

Few Students Meet ACT's New Mark for College Readiness in STEM Fields

By Catherine Gewertz on November 11, 2015 6:57 AM

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Only 20 percent of high school students who took the ACT are academically ready for the rigor of the first-year college courses they'll likely have to take if they're planning to major in science, technology, engineering or math, according to a report released Wednesday.

The ACT's third **"Condition of STEM" report** examines the performance of students who took the college admissions exam in 2015. This year's report is the first to analyze the students' performance against a new "STEM benchmark" that was added to the test in the fall of 2015.

The ACT produces scores in four areas: English, math, reading, and science. Students can compare their scores in each area to the **ACT's "college readiness benchmark" scores**, which indicate a strong likelihood of success in entry-level, credit-bearing college courses. Those college-readiness scores range from 18 to 23.

The STEM benchmark is a new addition, and is a blend of a student's scores in science and math. But it's based on a more rigorous expectation than the single-subject science or math college-readiness benchmarks in past reports. That's because of **recent ACT research** that suggested that higher-caliber performance in high school is necessary for good results in college courses such as physics, calculus, chemistry, or biology, typical choices for entering students who aspire to major in STEM disciplines.

As a result, the ACT STEM score that correlates with its typical definition of college readiness—a 50 percent chance of getting a B in a college course, and a 75 percent chance of earning a C—is 26.

Because the STEM college-readiness benchmark is so high, the "rates of attainment are extremely low," ACT officials said in a statement released with the results. Only 1 in 5 ACT-tested students in the class of 2015 met that mark.

The finding prompted ACT officials to echo their previous years' warnings that K-12 educators must take steps to bolster students' skills in STEM areas, since they are a key source of fast-growing, good-paying career fields and an important element of American competitiveness.

The "Condition of STEM" report also examines students' interest in those

fields. Those results were about the same as in [the 2014 report](#), with about half of high school students who took the ACT interested in STEM careers and college majors.

While interest in STEM careers and majors overall remains unchanged from last year, however, student interest in STEM has risen 1 percent in the last four years.

Student interest in the subfields within STEM shows some interesting patterns during that period, too. In the last four years, the percentage of students interested in computer science and math majors, and in engineering and technology majors, has increased by 2 percent, while the percentage of students interested in medical and health majors has declined by 3 percent, according to the ACT report.