

ACT College Readiness Benchmarks, Retention, and First-Year College GPA: What's the Connection?

ACT Information Brief 2004-1 showed that retention and cumulative first-year college GPA are related to ACT Composite scores. Overall achievement, as measured by cumulative first-year college GPA, is strongly related to high school preparation, as measured by ACT Composite score, for students who return for a second year of college. This brief expands on these results by exploring the connections between attainment of ACT's college readiness benchmarks and college retention and first-year college GPA.

To assist in identifying students who are ready for entry-level college course work, ACT has established *college readiness benchmarks*. These benchmarks represent ACT scores at which students who score as well or better have at least a 50% chance of earning a B or higher and a 75%-80% chance of a C or higher in specific entry-level college courses. Student performance relative to these benchmarks can be used as indicators of subject-specific achievement in high school and of college readiness.

This brief illustrates how admissions and institutional research professionals can use the benchmarks as another tool to identify students who are likely to perform well in college and persist after their freshman year.

Data

Results in this brief are based on ACT's *college readiness benchmarks*, first-year cumulative college GPA, and first-to-second year retention status. ACT college readiness benchmarks correspond to the following ACT scores: English = 18, Mathematics = 22, and Science = 24. The courses tied to these benchmarks include college English composition, college algebra, and biology, respectively.

Student information was obtained from institutions participating in ACT's Student Retention Service between 1999 and 2003, comprising 323,855 students from 233 four-year institutions representing a range of admissions policies, from open enrollment to highly selective. ACT's Student Retention Service Report contrasts academic and noncognitive characteristics of students who did and did not return for their second year.

Are ACT College Readiness Benchmarks Related to Retention and First-Year College GPA?

Figure 1 illustrates, for students who returned and did not return for a second year of college, the percentages of students meeting the college readiness benchmarks and average cumulative first-year GPA. This information is also presented in Table 1.

Figure 1: Public Four-Year Retention and College GPAs by ACT College Benchmarks

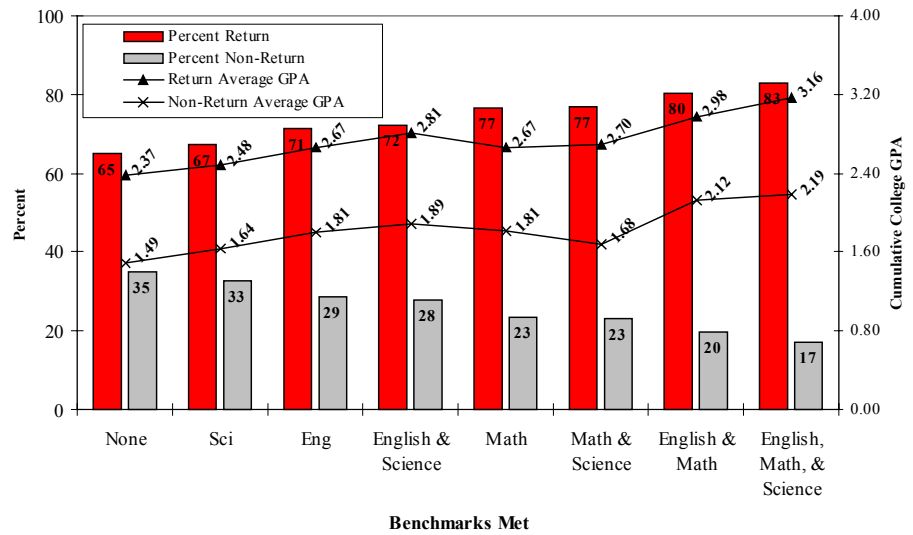


Table 1: Public Four-Year Retention and College GPAs by ACT College Benchmarks

		Benchmarks Met							
Retention Status	Result	None	Science	English	English & Science	Math	Math & Science	English & Math	English, Math, & Science
Non-Return	%	35	33	29	28	23	23	20	17
	Average GPA	1.49	1.64	1.81	1.89	1.81	1.68	2.12	2.19
Return	%	65	67	71	72	77	77	80	83
	Average GPA	2.37	2.48	2.67	2.81	2.67	2.70	2.98	3.16
% in Benchmark Group		15	<1	30	5	2	<1	19	28

In total, 47% of the students in this study either met both the mathematics and English benchmarks or met all three benchmarks. These students had the highest retention rates and returning first-year GPAs, corresponding to 80% and 83%, and 2.98 and 3.16, respectively. In contrast, students who met none of the benchmarks had a 65% retention rate and an average first year GPA of 2.37. In general, the more benchmarks students met, the more likely they were to return for a second year and the higher their first-year college GPAs tended to be. The positive relationship between number of benchmarks met and first-year GPA was consistent both for students who returned and for students who did not return for a second year of college. In addition, students who met the mathematics benchmark, regardless of whether any other benchmark was met, had higher retention rates than those of all other students.

Discussion

This study demonstrates the utility of ACT's college readiness benchmarks as indicators of first-year college GPA and second-year retention. For example, admitted students who meet English and mathematics or English, mathematics, and science benchmarks will likely earn a strong GPA and will have an 80% chance or better of returning for a second year. The point is clear: content area achievement in high school, especially in mathematics, does matter when it comes to college success.