

meaningful
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EXPLORE[®]

for your district

COLLEGE READINESS PROGRAM FOR 8TH GRADERS

The right choice for TEA's College Preparation Program

PROGRAM FEATURES

- Curriculum-based assessment that measures the knowledge and skills critical to college and career readiness
- Tests in English, math, reading, and science—just like the ACT
- Career interest inventory and exploration components give students personalized career information as part of a comprehensive profile
- Provides diagnostic student-level item analysis

BENEFITS FOR SCHOOLS AND DISTRICTS

- Aligns with Texas State Standards and the Texas College Readiness Standards
- Connects assessment results to instruction, curriculum evaluation, effective guidance, and student success
- Correlates with increases in college enrollment, persistence, and success
- Provides state, district, school, and student-level reports, with quick turnaround time that allows for monitoring of individual and group performance over time
- Increased opportunities for minority, middle, and low income students
- Promotes educational and career planning
- When used with PLAN and the ACT, enhances the value of the assessment by providing the first data point for analysis of changes when students move from grade 8 to grade 10 and from grade 10 to grade 11

BENEFITS FOR STUDENTS

- Helps increase student achievement for college or career
- Increases a student's likelihood of going to college
- Includes a career planning component that helps students identify career areas that align with their interests and engages students in planning for their future
- Includes *Using Your EXPLORE Results* that explains to students what their scores mean and how to use them

Since 1992, 8th grade students have benefited from testing with **EXPLORE**.

Ten states have implemented **EXPLORE** for testing statewide, and more than one million students test nationwide each year.

STATEWIDE TESTING HISTORY

ACT is the only not-for-profit company to administer statewide college preparation assessments in multiple states (14) over the span of two decades. In addition, numerous Texas districts have adopted all or part of ACT's College and Career Readiness System with proven results.

POWERFUL PREDICTOR

Empirically derived College Readiness Benchmarks developed to monitor whether students are on target to be ready for college and career.

MORE INFORMATION

Additional benefits of district administration can be found at:
www.act.org/aap/texas

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www.act.org/aap/texas



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PLAN[®]

for your district

COLLEGE AND CAREER READINESS PROGRAM FOR 10TH GRADERS

The right choice for TEA's College Preparation Program

PROGRAM FEATURES

- Curriculum-based assessment that measures the knowledge and skills critical to college and career readiness
- Tests in English, math, reading, and science—just like the ACT
- Provides diagnostic student-level item analysis
- PLAN scores enable 10th grade students to measure their readiness to succeed in AP courses, defined as a score of 3 or higher on an AP exam

BENEFITS FOR SCHOOLS AND DISTRICTS

- Aligns with Texas State Standards and the Texas College Readiness Standards
- Connects assessment results to instruction, curriculum evaluation, effective guidance, and student success
- Correlates with increases in college enrollment, persistence, and success
- Provides state, district, school, and student-level reports, with quick turnaround time that allows for monitoring of individual and group performance over time
- Increased opportunities for minority, middle, and low income students
- Promotes educational and career planning
- When used with EXPLORE and the ACT, enhances the value of the assessment by providing the second data point for analysis of changes when students move from grade 8 to grade 10 and from grade 10 to grade 11

BENEFITS FOR STUDENTS

- Helps increase student achievement for college or career
- Increases a student's likelihood of going to college
- Includes a career planning component that helps students identify career areas that align with their interests and engages students in planning their future
- Includes *Using Your PLAN Results* that explains to students what their scores mean and how to use them
- Provides prediction towards current and future ACT scores

Since 1987, 10th grade students have benefited from testing with PLAN.

Ten states have implemented PLAN for testing statewide, and more than one million students test nationwide each year.

STATEWIDE TESTING HISTORY

ACT is the only not-for-profit company to administer statewide college preparation assessments in multiple states (14) over the span of two decades. In addition, numerous Texas districts have adopted all or part of ACT's College and Career Readiness System with proven results.

POWERFUL PREDICTOR

Empirically derived College Readiness Benchmarks developed to monitor whether students are on target for college and career.

MORE INFORMATION

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www.act.org/aap/texas



Examining Student College Readiness, Achievement, Retention, and Success in Texas

*Ongoing
Longitudinal Research:
Texas and ACT College
Success Research Consortium
of Colleges and Universities*

Dr. Julie Noble
ACT Research Services
Iowa City, IA

Chuck Wharton
ACT Southwest Region
Austin, TX

Sue Wheeler
ACT Southwest Region
Austin, TX

*February 2008 –
February 2009*

ACT[®]



Texas-ACT College Success Research Consortium

Executive Summary of Research to Date

ACT has led the nation in a campaign to ensure that ALL students are ready for college and career after high school. In 2005, ACT released the “*What are ACT College Readiness Benchmarks?*” issue brief in an effort to assist educators at secondary and postsecondary institutions with identifying students who are prepared for first-year college coursework. The ACT Benchmarks are minimum scores on the ACT® English, Mathematics, Reading, and Science Tests that reflect at least a 50 percent chance of achieving a B or higher grade, or at least a 75 percent chance of a C or higher grade, in entry-level, credit-bearing English Composition, College Algebra, social sciences courses, and Biology.

“ACT research demonstrates that, compared to students who do not meet the ACT Benchmarks, students who met the Benchmarks are more likely to:

- persist to the second year at the same institution,
- achieve a grade of B or higher in first-year college courses,
- achieve a first-year college grade point average of 2.5 or higher,
- progress toward a college degree,
- complete a college degree.”

(ACT’s College Readiness System—Meeting the Challenge of a Changing World, 2008)

ACT’s College Readiness Benchmarks

College Course or Course Area	Test	EXPLORE® Score (8th grade)	PLAN® Score (10th grade)	ACT Score	COMPASS™ Score
English Composition	English	13	15	18	77
Social Sciences	Reading	15	17	21	88
College Algebra	Mathematics	17	19	22	52
Biology	Science	20	21	24	n/a*

*COMPASS does not have a science test.

Purpose of the Consortium:

The purpose of the research Consortium is to study pre-college college readiness indicators (e.g., ACT scores, College Readiness Benchmarks, high school preparation) associated with successful college outcomes such as *persistence over time, grade point average over time, and degree success*. In addition, research was conducted to validate the use of ACT scores for making institutional course placement decisions to help in advising students with respect to their freshman-level coursework.

Participating Institutions:

ACT partnered with six Texas postsecondary institutions:

- The University of Texas at Austin
- Texas A&M University
- Texas Tech University
- University of North Texas
- University of Texas – Pan American
- Tarleton State University



Population of Students Studied:

For these six institutions, the research examined the characteristics of Texas high school graduates, the longitudinal college outcomes of 2002 and 2003 entering freshman cohorts, and first-year college course outcomes for at least their 2002 through 2006 freshman classes.

Overview of research findings to date and issues to consider:

There has been an increase over the past 3 years in the college readiness of Texas high school graduates.

Percentage of ACT-tested Texas Students Meeting All Four Benchmarks

2006–07	2007–08	2008–09
19%	20%	22%

- What steps can be taken to help students who are not yet at the Benchmark scores?
- How can institutions increase college readiness?
- Are there specific secondary to postsecondary curriculum articulations in place?

The 4-, 5-, and 6-year degree completion rates are high for students meeting all 4 Benchmarks, but typical rates are under 50 percent for those meeting 1 to 3 or none of the Benchmarks.

- How can administrators and educators increase graduation rates?
- How can postsecondary institutions encourage graduation over a shorter time span?

In general, underrepresented minority students continue to be less likely to succeed in college.

There is a large decrease in retention rates for underprepared minorities after year 2.

- Helping students become college ready helps ameliorate racial/ethnic differences in the percentage who are successful in college.
- What are the roles of remediation, dual credit/dual enrollment, community colleges, and successful transfer of students to four-year institutions?

How can Texas public institutions decrease the rate of students not meeting the ACT College Readiness Benchmarks?

- Encourage greater articulation between secondary and postsecondary curriculum standards;
- Increase the use of EXPLORE (8th grade) and PLAN (10th grade) across secondary institutions so students can be on target for college and career readiness as early as 8th grade;
- Promote the ACT College Readiness Benchmarks as a key factor in building retention, achievement, and success in postsecondary education and increasing degree completion rates during years 4, 5, and 6;
- Use the ACT College Readiness Benchmarks and College Readiness Standards as key indicators of a student's academic ability to transition successfully from high school to postsecondary education.

Selected Findings for Fall 2002, 2003, and 2004 Enrolled Freshmen¹

Retention over time

- Retention rates were high at year 2, but dropped to 60 percent by year 4.
- Students who met all 4 ACT College Readiness Benchmarks were more likely to remain enrolled at the same institution through year 4 than students who met none or 1 to 3 of the Benchmarks; differences in retention rates increased over time.
- Retention rates increased over time as ACT Composite score increased.
- Female students had slightly higher retention rates than male students.
- Retention rates were similar between White and racial/ethnic minority students.
- Students taking high school mathematics coursework beyond Algebra II were more likely to return to the same institution through year 4 than students taking Algebra I, Geometry, and Algebra II; differences in retention rates increased slightly over time.
- Students taking Biology, Chemistry, and Physics in high school had slightly higher retention rates than students taking only Biology and Chemistry.
- Students with a high school GPA of 3.5 or higher had higher retention rates through year 4 than students with a high school GPA of less than 3.5; differences in rates increased somewhat over time.
- Students taking high school mathematics coursework beyond Algebra II and met the ACT Mathematics Benchmark were most likely to return to the same institution through year 4, while students taking Algebra I, Geometry, and Algebra II but did not meet the Mathematics Benchmark were the least likely to return to the same institution through year 4.
- The first-to-second-year retention rate for racial/ethnic minority students who met none of the Benchmarks was unusually high, but this rate declined sharply in year 3, relative to those for White students and minority students who met 1 to 3 or all 4 Benchmarks.

Cumulative College GPA of 3.0 or higher (Spring Years 1, 2, 3, and 4)

- The percentage of students earning a cumulative GPA of 3.0 or higher increased from 43 percent in year 1 to 53 percent in year 4.
- Across years 1 through 4, students who met all 4 ACT College Readiness Benchmarks were more likely to earn a cumulative GPA of 3.0 or higher than students who met none or 1 to 3 of the Benchmarks; students who met none of the Benchmarks were the least likely to earn a cumulative GPA of 3.0 or higher.
- As ACT Composite score increased, the percentage of students earning a cumulative GPA of 3.0 or higher also increased.
- Across years 1 to 4, female students were more likely than male students to earn a cumulative GPA of 3.0 or higher.
- Across years 1 to 4, white students were more likely than racial/ethnic minority students to earn a cumulative GPA of 3.0 or higher (by 18 to 20 percentage points).
- Across years 1 through 4, students taking high school mathematics coursework beyond Algebra II were more likely to earn a cumulative GPA of 3.0 or higher than students taking only Algebra I, Geometry, and Algebra II.
- Across years 1 through 4, students taking Biology, Chemistry, and Physics in high school were slightly more likely than students taking only Biology and Chemistry to earn a cumulative GPA of 3.0 or higher.
- Across years 1 to 4, students with a high school GPA of 3.5 or higher were much more likely than students with a high school GPA of less than 3.5 to earn a cumulative GPA of 3.0 or higher.

¹Based on six institutions. For one institution, only 2002 and 2003 enrolled freshmen could be included in analyses.

- Students taking high school mathematics coursework beyond Algebra II and who met the ACT Mathematics Benchmark were most likely to earn a cumulative GPA of 3.0 or higher, and students taking only Algebra I, Geometry, and Algebra II but did not meet the Mathematics Benchmark were the least likely to earn a cumulative GPA of 3.0 or higher.
- For students who met all 4 ACT College Readiness Benchmarks, differences in the percentages of students earning a cumulative GPA of 3.0 or higher between white and racial/ethnic minority students were 47 to 78 percent smaller than differences between racial/ethnic groups ignoring Benchmark attainment.

Degree Completion²

- Twenty percent of students completed a Bachelor's degree by year 4, 40 percent completed a degree by year 5, and 47 percent completed a degree by year 6.
- Students who met all 4 ACT College Readiness Benchmarks were more likely to complete a Bachelor's degree within 6 years than students who met none or 1 to 3 of the Benchmarks; students who met none of the Benchmarks were the least likely to complete a Bachelor's degree within 6 years.
- As ACT Composite score increased, the percentage of students completing a Bachelor's degree within 6 years also increased.
- Female students had higher degree completion rates than male students.
- White students had higher degree completion rates than racial/ethnic minority students (by 6 percentage points at year 6).
- Students taking high school mathematics coursework beyond Algebra II had somewhat higher Bachelor's degree completion rates than students taking only Algebra I, Geometry, and Algebra II.
- Students taking Biology, Chemistry, and Physics in high school were only slightly more likely to complete a Bachelor's degree within 6 years than students taking Biology and Chemistry.
- Students with a high school GPA of 3.5 or higher were more likely to complete a Bachelor's degree within 6 years than students with a high school GPA of less than 3.5.
- Students who met the Mathematics Benchmark were more likely to graduate than those who did not, regardless of the mathematics coursework taken in high school. However, students who took high school mathematics coursework beyond Algebra II and met the Mathematics Benchmark were the most likely to complete a Bachelor's degree within 6 years.
- Racial/ethnic minority students who met all 4 ACT Benchmarks had the highest degree completion rates, exceeding those of similar white students. These findings were reversed for students meeting 1 to 3 or none of the Benchmarks.

Conclusions and Future Plans

College readiness is strongly related to college persistence, achievement, and degree completion among the participating Texas institutions. ACT College Readiness Benchmark scores are *strong indicators* of college readiness and success. Results of the study show that the more ACT Benchmarks students meet the greater their likelihood of persisting through graduation in college. The results also revealed that college readiness helps ameliorate some differences in college success across racial/ethnic groups.

Future research by the Texas Consortium includes a comparative study of college outcomes over time of traditional students and dually enrolled/dually admitted students at participating consortium institutions. Other colleges and universities will be joining the Consortium to increase the representativeness of research results across the state.

² Includes Other Advanced Math, Trigonometry, and Calculus.

³ One institution not included in degree completion analyses.

The Forgotten Middle: National ACT Research on Middle School Achievement

Texas Senate Education Committee
April 20, 2010

Karen L. Pennell
Assistant Vice President & Regional Manager
ACT, Inc. Southwest Region



ACT's latest research shows that:

- Fewer than 2 in 10 eighth-grade students are on target to becoming college ready.

Purposes of Study

1. To examine the factors that have the greatest impact on improving student college and career readiness
2. To examine the trajectory of growth towards college and career readiness from 8th – 12th grades
3. To examine the influence of academically related student behaviors on college and career readiness

Sample

- 216,000 ACT-tested high school graduates in 2005 and 2006 who had taken EXPLORE, PLAN, ACT
- Over 4,000 high schools represented in each sample
- Results cross-validated

Factors that Matter

- Examined relative strength of six factors in predicting college/career readiness:
 - Background characteristics
 - Eighth-grade achievement
 - Standard coursework
 - Advanced/honors coursework
 - High school GPA
 - Student testing behaviors

What Makes the Most Impact to Get Students on Target for College and Career Readiness by the 11th/12th Grade?

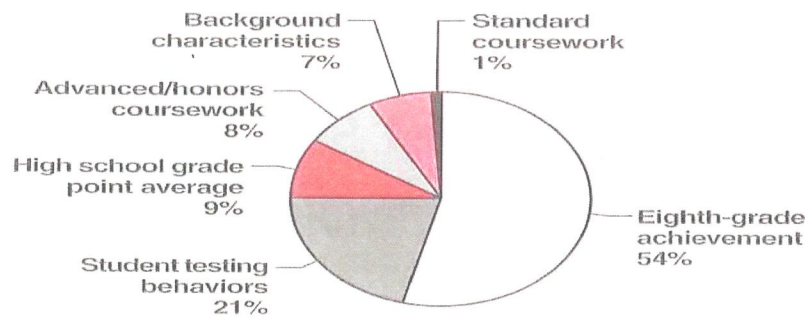


Figure 1a: English

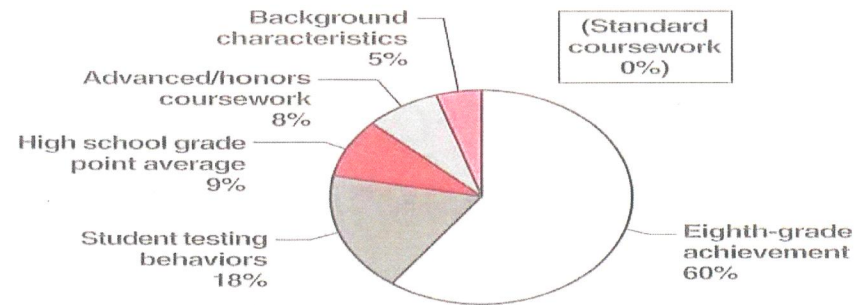


Figure 1c: Reading

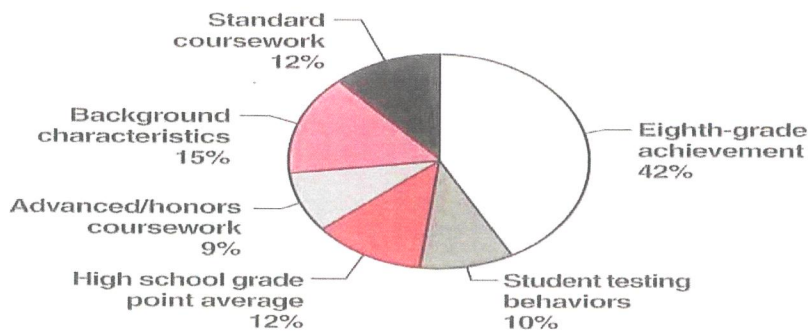


Figure 1b: Mathematics

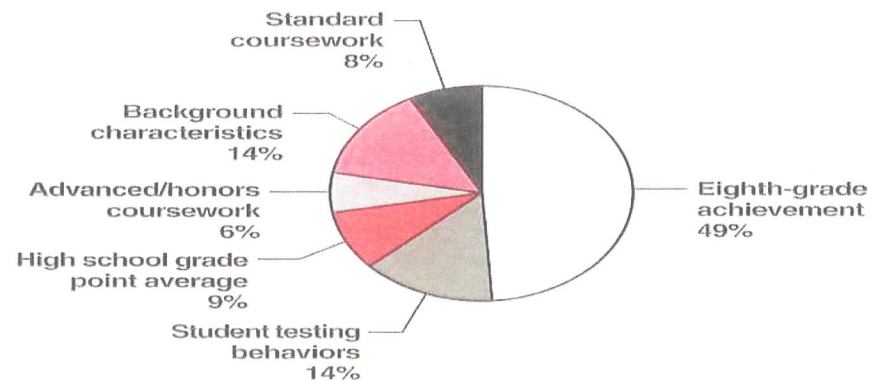


Figure 1d: Science

Results

- *Eighth-grade achievement has the strongest relationship with college/career readiness than any other factor.*
 - Holds across all subject areas
 - Holds across racial/ethnic lines
 - Holds across income lines
- The more academically prepared students are by the eighth grade, the more likely they are to benefit from high school.

What About Other Factors that Matter?

- Also examined the impact of various steps students could take to improve college/career readiness in high school:
 - Maintaining B average
 - Earning higher course grades
 - Taking core curriculum
 - Taking additional standard courses
 - Taking advanced/honors courses
 - Being on target for college readiness in eighth grade
 - Increasing eighth-grade achievement



Results of All Factors Examined

- Holds across all subject areas
 - Holds across racial/ethnic lines
 - Holds across income lines
- *Being on target for college readiness and increases in college readiness skills by the end of the eighth grade have the most dramatic impact on college/career readiness by the end of high school.*
 - The level of academic achievement that students reach by the eighth grade is a crucial element in determining whether they will be ready for college and career by the end of high school.

Results of All Factors Examined, cont'd.

- *Being on target for college readiness in the eighth grade puts students on a trajectory for success.*
- Only the group of students that was on target for college and career readiness by the eighth grade was ultimately ready for college by the end of high school.

Impact of Academic Behaviors

- Examined the influence of academically related student behaviors on college and career readiness:
 - Academic discipline
 - Commitment
 - Family attitude
 - Family involvement
 - Optimism
 - Orderly conduct
 - Relationships with school personnel
 - Safety of school environment
 - Steadiness
 - Thinking before acting

Bottom Line Results

“Students who are not on target for college and career readiness by the eighth grade will have a very difficult time making up the ground they have lost. Without sufficient preparation prior to high school, students cannot maximize the academic benefits of high school while they are there.”

- Although achievement has the greatest influence on eighth-grade course failure and in predicting 9th grade GPA, academic **behaviors** add to its predictive power.
- Of the academic behaviors that add predictive power, **academic discipline** is the strongest.
- The combination of academic achievement and academic behaviors is the best predictor for identifying students at **high risk** of failing a course or earning a low GPA.

Conclusions

- Preparing students for college and career is a *process that begins long before* high school.
- Middle schools need to prepare more students to *profit* from high school.
- Getting more students to be on target for college readiness by the eighth grade is *critical* for college readiness.
- K-8 standards must focus on the knowledge and skills that are essential for students to know and these standards must be *nonnegotiable* for *all* students.

Conclusions

- Student progress must be monitored and *interventions* made earlier in middle school – *before high school*.
- Academic behaviors promote college readiness but *are not substitutes* for academic preparation.
- The focus of the discussion must change: The transition to high school is as *important* as the transition to college.
- Getting more eighth-grade students to be *on target* for college readiness must become an essential part of the high school reform agenda.

Recommendations

1. Focus eighth-grade standards on the essential knowledge and skills and make these nonnegotiable for all students.
2. Monitor student progress early and intervene, beginning in upper elementary school.
3. Focus on improving students' academic behaviors
4. Increase federal and state support for schools to implement intervention programs.