Course Rigor

Are your core courses rigorous enough?

Taking the right kind of courses — rigorous courses — matters as much as, if not more than, taking the right number of courses. Students taking high-level mathematics and science courses beyond the core curriculum are more prepared for college and career than those taking only the core curriculum or less.

Students taking math courses beyond the core curriculum are more prepared than their peers

Percent of your ACT-tested high school graduates meeting or exceeding College Readiness Benchmarks in Mathematics, 2010

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<thead>
<tr>
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<th>Less than core</th>
<th>Core</th>
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Rigor at Risk

ACT’s 2007 research (Rigor at Risk) found that under current conditions, students do not have a reasonable chance of becoming ready for college unless they take additional higher-level courses beyond the minimum core. And even when students take substantial numbers of additional courses, no more than three-fourths of them are ready for first-year college coursework. This suggests that the quality and intensity — in other words, the rigor — of the high school curriculum need to be improved.
Teacher Quality Affects Course Rigor

Another important contributor to the rigor of the high school core curriculum is teacher quality. Teacher quality has the most significant impact on high school students' readiness for college and career. Schools need to determine whether they are assigning the right teachers to the right core courses — and to the students who need them most.

According to a recent study: 6

- Students in high-poverty and high-minority schools are disproportionately assigned to new teachers.
- Teachers in high-poverty and high-minority secondary schools are more likely to be lacking a major — or even a minor — in the subjects they teach.

States need to strengthen professional development and examine instructional practices to make sure courses are focused on college and career preparation.

Are your core courses rigorous enough?

Students taking science courses beyond the core curriculum are more prepared than their peers

Percent of your ACT-tested high school graduates meeting or exceeding College Readiness Benchmarks in Science, 2010

ACT research shows that rigor pays off. In its 2007 report Rigor at Risk, ACT analyzed close to 400 schools across the country that have shown greater-than-average increases in ACT Mathematics or Science Test scores. The study found that students at these high-performing schools who took rigorous courses such as Algebra II (over and above Algebra I and Geometry) or Chemistry (over and above Biology) improved their college and career readiness at about double the rate of all ACT-tested students who took the same courses in their high schools. Students at these high-performing schools also had greater success in college: both college enrollment and retention were higher for students in these schools than for all ACT-tested students nationally.