COLLEGE READINESS

Assessing the College Readiness in Reading of Eighth- and Ninth-Grade Students Using ACT's EXPLORE®

Based on 2006 EXPLORE-tested eighth- and ninth-graders, 43 percent are on target to be ready for college-level reading. And more students are on target to be ready for college-level reading in eighth and tenth grade than are actually ready by the time they reach twelfth grade.

College readiness—the level of preparation students need in order to be ready to enroll and succeed without remediation in credit-bearing entry-level coursework at a two- or four-year institution, trade school, or technical school—is currently inadequate and should be an expectation for all high school students.

It is also recognized today that the knowledge and skills needed for college are equivalent to those needed in the workplace (ACT, 2006b). We and others have documented that improving college and workforce readiness is critical to developing a diverse and talented labor force that will help ensure our nation's economic competitiveness in a growing global economy (Callan & Finney, 2003; Cohen, 2002; Somerville & Yi, 2002).

Reading is an essential component of college and workplace readiness. Low literacy levels often prevent students from mastering other subjects (ACT, 2006a; Alliance for Excellent Education, 2002). Poor readers struggle to learn in text-heavy courses and are frequently blocked from taking academically more challenging courses (Au, 2000).

Much has been written about the literacy problem in U.S. high schools. Approximately two-thirds of the nation's secondary school students are reading below grade level (Alliance for Excellent Education, 2005). More than 3,000 students drop out of high school every day (STAND UP Coalition, 2006), and one of the most commonly cited reasons for the dropout rate is that students do not have the literacy skills to keep up with the curriculum (Kamil, 2003; Snow & Biancarosa, 2003).

Students at the college level are not faring much better. Eleven percent of entering postsecondary school students are enrolled in remedial reading coursework (National Center for Education Statistics, 2004). Seventy percent of students who took one or more remedial reading courses do not attain a college degree or certificate within eight years of enrollment (Adelman, 2004).

ACT®

According to the Alliance for Excellent Education (2006), the shortage of basic skills costs U.S. businesses, government, students, and parents more than $3.7 billion per year in decreased productivity, college subsidies, and tuition.

ACT data suggest that the readiness of the nation's high school students for college-level reading is far too low. But ACT data also show that, while it is important for students to be able to comprehend both explicit and implicit material in texts, as well as to understand how various textual elements (such as main ideas, relationships, or generalizations) function in a text, the clearest differentiator in reading between students who are ready for college and students who are not is the ability to comprehend *complex* texts.

This report concludes with recommended action steps that policymakers and educators can take to help all students read at the level of proficiency necessary to ensure that they are ready to succeed in college without remediation.

1. **Forty-three percent of 2006 EXPLORE-tested eighth- and ninth-graders are on target to be ready for college-level reading—and more students are on target to be ready for college-level reading in eighth and tenth grade than actually are ready by the time they reach twelfth grade.**

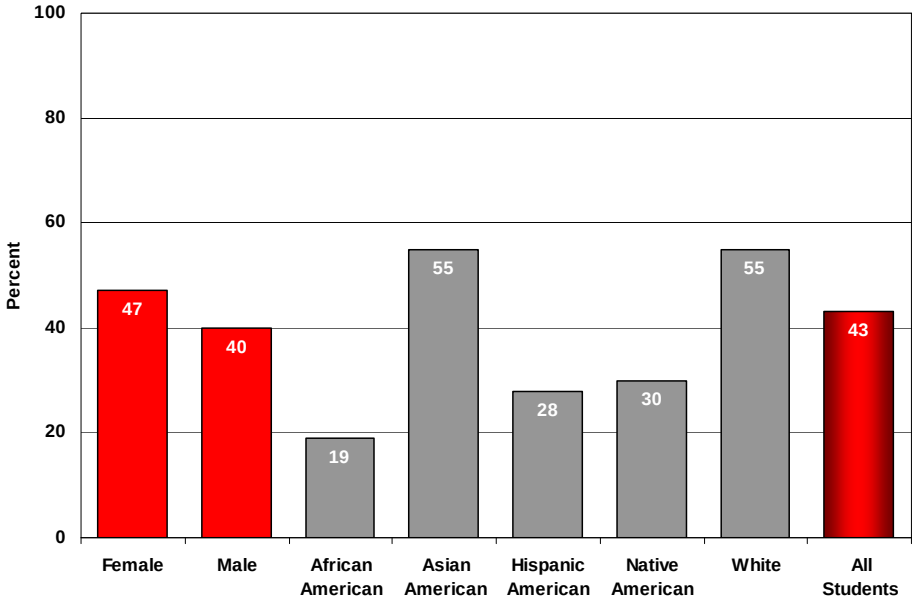
   - **About 4 in 10 students are on target to be able to meet the demands of college-level reading, based on ACT's readiness indicator.** Forty-three percent of EXPLORE-tested high school graduates met the EXPLORE College Readiness Benchmark for Reading, demonstrating the likelihood of their being ready to handle the reading requirements for typical credit-bearing first-year college social science coursework by the time they graduate from high school.[*]

     The EXPLORE College Readiness Benchmarks are the minimum subject-test scores needed to be on target to be ready for college in a particular subject area—English, Mathematics, Reading, or Science. College readiness in a subject area is defined as having about a 50 percent chance of obtaining a B or higher, or about a 75 percent chance of obtaining a C or higher, in the corresponding credit-bearing first-year college course (English Composition, Algebra, social science, or Biology). The EXPLORE College Readiness Benchmark for Reading is 15.

[*] The findings in this report are based on the performance of 639,182 eighth- and ninth-grade students who took EXPLORE during the 2005–2006 academic year.

- **For some groups, the percentage of students who are on target to be ready for college-level reading is substantially smaller.**

2006 EXPLORE-tested Eighth- and Ninth-graders Meeting the EXPLORE College Readiness Benchmark for Reading



- **More eighth- and tenth-graders nationally are on target to be ready for college-level reading than are actually ready when they graduate from high school.** ACT has also developed College Readiness Benchmarks for the tenth- and twelfth-grade components of its early college readiness preparation system, EPAS™ (which includes EXPLORE, PLAN®, and the ACT® test). The Benchmarks reflect expected growth between eighth and tenth grades and between tenth and twelfth grades.

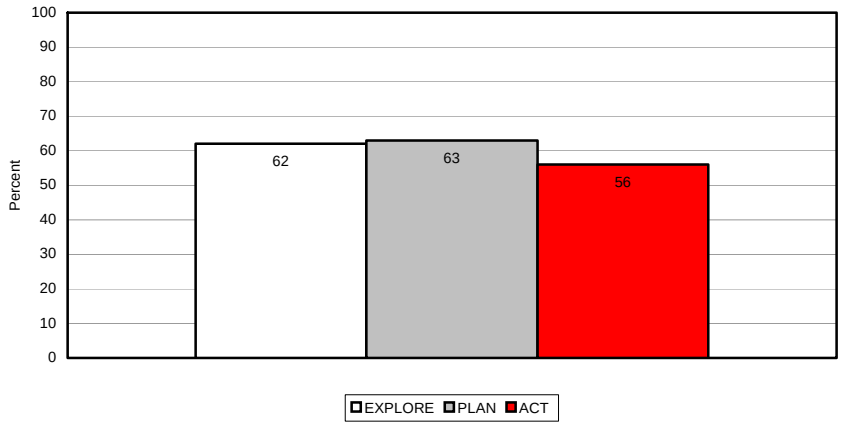
  Based on the actual performance of students in college, ACT identified College Readiness Benchmarks for the ACT Assessment that reflect a 50 percent chance of earning a grade of B or higher, or about a 75 percent chance of earning a grade of C or higher, in entry-level credit-bearing college courses. Subsequently, corresponding readiness benchmarks were developed for EXPLORE and PLAN to reflect a student's probable readiness for college-level work in these same courses by the time they graduate from high school, assuming that they continue to demonstrate the same level of achievement.

  The EXPLORE and PLAN College Readiness Benchmarks were developed using records of students who had taken EXPLORE, PLAN, and the ACT. Using these data, we associated each EXPLORE and PLAN subject-test score with an estimated probability of meeting or exceeding the relevant ACT benchmark.

  The figure on the next page shows that, in a combined testing population of four recent cohorts of students who participated in all

three EPAS programs, 62 percent of eighth-grade students were on target to be ready for college-level reading by the time they graduate from high school. The percentage of these same students who were on target to be ready increased slightly when they reached the tenth grade. However, by the time they took the ACT, a smaller percentage of these same students were actually ready for college-level reading.

EXPLORE-, PLAN-, and ACT-tested Students Meeting Reading Benchmarks, 1998–2002 to 2001–2005 (Combined)



2. Students who are on target in eighth and ninth grade to be ready for first-year college social science courses are substantially more likely to be on target to be ready for college in English, mathematics, and science.

Because reading is likely a strong intervening factor in academic areas across the curriculum, we examined the English, mathematics, and science achievement of students who met and did not meet the EXPLORE College Readiness Benchmark in Reading. The figure on the next page shows, for students who met and did not meet the Reading Benchmark, the percentage of students meeting the EXPLORE College Readiness Benchmarks in English, Mathematics, and Science.

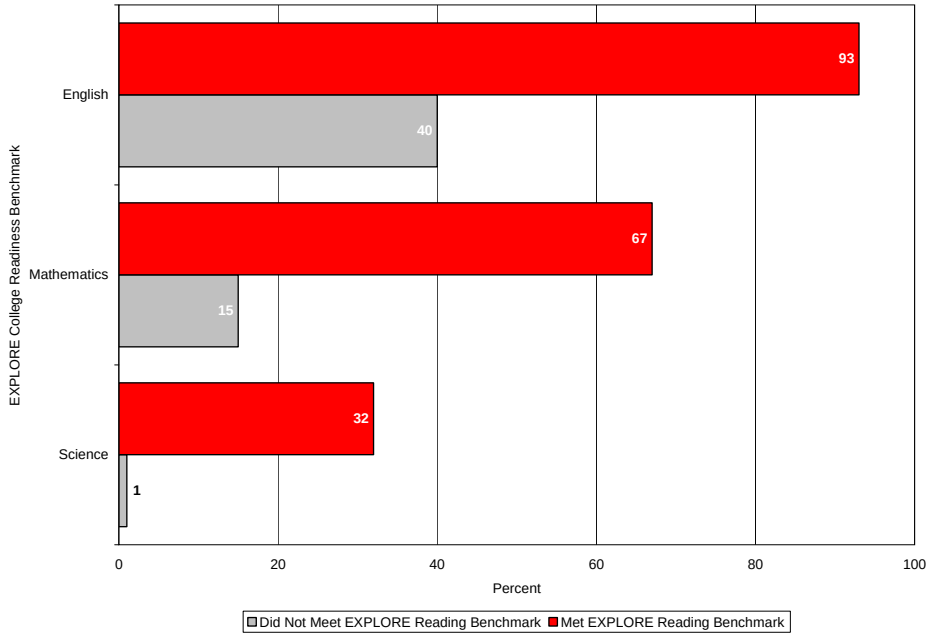
Of those who met the EXPLORE Reading Benchmark:

- 93 percent also met the EXPLORE English Benchmark;
- 67 percent also met the EXPLORE Mathematics Benchmark; and
- 32 percent also met the EXPLORE Science Benchmark.

Of those who did **NOT** meet the EXPLORE Reading Benchmark:

- only 40 percent also met the EXPLORE English Benchmark;
- only 15 percent also met the EXPLORE Mathematics Benchmark; and
- only 1 percent also met the EXPLORE Science Benchmark.

Percentages of 2006 EXPLORE-tested Eighth- and Ninth-Graders Meeting the EXPLORE College Readiness Benchmarks in English, Mathematics, and Science, by EXPLORE Reading Benchmark Attainment



The ACT College Readiness Standards™ describe what students can do based on their EXPLORE scores, as well as in which activities they can engage to progress to the next level of achievement. The Appendix lists some of the College Readiness Standards that eighth- and ninth-grade students need to be on target for college readiness in reading, as well as some suggested activities that can help students attain those standards.

3. **We can no longer afford to ignore reading instruction in high school. Something must be done to improve the reading proficiency of all students.**

   According to our research, ACT-tested students who can read *complex* texts are more likely to be ready for college; those who cannot read complex texts are less likely to be ready for college. Therefore, ACT recommends strengthening reading instruction in *all* high school courses by incorporating complex reading materials into course content. ACT research has shown that performance on complex texts is the clearest differentiator in reading between students who are likely to be ready for college and those who are not. And this is true for both genders, all racial/ethnic groups, and all annual family income levels (ACT, 2006a).

   A complex text can be described with respect to the following six aspects (which can be abbreviated to "RSVP"):

   - **Relationships:** Interactions among ideas or characters in the text are subtle, involved, or deeply embedded.
   - **Richness:** The text possesses a sizable amount of highly sophisticated information conveyed through data or literary devices.
   - **Structure:** The text is organized in ways that are elaborate and sometimes unconventional.

- **Style:** The author's tone and use of language are often intricate.
- **Vocabulary:** The author's choice of words is demanding and highly context dependent.
- **Purpose:** The author's intent in writing the text is implicit and sometimes ambiguous.

  The type of text to which students are exposed in high school has a significant impact on their readiness for college-level reading. Specifically, students need to be able to read complex texts if they are to be ready for college. All courses in high school, not just English and social studies but mathematics and science as well, must challenge students to read and understand complex texts. In most cases, a complex text will contain multiple layers of meaning, not all of which will be immediately apparent to students upon a single superficial reading. Rather, such texts require students to work at unlocking meaning by calling upon sophisticated reading comprehension skills and strategies.

  Certainly, students will need to make the effort, both inside and outside of school, to enhance their comprehension of complex texts. But in a nation where 13- and 17-year-olds have increasingly less exposure to or interaction with books outside of the classroom, high schools must still play the primary role in providing students with the kinds of complex reading materials and experiences they need in order to be ready for college and work and must continue to teach and reinforce reading strategies that deal with increasingly more complex reading tasks.

  Students must have the opportunity to improve their reading skills and strategies at a time when they need to build upon the foundational skills in reading that they developed when they entered high school. They must be given more opportunities to read challenging materials across the curriculum so that they are better positioned to comprehend complex texts in all subjects once they enter college or the workplace.

- **Ensure that state standards both explicitly define reading expectations for, and incorporate increasingly complex texts into, the English, mathematics, science, and social studies courses in grades 9 through 12.** Without specific reading standards across the curriculum, teachers cannot be expected to know what level of reading proficiency students should be expected to attain or what degree of text complexity is appropriate in each subject and grade. Reading standards that address text complexity should be embedded in English, mathematics, science, and social studies standards.

- **Make targeted interventions to help students who have fallen behind in their reading skills.** As we strengthen high school courses and state standards with respect to text complexity, we must also address the reading skills of those students who begin high school with reading deficiencies. Such deficiencies need to be diagnosed much earlier, in upper elementary and middle school, so

that earlier interventions can be made. If a greater number of students can be identified and helped before they reach high school, they will be more likely to have developed the necessary foundational reading skills upon which college-ready skills can be based.

- **Provide high school teachers with professional development training to help them incorporate the kinds of complex texts and instruction into their courses that will help increase students' readiness for college-level reading.** Teachers need the support and professional development opportunities necessary to ensure that they understand the types of reading skills students need to have by the time they graduate from high school.
- **Strengthen high school assessments so that they align with improved state standards and high school instruction across the curriculum.** As we strengthen the high school curriculum by incorporating complex reading materials into all courses as defined by improved state standards, so must we also reflect this greater degree of complexity in the high-stakes assessments that high school students take. These assessments need to reflect a wider range of reading materials by including complex texts in all subject areas.

Action Steps

What Can Policymakers Do?

- Consistent with the National Governors Association's recommendation that comprehensive literacy plans be developed in each state (NGA Center for Best Practices, 2005), incorporate reading expectations into state standards across the curriculum so that they specify the inclusion, by grade level, of increasingly complex reading materials in English, mathematics, science, and social studies.
- Build support for a legislative focus on improving reading achievement in middle school and high school.
- Encourage local efforts to improve reading achievement at the school and district levels.
- Disseminate best practices found in middle schools and high schools that are achieving results and promote similar efforts on a wider scale.
- Increase funding for school or district programs that improve middle-school and high-school reading achievement.
- Provide resources for professional development opportunities for teachers so that they are equipped to provide the necessary reading instruction in their subject areas and grade levels.
- Make provisions both for assessing students' college readiness in reading to evaluate their progress and for making timely interventions when they encounter difficulties.

What Can Educators Do?

- Consistent with the National Governors Association's recommendation that schools and districts develop comprehensive literacy plans, incorporate reading expectations into state standards across the curriculum so that they specify the inclusion, by grade level, of increasingly complex reading materials in English, mathematics, science, and social studies.
- Diagnose reading deficiencies and intervene earlier, before high school. Using EXPLORE scores and the ACT College Readiness Standards™, teachers can identify the kinds of skills students are lacking. The College Readiness Standards describe what students can do based on their EXPLORE scores, as well as in which activities they can engage to progress to the next level of achievement (as shown in the excerpt in the Appendix). ACT also has more extensive teacher support materials available that focus on helping these students.
- Incorporate complex reading materials into all high school courses, not just English and social studies, to strengthen students' reading skills throughout high school.
- Require all teachers in all courses to teach reading strategies so that students are able to progress from comprehension of simpler texts to comprehension of more complex texts.
- Push students to read texts that are personally challenging, and support their efforts by giving them a variety of critical reading strategies to use.
- Research shows that students who take the right *number* of courses (four years of English and three years each of mathematics, science, and social studies) are more likely to be ready for college than those who do not. Middle and high school teachers should encourage all students to take Algebra II and at least one additional higher-level mathematics course, as well as Biology, Chemistry, and Physics.
- Systematically assess students' college readiness in reading to evaluate their progress and make timely interventions when they encounter difficulties.

These are important and far-reaching missions that no one group of concerned individuals can accomplish alone. Teachers, school administrators, and policymakers have crucial roles to play. By helping all students to become better readers, they can become ready to succeed in college and work. It's a difficult goal, but a worthy one. And with greater effort on all our parts, it's a goal we can achieve.

Appendix

What Students Need to Know Early in High School to be on Target for College Readiness in Reading

(excerpted from the ACT College Readiness Standards)

Below-Benchmark Range	Benchmark Range	What Students Need to Know and Be Able to Do	Sample Student Activities to Encourage Readiness for College-Level Reading
1–12	13–15 (EXPLORE Benchmark: 15)	• Recognize a clear intent of an author or narrator in uncomplicated literary narratives • Locate basic facts (e.g., names, dates, events) clearly stated in a passage • Determine when (e.g., first, last, before, after) or if an event occurred in uncomplicated passages • Recognize clear cause-effect relationships described within a single sentence in a passage • Understand the implication of a familiar word or phrase and of simple descriptive language • Draw simple generalizations and conclusions about the main characters in uncomplicated literary narratives	• Identify the author's or narrator's reasons for including specific information in the text • Analyze how an author or narrator uses description, dialogue, and action to suggest relationships between characters in written or non-print sources • Scan a text in order to locate specific details • Compose generalizations that include qualifying language

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