TURNING COMMUNITY COLLEGE DROP-OUTS INTO GRADUATES

Texas community colleges have a high dropout rate, which limits economic opportunity for Texans and poses a major barrier to building and sustaining a skilled workforce. At the current dropout rate, Texas will have a shortfall of 54,000 bachelor and associate degrees by 2015.¹

Although two-thirds of Texas college-bound high school graduates are prepared for college work, a large number of recent graduates and adults returning to pursue higher education are not college ready. Those underprepared for college face the hurdle of completing remedial courses—known as developmental education—in one or all core subject areas of math, reading, and writing—before enrolling in credit-bearing coursework. Nationally, fewer than 40 percent of students who are referred to developmental education actually enroll in college-level courses.² In Texas, approximately half of underprepared students do not return to school after the first year of college and never complete college-level coursework.³

With emerging demand for higher-skilled workers, developmental education reforms are key to maximizing access to good jobs and moving the Texas economy forward.⁴ This policy page discusses the challenges Texas faces in achieving greater postsecondary completion at community and technical colleges and outlines the key components to improve our developmental education system to meet those goals.

Developmental Education: The Basics

Developmental education is a set of remedial courses in basic academic disciplines such as math, reading, and writing. Institutions of higher education, including four-year universities and two-year community colleges, offer developmental education courses, as well as counseling, advising, and tutoring for students who need additional preparation before beginning college-level coursework. Most academic institutions routinely assess students before enrollment to determine their skill level and whether or not developmental education courses are necessary before beginning college-level coursework. With the highest concentration of underprepared students, community colleges do the bulk of developmental education work to prepare students to succeed in college-level courses.

The developmental education population is represented by both “traditional” students—recent high school graduates—and “nontraditional students”—working adults returning to pursue an academic degree, certificate, or career pathway.

GLOSSARY

Cohort: Refers to the class of first-time college students in a particular year.
Underprepared Students: First-time college students who are not prepared for college-level coursework based on the Texas Success Initiative (TSI) standards.
Prepared or “College-Ready” Students: Refers to students who are prepared for college-level coursework based on TSI standards.
Persistence Rates: The time a student remains in college.
College Completion: Students who graduate with a postsecondary certificate or diploma are considered to have achieved college completion.
Two-Year Institution: Texas two-year institutions include both community and technical colleges.
The Texas Success Initiative (TSI), embodied in Texas Education Code Section 51.3062, authorizes public institutions of higher education to assess entering college students to determine their level of preparedness for college-level coursework. Under TSI standards, colleges can administer one of various state-approved assessment tests, including the Texas Higher Education Assessment (THEA), COMPASS, ASSET, or ACCUPLACER. Students who do not pass the assessment test are typically required to enroll in their school’s developmental education program before enrolling in college-level coursework.

TSI allows colleges to develop their own developmental education sequences and as a result, many students across the state encounter varying types of developmental education programs, including short courses, regular 16-week courses, and tutoring, among others. The broad spectrum of developmental education strategies makes it difficult to assess the effectiveness of these programs across the state.

**Are Texas Students Ready for College?**

**College Readiness of Texas High School Graduates: 2006-07**

Although many institutions of higher education are faced with a growing number of underprepared students, recent statewide data of the graduating high school class of 2006-07 indicate that two-thirds (66.6 percent) of graduates who enroll in Texas public colleges meet TSI standards in all three subject areas. As the graph below demonstrates, those with the highest preparedness rate were Asians, Whites, and Native Americans, while African Americans and Hispanics had a lower rate of just around half of students prepared for postsecondary coursework.

**Underprepared Texas College Students Concentrated at Two-Year Institutions**

Despite evidence that recent high school graduates appear college-ready based on TSI standards, almost 50 percent of first-time students at two- and four-year colleges—or nearly 80,000—are underprepared in at least one of the core academic areas: math, reading, and writing. The majority of underprepared college students are concentrated in two-year institutions, leaving community colleges and technical schools with the primary task of bringing a greater share of Texas students up to college readiness standards. Of the 2007 cohort of entering college freshmen, only 35.8 percent of students at community colleges and technical schools were college ready compared to 80.1 percent at four-year institutions.

**A Snapshot of Developmental Education Trends at Texas Two-Year Colleges**

- Just over one in 10 first-year Texas community college students are underprepared for college-level coursework in all three academic areas of math, reading, and writing.

- More than half of Texas first-time community college students are underprepared for college-level coursework in at least one of the core academic areas of math, reading, and writing.

- 80 percent of the first-time college students underprepared in math attempt developmental education courses after three years. Of those who attempted developmental education, nearly 33 percent successfully completed their series.

- Fewer than 20 percent of first-time students underprepared in math attempt college-level coursework after three years.

- Underprepared students who attempt college-level coursework eventually meet or exceed the performance of their peers who were college ready when they began their postsecondary education.

Source: CPPP Analysis of Texas Higher Education Coordinating Board Developmental Education Accountability Measures Data: Community Colleges Statewide Totals, 2005 cohort of first-time community college students.

*67 percent of Texas first-time college students were classified as either underprepared or unknown in 2007. We estimate that more than half of all enrolled first-time college students are underprepared in at least one subject.
Race/Ethnicity of Developmental Education Students: Data from the 2008 cohort of first-time college students at two-year institutions indicate considerable disparities across racial and ethnic groups. As the graphic at middle right demonstrates, nearly three in four African American and over half of Hispanic students are deemed underprepared. 

The Age Factor: The most recent data available from the fall 2003 cohort of first-time community college students indicate that recent high school graduates are more likely to be college ready than older adults returning to pursue a postsecondary degree. Of those under 18 at two-year institutions, 70 percent were college-ready, while only 33 percent of adults age 18 to 21 were prepared. For adults 22 and older, the outcomes were similar, with 65 percent of 22 to 24 year-olds and 60 percent of adults over 24 referred to developmental education. 

Math Poses Greatest Barrier for Texas Community College Students

First-time Texas college students are overwhelmingly underprepared in math compared to the other core subject areas. In 2007, 41 percent of community college freshmen were underprepared in math. A smaller share of Texas college students are ill-prepared in all three subject areas with 11.6 percent of community college students falling below TSI standards. 

As indicated by the graph below, the high share of underprepared college students has remained constant over the past five years. Texas institutions of higher education, especially two-year colleges, are seeing the same lack of preparation in the entering freshmen population year after year.
Most Community College Students Leave Without a Degree or Credential

Six-Year College Graduation Rates at Texas Two-Year Colleges: Fall 2001 Cohort

The low persistence and completion rates for students entering two-year colleges is alarming. Of the more than 54,000 first-time community college students in 2001, just a third of students completed college within six years with either a baccalaureate degree (15 percent) or postsecondary certificate (16 percent), while 57 percent (31,098) did not graduate and were not enrolled by the fall of 2007.12

Underprepared Students Less Likely to Obtain Postsecondary Credentials

Developmental education students at community colleges are less likely than prepared students to complete their postsecondary degrees. As the chart below demonstrates, the three-year graduation rate of prepared students at two-year colleges was more than twice the rate of underprepared students. Overall, only one in five underprepared students in Texas earns a postsecondary certificate or degree within six years, compared to nearly half of all prepared students.13

Roadblocks to Postsecondary Completion

Time commitment for remedial coursework: Students entering college underprepared in math, reading, or writing meet barriers to moving forward when faced with the prospect of one or more years of developmental education before beginning college-level work. The delay in beginning for-credit coursework often requires an additional year or more for some students, resulting in time away from family and work, as well as the depletion of financial aid, all without contributing to degree requirements. As a result,

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Underprepared Students at Two-Year Institutions Less Likely to Graduate After Three Years

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<td>17.0%</td>
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Source: CPPP Analysis, Texas Higher Education Coordinating Board, Fall 2005 Cohort

THE UNITED STATES IS FALLING BEHIND ON POSTSECONDARY COMPLETION

Americans increasingly drop out of college and often fall short of attaining a college degree or certificate due to many barriers, including cost, lack of student supports, and not being ready for college-level coursework in math, reading, or writing. As a result, the United States has fallen behind other developed nations in postsecondary attainment, slipping from a rank of 1st to 12th, leaving the nation’s young population between 18 and 24 less well educated than older adults age 25 to 65. At current educational attainment levels, the United States is on a trajectory of falling 16 million degrees short of the 65 million needed to meet industry needs and to keep up with other industrial nations by 2025.


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More than Half of Two-Year Community College Students Did Not Graduate After Six Years

- Enrolled in College Fall 2007 12%
- Associate Degree or Certification 16%
- Baccalaureate or Above 15%
- Did Not Graduate 57%

Source: CPPP Analysis, Texas Higher Education Coordinating Board, Fall 2001 Cohort
underprepared students are less likely to persist in college and attain a postsecondary certificate or degree. Even as current and emerging industries require postsecondary certificates or two-year associate degrees, many students, as indicated by lower graduation rates, fail to achieve these intermediate goals that could put them on a path to higher-skilled and higher-paying work.

As the chart at right demonstrates, students failing to meet TSI standards in all three subject areas were the least likely to return to college after one year, with fewer than half returning for a second year at community colleges, compared to just over one-third of students at four-year institutions returning after their first year of college.\(^\text{14}\)

The three-year persistence rates for underprepared college students at two-year institutions was just over 10 percentage points lower than the rate for prepared students entering in the fall 2005, indicating that persistence rates decline the longer a student must take remedial coursework.\(^\text{15}\)

**Self-supporting college students**: Self-supporting college students experience greater hurdles to covering the cost of attendance as tuition rises. In fact, students report that the primary reason they drop out of college is because of the stresses of working and going to school as they support themselves through college.\(^\text{16}\) In Texas, one-half of public college students live independently of their parents, and one in four are parents themselves.\(^\text{17}\) The need to work makes college completion less likely. Approximately one-third of Texas students who worked between 15 and 34 hours and half of students who worked more than 35 hours per week, did not obtain a postsecondary degree or certificate within six years.\(^\text{18}\) This problem is more prevalent at public two-year institutions where more than half of Texas undergraduates are enrolled.\(^\text{19}\)

**Rising cost of tuition and fees**: The growing cost of tuition and fees, coupled with the expense of room and board, present additional barriers for today’s college students. Texas college students have experienced a continued increase in tuition and fees since 2002. As the table to the right indicates, college students are paying an average of 74 percent more at four-year institutions and 50 percent more at community colleges. These increasing costs pose a barrier both for those who must undertake developmental education courses, as well as those students hoping to transfer to a four-year university to complete a baccalaureate degree.

**Inadequacy of Texas Financial Aid and College Savings Programs**: Texas college students lack adequate access to financial aid to cover the rising costs of attendance. Lack of access
to financial aid is especially challenging for community college students who accounted for approximately 60 percent of all Texas college freshmen in 2007, when only 12 percent of TEXAS Grant funds went to community college students. In 2007, the TEXAS Grant program reached just over half (51 percent) of all eligible students due to inadequate funding levels. Only 4 percent of eligible students received support from the Texas Educational Opportunity Grant (TEOG).

Additionally, many low-income students enter postsecondary education with no college savings accounts as access to these savings vehicles remains limited for households under $50,000. Texas students, regardless of receiving aid, continue to have unmet needs as the cost of college attendance has risen. Nearly half of Texas students have unmet need after considering the estimated family contribution and all sources of financial aid. Two-year college students had an average of $3,580 in annual unmet need, while four-year college students had $4,394 in unmet need.

Looking Under the Hood: Developmental Education in Texas

Student Performance at Texas Two-Year Institutions: Enrollment, Persistence & Completion

A large fraction of developmental education students at two-year institutions are not meeting college readiness standards after three years of remedial coursework. As the graph indicates at top right, those underprepared in math are less likely to achieve college readiness through developmental education (32.7 percent) than those needing remedial coursework in reading (51.3 percent) and writing (48.5 percent).

Despite the high number of college dropouts among underprepared students and low achievement in meeting college readiness, those who persist in developmental education show signs of improvement, not only in their ability to meet TSI standards, but also in their ability to complete college-level courses. An analysis of the 2005 cohort of first-time community college students, as shown in the chart at bottom right, demonstrates that two years of developmental education results in the doubling of the number of students who meet TSI obligations. Due to increased exposure in classroom instruction, 16.4 percent more students continue to improve into their third year of developmental education.

Of the 2005 cohort of students tracked over a three-year period, as indicated by the graphs to the right, those below TSI standards were less likely to attempt college-level courses than their college-
ready peers, but were more likely to successfully complete college-level coursework.

Overall, the data indicate that the likelihood of success for underprepared students increases for students who persist in developmental education and eventually enroll in college-level coursework. Although nearly 30 percent of developmental education students who attempt college-level courses still do not pass, the vast majority are succeeding. While reforms to developmental education design are important, Texas must address the problem that too few underprepared students make it through the barriers imposed by time-intensive remedial coursework, the rising cost of college attendance, inadequacy of financial aid, and inaccessible college savings programs. As a result of these barriers, the drop-out rate at two-year institutions leaves Texas with too few workers with in-demand skills, thereby harming the state’s ability to remain competitive in the global economy.

What’s Happening in Developmental Education Innovation in Texas?

Achieving the Dream: Community College Counts
To address the issues facing community colleges and their developmental education programs, a national initiative known as Achieving the Dream has launched efforts in states, including Texas, to promote postsecondary completion at two-year colleges. Since 2004, the initiative has engaged 22 states and 100 participating institutions to improve data collection and analysis at community colleges to better inform public policy and assess the effectiveness of developmental education programs. The initiative, focused on student success, aims to improve student persistence and degree completion rates, particularly for students of color and low-income students. The Achieving the Dream initiative primarily assists colleges with building a system to gather, analyze and use research data to better guide public policy and internal decision making to improve student outcomes. Other policy areas adopted across Achieving the Dream states include:

- Strategies to prevent the need for developmental education;
- Reforming the assessment protocols to ensure students are properly placed in developmental education;
- Implementation of new and innovative programs to identify successful approaches in developmental education.24
Achieving the Dream in Texas

In Texas, twenty-five community colleges currently participate in the Achieving the Dream initiative. Each of these Texas colleges has set their goals and developed activities to increase college success through improved developmental education programs, incorporating new learning strategies, and improving data collection to better evaluate the effectiveness of programs to meet student needs. To see detailed information on the Texas Achieving the Dream Community Colleges, http://www.achievingthedream.org/ABOUTATD/COLLEGEPROFILES/default.tp#.texa.

Testing What Works: 2010-11 Demonstration Projects

The Texas Higher Education Coordinating Board has launched the 2010-2011 demonstration projects for four institutions of higher education to make structural and curricular changes in their developmental education programs. Key components of the program include:

- Total funding of $5 million over two years. Grant awards range from $500,000 to $750,000 per year.
- Grant recipients will develop innovative developmental education strategies with the goal of increasing persistence and completion rates of underprepared students. The final product will be a comprehensive developmental education model for use statewide.
- Programs will be crafted to offer multiple developmental education tracks and curricula that target the core areas of deficiencies for each student rather than requiring all students scoring below TSI standards to take a full course or sequence of courses. This approach allows for students to be measured on an individual basis and assigned the appropriate course of remedial work necessary to prepare them for college-level coursework.

Bill & Melinda Gates Foundation: Developmental Education Initiative

The Bill & Melinda Gates Foundation launched a $16.5 million project in 2009 to administer grants to 15 community colleges across the country to improve their developmental education programs with the goal of increasing college completion rates. Texas received $3.3 million for four Texas community colleges to incorporate performance-based incentives, develop better data tracking and reporting systems, align remedial and college entrance and exit standards, improve remedial math programs, and to ensure that programs align with student career goals.

A MODEL APPROACH TO DEVELOPMENTAL EDUCATION: AMARILLO COLLEGE

Amarillo College has an award-winning developmental education program that has been recognized by the National Association for Developmental Education (NADE) as a distinguished-level institution in developmental math, reading, and writing, making it one of only two colleges in the nation to achieve this level of recognition in all of its developmental coursework programs. Other recognitions include the 2009 NADE John Champaign Memorial Award and a 2009 Star Award from the Texas Higher Education Coordinating Board for its outstanding developmental mathematics program and its Mathematics Outreach Center, respectively. Also, the college received the Texas Association for Developmental Education (TADe) Best Program Award for 2009.

The college's developmental education program addresses the needs of each student while providing a broad set of program components for each subject area, including the Access Learning Center that provides individualized attention for students in need of more flexible instruction. With a strong success rate in transitioning students from developmental education to college-level coursework, Amarillo College has leveraged its strong institutional support and a highly trained staff to advance struggling students toward meeting or exceeding the performance of other students who were college-ready when they first entered college.

Amarillo's program uses data and research to identify best practices and improve delivery of developmental coursework resulting in adjustments to its math curriculum and the introduction of study skills instruction. The college provides seven options for underprepared students to complete developmental education requirements, including:

- Face-to-face structured courses;
- Access Learning Center Basic Academic Skills Courses;
- On-line classes;
- Participation in learning communities;
- Fast-track classes;
- Access to the Mathematics Outreach Center and Testing Lab; and
- The Reading Center.

All programs offer flexible scheduling, including open doors to the various learning centers and labs for 60-plus hours per week.
Conclusion

With nearly half of all first-time college students not college ready in at least one of the core academic areas of math, reading, and writing, Texas colleges face many challenges with bringing students up to college readiness standards.

Overall, developmental education data demonstrate that students who persist in their sequence of coursework eventually meet or exceed their college-ready peers in successfully completing college-level courses. With evidence that students are succeeding in the developmental education system, additional reforms to the system are the key to ensuring that Texas colleges—especially Texas community colleges with the largest share of underprepared college students—can successfully prepare students based on their individual needs rather than through a one-size-fits-all approach.

As many students are deterred from attempting developmental education because of the time and cost, new developmental education approaches can help colleges target specific student needs without requiring lengthy coursework and losing students due to the burden of repeating basic courses without contributing to their degree completion.

Increasing persistence rates among developmental education students and promoting greater college success through degree completion will help Texas increase economic opportunities for college students and will give Texas the competitive edge of being able to fill the “degree gap” and make progress towards a higher skilled and relevant workforce.

Improving Texas’ Developmental Education System: A Checklist for Policymakers

• Pursue reforms to developmental education policies, including adoption of a single assessment mechanism to best address the academic skills gaps among college freshmen
• Improve the higher education data collection system to better track performance indicators and demographic data for developmental education students
• Address the adequacy of financial aid at community colleges overall
• Assess the inadequacy of state funding for developmental education programs at community colleges
• Address student support services to better accommodate college students while they pursue their higher education

THE WORKING POOR FAMILIES PROJECT AND DEVELOPMENTAL EDUCATION

The Working Poor Families Project (WPFP) supports state nonprofit organizations in their work to build greater economic security among low-income workers. As a part of WPFP’s larger effort to increase the economic opportunities for working poor families, the project has launched a multi-state initiative to improve state developmental education policies. These efforts aim to build stronger developmental education systems to ensure that student persistence rates, skill development, and overall postsecondary completion rates are increased. For a detailed analysis of the WPFP’s recommendations for states, see their full report “Improving Student Success By Strengthening Developmental Education In Community Colleges: The Role of State Policy.”

CPPP thanks the Working Poor Families Project for supporting our research.
Endnotes


3 Texas Higher Education Coordinating Board (THECB), Developmental Education Accountability Measures Data, 2007. Note: This figure refers to students who come to college underprepared in all three subject areas. According to the THECB, only 48.6 percent of underprepared students in all three subject areas return after the first year of college. For those students underprepared in one or two areas, the persistence rate is slightly higher at 55.1 percent for those underprepared in math, 58.4 percent for those underprepared in reading, and 58.8 percent for those prepared in writing. It is important to note that these are not unduplicated counts for those who are underprepared in one or two subject areas; therefore, it is likely that the persistence rates for these groups are slightly lower than presented here.


7 THECB Developmental Education Accountability Measures Data: Community Colleges Statewide Totals, 2007.

8 THECB, 2008.


10 THECB, Developmental Education Accountability Measures Data: 2007. This figure includes all Texas two-year institutions, including community and technical colleges.

11 Ibid.


13 THECB, 2009.


16 Johnson, Jean and Rochkind, Jon “With Their Whole Lives Ahead of Them,” A Public Agenda Report for the Bill & Melinda Gates Foundation,


18 Ibid, Section 7, p. 69.

19 THECB, Enrollment, Statewide Longitudinal Data, 2008. Note: The total percentage is derived from public two- and four-year institutions only.

20 THECB, Accountability Measures, 2007; and Legislative Budget Board (LBB), Texas State Government Effectiveness and Efficiency Report, “Increase the Student Transfer Rate from Two-Year to Four-Year Institutions of Higher Education,” January 2009. Note: The total percentage of college freshmen at Texas public community colleges is based on THECB 2007 accountability measures data.


22 TG, p.65.

23 Ibid, p.65.

