Funding Sources

The P.E.R.T costs $0.94 per subject-area test, for a total of $2.82 for all three subtests. State funds cover the cost of the test units for eligible students. Districts may choose to purchase additional units that can be used to test other students or to provide retests.

Early Intervention

HB 1255 codified a requirement that Florida high schools use the results of the P.E.R.T. test to advise students who do not test ready for college-level work of any deficiencies, offer appropriate postsecondary preparation instruction, and require students to complete transitional coursework prior to graduation. Florida has developed both one-semester and full-year transitional courses. The course numbers, titles, and descriptions are standard statewide.

“College Success” transitional courses are one-semester, one-half-credit high school elective transitional courses that incorporate the same competencies embedded in the highest level of developmental education courses. Courses in the series include Reading for College Success, Writing for College Success, and Mathematics for College Success. Students who complete these courses while in high school are exempt from further placement testing and postsecondary remediation if they enroll in a community college within two years.

“College Readiness” transitional courses are full-year, one-credit courses that align with entry-level, credit-bearing college courses. Mathematics for College Readiness and English 4: Florida College Prep count as required high school credit in mathematics or English.

Under State Board Rule, the P.E.R.T. serves as the final exam in each of these courses.

Enabling Authority

HB 1255 (2011). http://www.flsenate.gov/Session/Bill/2011/1255/BillText/er/PDF

SB 1908 (2008)

Local Implementation

School districts had little lead-time to adjust master schedules to accommodate the new transitional courses. Staffing posed one of the greatest challenges due to state-mandated class-sizes and the need to provide targeted professional development for teachers of the new curriculum. The Florida Department of Education is working with the Florida Virtual School to make transitional courses available online so they also can be offered as a part of summer school. The mandated remediation courses have drawn complaints from students whose plans to not include postsecondary education and from students who cannot fit electives into their schedules.

Evidence of Success

CNA has been awarded a five-year (2012-2017) Institute for Education Sciences grant to evaluate Florida's College and Career Readiness Initiative. Researchers will evaluate the impact the use of early assessments and intervention on students' college persistence and completion. State officials anticipate re-take scores on the P.E.R.T will be a good indicator of student progress. Anecdotal reports from districts suggest the transitional courses make a difference. The P.E.R.T results are included as a metric of college readiness in Florida's high school grading system.

Resources

English language arts and mathematics courses that may be used for students whose test scores on the P.E.R.T. are below the established cut scores in accordance with 1008.30, F.S.:

- 1200410 Mathematics for College Success (elective, not mathematics graduation credit). http://www.fldoe.org/BII/pdf/1200410.pdf
- 1009370 Writing for College Success (elective). http://www.fldoe.org/BII/pdf/1009370.pdf
- 1008350 Reading for College Success (elective). http://www.fldoe.org/BII/pdf/1008350.pdf

English language arts and mathematics courses approved by the NCAA:

- 1200700 Mathematics for College Readiness (mathematics graduation credit). http://www.fldoe.org/BII/pdf/1200700.pdf
- 1001405 English 4: Florida College Prep (ELA graduation credit). http://www.fldoe.org/BII/pdf/1001405.pdf

KENTUCKY

Early Assessment

SB 1 laid the groundwork for early assessment of college readiness in Kentucky. Beginning with the 2007-08 school year, Kentucky required all eleventh graders to take the ACT college-admissions exam. The state uses ACT's Educational Planning and Assessment System (EPAS), which includes a high school readiness examination in grade 8, a college readiness examination in grade 10, and the ACT college admissions and placement examination in grade 11. The overall ACT assessment in Kentucky consists of tests in English, mathematics, reading, and science. Scores from the assessments are used to measure student achievement, gauge student readiness for transitions, and evaluate school programs.

The Kentucky Council on Postsecondary Education established the college-readiness benchmarks for the subject-area ACT tests, which are administered in spring of the junior year. The benchmarks include: English (18), mathematics general education, statistics, or applied math (19), reading (20), and college algebra (22). The council's benchmarks are used to determine whether a student should be placed in a remedial, noncredit English or mathematics college course.

The Kentucky Department of Education pays for students to take the ACT test and publicly reports the percentages of students at the school level who meet the ACT college-ready benchmarks in English and mathematics in grade 11. The score is recorded on a student's high school transcript and used, along with high school grade point averages, to determine the amount of money high school graduates are eligible to receive through the Kentucky Educational Excellence Scholarship program. Kentucky's Unbridled Learning accountability system includes a college/career-readiness component that holds schools and districts accountable for the percentage of students who are considered ready for college and or careers. The college-ready indicator includes Council on Postsecondary Education benchmarks on any administration of the ACT.

Enabling Authority

Senate Bill 130 (2006) http://www.lrc.ky.gov/record/06rs/sb130.htm

Costs and Funding Sources

The cost of the ACT exam (one-time) is paid with state funds. (Students who retake exam must pay, but students who are eligible for free and/or reduced lunch are not

charged.) In 2012, 44,516 juniors were tested at a cost of $32 per test, which totaled $1.4 million.

Early Intervention

As part of Kentucky's College and Career Readiness Unified Plan, targeted interventions help ensure student success. SB 1, enacted in 2009, mandated the development of a new state assessment and accountability system and also established implementation of several college and career readiness strategies. Transitional courses were developed as a key element of the state's Secondary Intervention Programs strategy to reduce remediation rates of 2010 recent high school graduates by at least 50 percent by 2014—and to increase the college completion rates of students enrolled in one or more remedial classes by 3 percent annually from 2009 to 2014.

Under the statute, high school juniors who fail to meet the ACT benchmarks for entry into a credit-bearing course at a public postsecondary institution without placement in a remedial course or an entry-level course with supplementary academic support "shall be provided the opportunity to participate in accelerated learning designed to address his or her identified academic deficiencies" prior to high school graduation. Students who meet benchmarks are encouraged to accelerate their studies by enrolling in AP or dual enrollment courses in the senior year.

The Kentucky Department of Education and the Council on Postsecondary Education convened statewide teams of secondary and postsecondary educators to assist school districts and high schools in designing and implementing college-readiness courses in mathematics and reading. Transitional courses in science and social studies are slated to be developed after standards are updated in these subject areas. The courses center on a framework of content and concepts aligned with the revised Kentucky Core Academic Standards, and with college-readiness standards.

Districts can adapt the transitional courses to meet the specific needs and conditions in their high schools. Courses may be offered for a full year or a semester, as a before or after-school intervention, as a supplement to another math or English language arts course, or as a course in which students have flexible entry and exit based on pre-assessment scores. For example, transitional math courses can count as a fourth year of math (which is a graduation requirement) or as an elective. Credit decisions are also made at the district level. The Department of Education suggests, but does not require, a post-assessment be administered to show if a student has mastered content before graduation.

Transitional courses are not offered online, but the Department of Education's College and Career Readiness Delivery Plan calls for virtual and off-campus delivery options to be developed by January 2014.

Enabling Authority

Senate Bill 1 (2009) http://www.lrc.ky.gov/record/09RS/SB1.htm

Local Implementation

High School A (1,470 students)

Transitional courses in mathematics and English/reading were piloted in spring 2010. The district administers the computerized Measures of Academic Progress tests in mathematics, reading, and language usage three times a year in grades K-10. MAP is used to assess individual student skill strengths and weaknesses and focus interventions to prepare students for ACT in their junior year.

Mathematics Transitional Course

While the Council on Postsecondary Education requires a 19 ACT math score, this district and many others have set the benchmark to the higher prerequisite for college algebra. Students who fail to meet the ACT math benchmark (22) are grouped into a transitional course based on their scores T-1: 14-15 score; T-2: 16-18 score; T-3: 19-21 score. T-1 course content equates to developmental courses in math, T-2 to beginning algebra, and T-3 to intermediate algebra. Students whose scores are further from benchmark (i.e., T-1 and T-2) must take a full-year transitional course for credit during the regular school day, which begins in the fall semester. The higher scoring T-3 students take a semester-long course, offered in the spring. Starting with the Class of 2012, all students take four years of math in high school. For students who have not met benchmark in this high school, the transitional course counts for the fourth year. School administrators would like to offer T-3 as a full-year course but it is not offerered at this time because of funding constraints. The state mandated the transitional interventions but does not provide additional resources to help cover the costs of designing or implementing the transitional courses. To staff the new classes, the school has reassigned teachers. As a result, fewer sections of Algebra I are offered, which has increased the size of those classes.

All students enrolled in a transitional math course take the KYOTE College Readiness and/or KYOTE Algebra exam (online testing program) three times, including at the end of the course. Placement in college credit-bearing courses is guaranteed to students who score well on KYOTE or COMPASS.

English/Reading Transitional Course

Students who fail to meet benchmark at any level in either English or reading are enrolled in a combined English/reading transitional course. School administrators say they are still "working the kinks out" of this course. They contemplate adding a second course to better meet the needs at students who score further from benchmark and find it difficult to keep up with the more intensive writing exercises.

High School B (840 students)

In addition to the computerized Measures of Academic Progress, this district also uses the KYOTE practice tests as a diagnostic tool to adjust instruction to student needs. ACT boot camps are also held to prepare students for the test.

Transitional Mathematics Course

School Administrators say they have made some adjustments to the Department of Education's sample transitional math curriculum. However, unlike school A, they do not have sufficient students to group by proficiency levels. All students are enrolled in one math course, which includes more contextual learning than a traditional Algebra I course but also provides test prep skill building. The school has found that many students who fail to meet math benchmarks have difficulty reading problems, budgeting their time, and using loaned calculators.

While the district permits the transitional math class to substitute for the fourth-year mathematics graduation requirement, students enrolled in some of the schools' career clusters (e.g., business and marketing; construction; manufacturing; health sciences) who fail to meet the ACT benchmark must take a "double dose" of math in twelfth grade. These clusters have a prescribed math requirement for graduation. However, students who meet benchmark are encouraged to take AP math or a credit-bearing math course at a nearby college. The college partner waives tuition for two dual-credit courses each semester.

Transitional English Course

While the Department of Education developed both English and reading courses, this district opted for a course that melds the two domains in a new Senior Transitional English course. District administrators found most students who fail to meet the ACT reading benchmark also came up short on the English benchmark. They believe this skill deficit also contributes to low scores in math. The course focuses on reading, but the entire 9-12 English curriculum is being adjusted to include more emphasis on non-fiction.

Using Title I funds, and a sub-grant from a Social Innovation Fund that required a local match, the district pays teachers a stipend to develop curricula during the summer months. Resources also have been used to hire substitute teachers to cover classes while classroom teachers undergo professional development to learn how to use data more effectively to assess curriculum and programming weaknesses.

Evidence of Success

Department of Education program staff characterize the Commonwealth's College and Career Delivery Plan, which was developed under the comprehensive SB1 legislation, as a "game-changer." They say all districts now focus on not just getting kids to graduate with a diploma but preparing them to be college/career ready by graduation. Kentucky has shown improvement in all ACT tested subject areas, and 3,000 more graduates enrolled in college after high school.

Only limited evidence is available about the role transitional courses play in better preparing students to meet college ready benchmarks. The state does not collect data on student participation rates or outcomes, but it has the ability to monitor student progress through its College and Career Readiness Feedback Reports. Because the delivery of interventions differs from district to district, it will be difficult for the state to track and assess the efficacy of the various course models.

During the 2009-10 academic year, six high schools piloted the Math Transitions Program, using curricula developed by a mathematics team at Eastern Kentucky University. According to a report issued by the Kentucky Council on Postsecondary Education, 84 percent of the participating students demonstrated readiness for a college credit-bearing mathematics course, with 64 percent demonstrating readiness for college algebra. EKU estimated a savings of approximately $284,000 in tuition costs associated with the developmental math coursework that is no longer necessary for these students to achieve college readiness in math.

High school administrators interviewed for this report believe the ACT assessment and transitional course interventions are already bearing fruit. High School A found the percentage of students who met ACT math benchmarks after taking the transitional course had risen 16 percent in one year. "I believe that teachers' ability to understand the skill set required for student success on the ACT played a major role," commented one assistant principal. "Once they understood the expectations, teachers were able to implement Quality Core instruction into their daily classroom instruction and design ACT like assessments to better prepare students."

High School B reported even more dramatic results. In spring 2011, only 3 percent of juniors met the math benchmarks on the ACT, but by the time students graduated a year later, 64 percent met it.

Resources

Reading Transitional Course Curriculum Framework. http://www.education.ky.gov/NR/rdonlyres/0D53F123-62D5-431F-9897-E57605DE21C7/0/ReadingTransitionCourseFinal8910.pdf

English Transitional Course Curriculum Framework. http://www.education.ky.gov/NR/rdonlyres/A719BC67-D78A-46C5-8FEA-2FE927B8675F/0/EnglishTransitionCoursefinal.pdf

Mathematics Transition Course Curriculum Framework. http://www.education.ky.gov/NR/rdonlyres/525ACB21-507C-4501-96D8-E223ED3FAA24/0/Mathematics_Transition_Course_Final5_18.pdf

Transitional Interventions FAQ. http://www.education.ky.gov/NR/rdonlyres/4FF7D569-FF0D-437F-9F63-93958332754E/0/TCAdministratorTraining.pdf

Transitional Course PowerPoint for Administrators. http://www.education.ky.gov/NR/rdonlyres/712944A3-BD7B-4017-8F9B-459D2FB49FE1/0/TCAdministratorTraining.pdf

Considerations for Policymakers

Kentucky Department of Education staff credit the enabling legislation with helping to create the mutual responsibility of K-12 and the postsecondary systems and institutions for establishing college-ready standards and benchmarks. Though the changes received widespread support and media attention, school officials found many parents were unfamiliar with the new assessments and interventions. Concerns were raised about why remediation was necessary, as were objections to their students being pulled from courses that interest them to be placed in intervention courses. While the state has recommended a modular course delivery approach, school schedules, capacity issues, and seat-time requirements often make it difficult to provide students who can demonstrate proficiency before the course ends with accelerated options mid-semester or mid-year.

VIRGINIA

Initiative Description

Through its participation in the Southern Region Education Board's *College and Career Readiness Initiative,* Virginia began developing senior-year elective capstone courses. The English language arts and mathematics transitional capstone courses contain "high interest contextualized content" and target students who have completed the necessary coursework and passed English III and either Algebra II or Algebra Functions and Data Analysis assessments but are not at a high enough level to ensure success in credit-bearing college courses. The courses are designed to help students master the state's College and Career Ready performance expectations before leaving high school. Capstone courses may also be used to support students who plan to enter the workforce directly after high school.

Enabling Authority

In 2009 and 2010, the Virginia State Board of Education adopted revised learning standards in English and mathematics, including the provision of senior-year transitional courses (capstone courses).

Local Implementation

The National Center on Postsecondary Research has conducted a case study on the development and implementation of Virginia's capstone courses. When published, it will provide the field with valuable information about this intervention.

Resources

Grade 12 English Capstone Course Content and Performance Expectations. http://www.doe.virginia.gov/instruction/college_career_readiness/resources/english_capstone_course_content.pdf

Grade 12 Math Capstone Course Content and Performance Expectations. http://www.doe.virginia.gov/instruction/mathematics/capstone_course/math_capstone_course_description.pdf

College and Career Readiness in Virginia PPT. http://google.virginiainteractive.org/doesearch.html?cx=006541648125353085856%3A6duzyvbxzv8&cof=FORID%3A10&ie=UTF-8&sa=Search&q=capstone%20co

APPENDIX

Alamo Community College System

Lisa Alcorta
Director of Developmental Education
and Academic Success
Alamo Colleges
201 West Sheridan
San Antonio, TX 78204
210.485.0178

Austin Community College

Melissa Richardson Curtis, PhD
Director, College Connection
Austin Community College
512.223.7088 or 223.7084
www.austincc.edu/collegeconnection

El Paso Community College

Irma Camacho
Director of Student Success
El Paso Community College
Phone: 915.831.2848
Fax: 915.831.3387

Houston Community College System

Charles Cook
Vice Chancellor for Instruction
Houston Community College
3100 Main Street
Houston, TX 77002
713.718.5040
charles.cook@hccs.edu

San Jacinto College

Rebecca Goosen, EdD
Associate Vice Chancellor for College
Preparatory
NADE President
San Jacinto College
4624 Fairmont Parkway, Suite 203
Pasadena, TX 77504-3398
Office: 281.459.7667
Fax: 281.459.7627
rebecca.goosen@sjcd.edu

Pamela S. Campbell
Assistant Vice Chancellor for
Educational Partnerships
San Jacinto College
4624 Fairmont Parkway, Suite 203
Pasadena, TX 77504
281.991.2672
pamela.campbell@sjcd.edu

South Texas College

Kim McKay
Interim Dean of Enrollment Services
South Texas College
Office: 956.872.2096
Fax: 956.872.8340
kjmckay@southtexascollege.edu
www.southtexascollege.edu

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