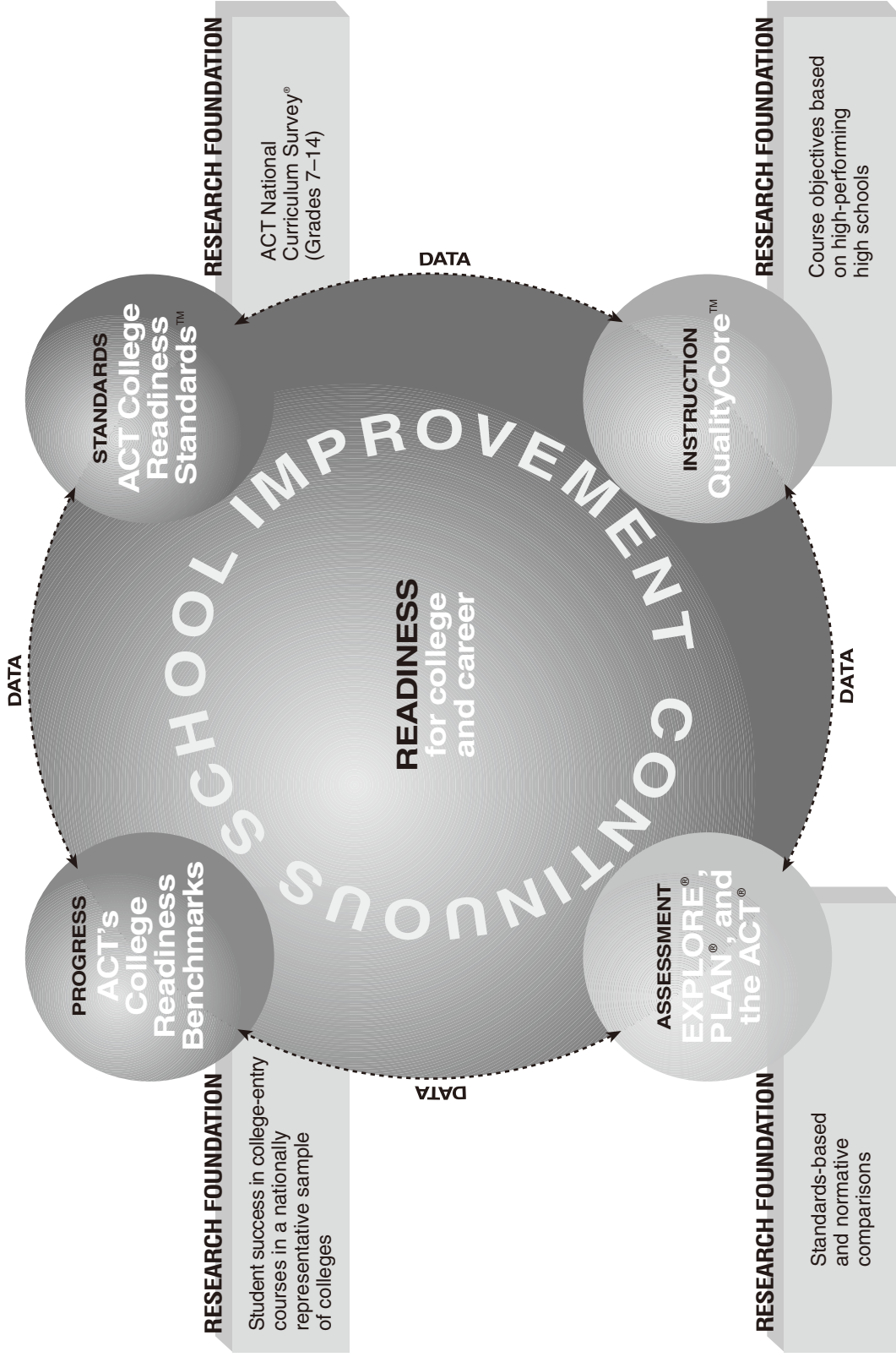


Focus: College Readiness

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Focus:
College Readiness



College Readiness Standards

What are the ACT College Readiness Standards™?

EXPLORE, PLAN, and the ACT are the only assessments that empirically link test scores directly to learning standards. College Readiness Standards are statements describing the knowledge and skills typically demonstrated by students who score in a particular EXPLORE, PLAN, or ACT score range. They indicate what students are likely to know and to be able to do based on their scores. The College Readiness Standards are the key to understanding what EXPLORE, PLAN, and ACT scores *really* mean.

How are the Standards organized?

Six College Readiness Standards score ranges (13–15, 16–19, 20–23, 24–27, 28–32, 33–36) are provided for each content area (English, math, reading, and science) along a scale common to EXPLORE (1–25), PLAN (1–32), and the ACT (1–36). The Standards are cumulative, meaning that a student scoring in the 20–23 score range is likely to be able to demonstrate the skills and knowledge indicated in all preceding score ranges (13–15 and 16–19). The Standards are also organized by content strand (e.g., Expressions, Equations, & Inequalities in mathematics).

Mathematics College Readiness Standards (Score Range 24–27)

	Probability, Statistics, & Data Analysis	Number: Concepts & Properties	Expressions, Equations, & Inequalities
24–27	Calculate the average, given the frequency counts of all the data values Manipulate data from tables and graphs Compute straightforward probabilities for common situations Use Venn diagrams in counting*	Find and use the least common multiple Order fractions Work with numerical factors Work with scientific notation Work with squares and square roots of numbers Work problems involving positive integer exponents* Work with cubes and cube roots of numbers* Determine when an expression is undefined* Exhibit some knowledge of the complex numbers†	Solve real-world problems using first-degree equations Write expressions, equations, or inequalities with a single variable for common pre-algebra settings (e.g., rate and distance problems and problems that can be solved by using proportions) Identify solutions to simple quadratic equations Add, subtract, and multiply polynomials* Factor simple quadratics (e.g., the difference of squares and perfect square trinomials)* Solve first-degree inequalities that do not require reversing the inequality sign*

* Statements apply to PLAN and the ACT only

† Statements apply to the ACT only

This graphic depicts a College Readiness Standards score range for mathematics content. (Note: This illustration displays only 3 of 9 mathematics content strands.)

How can the College Readiness Standards be used?

- Students can use the Standards to identify the skills and knowledge needed to be prepared for college.
- Teachers and counselors can use the Standards to design and deliver instructional programs that will prepare students for success in college.

- Colleges can use the Standards to articulate academic expectations for entering students and identify students who have the skills necessary to succeed in college-level courses.
- ACT has carried out alignment studies between the ACT EPAS tests and state standards in nearly 40 states. These state matches describe the degree that EPAS assessments measure student achievement on the particular state's standards. Please contact the regional office that serves your state for more information about curriculum matches.

How can I get the College Readiness Standards?

A complete printable set of the ACT College Readiness Standards for English, math, reading, and science can be downloaded at www.act.org/ew/resources. The Standards are also available online at www.act.org/standard or through your regional office.



College Readiness Benchmarks

What Are ACT College Readiness Benchmarks?

The ACT College Readiness Benchmarks are the minimum ACT test scores required for students to have a high probability of success in credit-bearing college courses—English Composition, social sciences courses, Algebra, or Biology. In addition to the Benchmarks for the ACT, there are corresponding EXPLORE and PLAN Benchmarks for use by students who take these programs to gauge their progress in becoming college ready in the 8th and 10th grades, respectively.

ACT’s College Readiness Benchmarks

College Course or Course Area	Test	EXPLORE Score	PLAN Score	ACT Score
English Composition	English	13	15	18
Algebra	Mathematics	17	19	22
Social Sciences	Reading	15	17	21
Biology	Science	20	21	24

Why these courses?

English Composition, Algebra, and Biology are the first credit-bearing courses most commonly taken by first-year college students. Course placement data also show that reading achievement is most closely aligned with success in credit-bearing social sciences courses in college.

What do we mean by “a high probability of success”?

Students who meet a Benchmark on the ACT have approximately a 50 percent chance of earning a B or better and approximately a 75 percent chance or better of earning a C or better in the corresponding college course or courses. Students who meet a Benchmark on EXPLORE or PLAN are likely to have approximately the same chance of earning such a grade in the corresponding college course(s) by the time they graduate high school.

What data were used to establish the Benchmarks for the ACT?

The ACT College Readiness Benchmarks are empirically derived based on the actual performance of students in college. As part of its Course Placement Service, ACT provides research services to colleges to help them place students in entry-level courses as accurately as possible. In providing these research services, ACT has an extensive database consisting of course grade and test score data from a large number of first-year students and across a wide range of postsecondary institutions. These data provide an overall measure of what it takes to be successful in selected first-year college courses. Data from 98 institutions and over 90,000 students were used to establish the Benchmarks.

How do the Benchmarks for the ACT differ from minimum college course placement scores?

As shown above, the Benchmarks represent a summary across many colleges and many students. The standards for each individual college may vary depending on the material covered in the course and the grading practices within that course. Rather, the Benchmarks represent a criterion for success for a *typical* student at a *typical* college. As such, they give students, parents, and counselors useful guidelines for understanding whether a student has mastered the necessary skills to have a reasonable chance of success in college.

How were the Benchmarks determined for EXPLORE and PLAN?

The College Readiness Benchmarks for EXPLORE and PLAN were developed using about 150,000 records of students who had taken EXPLORE, PLAN, and the ACT. First, we estimated the probabilities at each EXPLORE and PLAN test score point associated with meeting the appropriate Benchmark for the ACT. We then identified the EXPLORE and PLAN test scores in English, Reading, Mathematics, and Science that corresponded most closely to a 50 percent probability of success at meeting each of the four Benchmarks established for the ACT.

How can institutions benefit from using the Benchmarks?

Colleges can use the Benchmarks for the ACT as one among several criteria for admission or as a foundation for determining course placement scores. States can use the Benchmarks as a tool for establishing minimum standards for high school graduation in statewide assessment contexts that are aimed at preparing high school graduates for postsecondary education.

Junior high and high schools can use the Benchmarks for EXPLORE and PLAN as a means of evaluating students' early progress toward college readiness so that timely interventions can be made when necessary, or as an educational counseling or career planning tool.

In all the above cases, the Benchmarks offer users a concise, reliable method of articulating postsecondary expectations to middle and high schools so that timely interventions can be made.

ACT's Six Steps to College Readiness



ACT's Six Steps to College Readiness	Use EXPLORE, PLAN, the ACT, and QualityCore to:	Visit www.act.org/ew/resources for the following related resources:
<p>1) Early Awareness Students and parents should be aware of the benefits of postsecondary education and the preparation necessary to be successful in college. Early planning is essential.</p>	<ul style="list-style-type: none"> ■ Get an early indicator of students' readiness for college ■ Identify students with no postsecondary plans ■ Identify students with inconsistent goals, plans, and skills ■ Identify students expressing need for help in selected areas ■ Engage parents in the educational planning process 	<ul style="list-style-type: none"> ■ <i>Making High School Count</i> ■ <i>Family Firsts</i> ■ <i>Get Set for College</i> ■ College Readiness Benchmark Scores (found within College Readiness Standards) ■ DISCOVER ■ <i>College Planning Guide</i>
<p>2) High Expectations All students should have high expectations—set by caring adults—that they will achieve in high school.</p>	<ul style="list-style-type: none"> ■ Tie academic planning to career goals ■ Identify students for advanced courses ■ Demonstrate that college is a worthy goal ■ Emphasize importance of rigorous coursework for all students 	<ul style="list-style-type: none"> ■ DISCOVER ■ <i>Get Set for College</i> ■ <i>Making High School Count</i> ■ <i>College Planning Guide</i>
<p>3) Rigorous Preparation All students should have access to rigorous courses taught by highly skilled teachers.</p>	<ul style="list-style-type: none"> ■ Describe how students are performing in core academic areas ■ Encourage rigorous course-taking patterns (e.g., Courses for Success) ■ Ensure that course content is rigorous and designed to help students become college ready. ■ Monitor student progress toward meeting College Readiness Benchmarks Scores 	<ul style="list-style-type: none"> ■ College Readiness Standards ■ College Readiness Benchmark Scores

ACT's Six Steps to College Readiness	Use EXPLORE, PLAN, the ACT, and QualityCore to:	Visit www.act.org/ew/resources for the following related resources:
<p>4) High Performance All students should reach a high level of performance, demonstrating mastery of skills in classes and on independent standard assessments.</p>	<ul style="list-style-type: none"> ■ Incorporate assessment data into school improvement plans ■ Inform instructional needs ■ Improve student academic participation ■ Monitor student academic growth over time ■ Measure progress toward district goals ■ Develop consistent profiles of performance for students, parents, schools, staff 	<ul style="list-style-type: none"> ■ College Readiness Standards ■ College Readiness Benchmark Scores
<p>5) Full Participation All students should have the opportunity to obtain a postsecondary education.</p>	<ul style="list-style-type: none"> ■ Identify students' postsecondary plans ■ Encourage exploration of the full range of career and educational options ■ Engage all students in long-range educational planning ■ Identify students who might not have thought college was in their future ■ Boost college admission test scores and college enrollment rates 	<ul style="list-style-type: none"> ■ <i>Family Firsts</i> ■ DISCOVER ■ <i>Get Set for College</i> ■ <i>College Planning Guide</i>
<p>6) College Success All students should have the opportunity to succeed in college and persist to graduation.</p>	<ul style="list-style-type: none"> ■ Reduce the number of students requiring remediation ■ Guide students to appropriate programs and institutions ■ Emphasize college requirements for entrance and success ■ Identify careers matching student interests 	<ul style="list-style-type: none"> ■ College Readiness Standards ■ College Readiness Benchmark Scores ■ DISCOVER



On Course for Success

Implications for Educators and Policymakers

In a recent report titled *On Course for Success*, ACT and The Education Trust examine ten high schools with challenging student populations that have overcome the odds by fostering greater access to college. What we have found is that when students are provided with high-level courses, qualified and experienced teachers, teaching that is flexible and responsive to students, and extra support when they need it, all students can be prepared to succeed.

A new high school agenda

The need to improve high school education has taken on great urgency among educators and policymakers. Among all the competing ideas on the table, one significant area of consensus is emerging: that all students should be adequately prepared for the challenges of higher education and high-performing jobs when they graduate from high school. But while the goal for all students may be clear, the way to get there is just coming into view. Research shows, for example, that taking a rigorous college-preparatory curriculum in high school is the single biggest predictor that one will eventually earn a college degree. But what are the courses in this curriculum? What does “rigor” look like? What are the components that put students “on course for success”? It’s these questions that ACT and The Education Trust sought to answer.

The study

Our study focused on “successful” high schools where the student population was at least 40 percent minority and/or at least 50 percent low-income. “Success” was defined as producing a significant proportion of graduates who had met or exceeded ACT College Readiness Benchmark scores that predict at least a C grade in first-year college courses. We limited our study to English, mathematics, and science.

We selected ten qualifying schools to participate. With the help of the schools, we were able to identify the courses that the high-scoring students took and the teachers who taught them. We surveyed these teachers about their experience, teaching philosophy, and instructional practices. We then visited all ten schools, observed a total of 41 classrooms, and interviewed the teachers.

What we found is that students in these courses were provided key academic resources that previous research supports as having a positive impact on student learning:

- high-level college-oriented content,
- qualified and experienced teachers,
- teaching that is flexible and responsive to students, and
- extra support for students when they need it.

The added value of this study is that it begins to fill in the details about what these resources look like in practice. For example, we found a high incidence of teaching that made content meaningful to students through connections to the real world, other topics and subjects, and popular culture. We also observed teachers directing instruction while constantly taking and asking questions, heading off the possibility that a student will not understand.

Perhaps the major contribution made by this study comes out of the hundreds of instructional materials that we collected and analyzed. The artifacts provided the basis for the Model Course Syllabi and Course Descriptions that form the bulk of *On Course for Success*. These rich curricular models begin to provide real answers to the questions: What does rigor look like? How can it best be taught?

What can policymakers do?

On Course for Success suggests several policies to improve high schools' ability to adequately prepare all students for a smooth transition to college, should they choose to go. These policies extend from the federal level to the classroom.

At the federal level

- **Provide additional funding to allow all students to have access to rigorous courses, highly qualified teachers, and additional in- and out-of-classroom support.**

At the state level

- **Reexamine high school standards and course requirements.** The content in the courses examined in this study exceeded the standards most states have established for high school graduation. States should reexamine their high school standards and graduation requirements in English, math, and science to see if they align to the courses featured in this study. This examination should include state assessments.
- **Ensure an adequate supply of qualified and experienced teachers.** The highly qualified teacher provisions of the No Child Left Behind Act are a starting point to making sure all students have the benefit of capable teachers who are experts in their subjects. Certification policies for secondary teachers should be evaluated for what they certify about teacher knowledge and pedagogical skills. States should pay special attention to making sure that high-poverty high schools have sufficient access to experienced teachers.
- **Support school-based programs to provide extra help for students.** High schools should be responsible for providing extra help before, after, and during school hours and, if needed, on Saturdays and in summer programs. States should help with the resources schools need to provide these services.
- **Define college admission and course placement requirements in terms of specific courses to be taken by students.** Work with postsecondary institutions to communicate admission and course placement requirements in terms of specific Courses for Success, rather than only in terms of the number of courses.

(continued)

At the district level

- **Reevaluate the content of college-oriented curricula as currently taught.** Just having the right course name doesn't guarantee that a course's content will focus on the skills students need to be ready for college. The syllabi and course descriptions in *On Course for Success* represent a starting point for evaluating present college-preparatory courses. They should also be used to inform the adoption of textbooks and other curricular materials.
- **Make sure all schools have teachers qualified to teach these courses.** Beyond certification, teachers need opportunities to maintain and enhance their mastery of the discipline and appropriate pedagogy.
- **Support the implementation of a high-level curriculum for all students.** School boards, superintendents, and community leaders should commit to providing all high school students with a college-preparatory curriculum. This means providing the necessary resources for qualified teachers, high-level curricular materials, and extra academic services for students when they need it.

At the high school level

- **Reevaluate current courses, syllabi, and lesson plans for rigorous college-oriented content.** Begin with the composite syllabi and course descriptions in *On Course for Success*.
- **Make sure all students are taught this curriculum.** It's important that all students from grade 9 to grade 12 are prepared for the option of college. Administrators and counselors should be especially attentive to providing this curriculum to low-income and minority students who have not always had access to high-level content.
- **Provide students with help outside the classroom when needed.** High schools should organize tutorial help both during and outside school hours for students who need it. Educators have a special responsibility to make sure that struggling students are not just offered help but actually receive it.

This is an ambitious agenda but one that's gaining currency across the nation. Increasingly, we know what needs to be done. This study sheds light on how to get there by showing what content and instruction will keep students *On Course for Success*.

Note: The full report, *On Course for Success: A Close Look at Selected ACT High School Courses That Prepare All Students for College*, and other related ACT reports and resources can be found at www.act.org/path/policy/index.html