



## **The Forgotten Middle: Improving Readiness for High School**

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Improving readiness for entry-level college coursework among U.S. high school graduates is a national challenge, one that has been a subject of increasing attention and concern. But a closely related challenge has received much less attention—keeping students on target for college readiness during elementary and middle school.

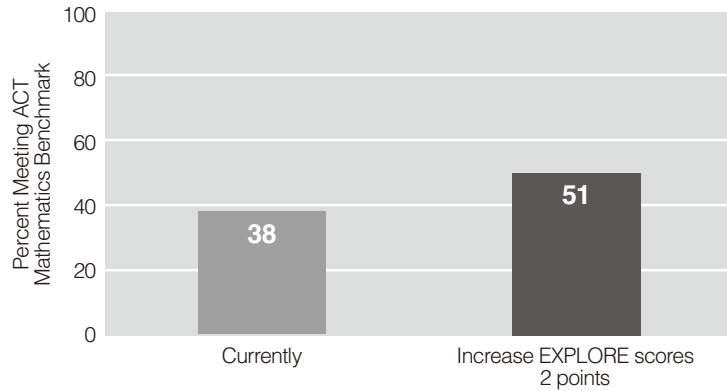
Based on ACT data, only 1 in 10 eighth graders are on target to be ready for college-level work by the time they graduate from high school.\* This percentage is so small that it raises questions not just about the prospect that these students will be ready for college by the end of high school, but also about whether they are even ready for high school. It also raises questions about whether students who do not plan to attend college are preparing adequately for good-paying jobs: a previous ACT study (2006) showed that career training programs for jobs like plumbing and electrical work require a level of mathematics and reading skills comparable to those necessary to succeed in a two- or four-year college curriculum.

A new longitudinal study by ACT (in press) reveals that when students' skills are improved during middle school, the results by the end of high school can be astounding. Improving student skills as reflected by an 8 percent increase in average assessment score (i.e., 2 score points on 25-point scale) would result in a 13 percentage-point increase in the percentage of high school graduates who are ready for college in mathematics (Figure 1, from 38 to 51 percent), and a 16 percentage-point increase in the percentage who are ready for college-level reading (Figure 2, from 51 to 67 percent).

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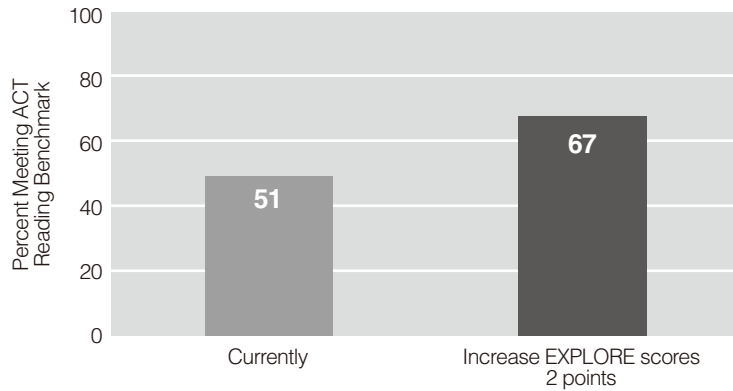
\*Based on more than 540,000 eighth graders who took the ACT EXPLORE® assessment in 2007.

**Figure 1**  
**ACT College Readiness Benchmark<sup>1</sup> Attainment in Mathematics,**  
**by EXPLORE Score**



<sup>1</sup>The ACT College Readiness Benchmarks are the minimum scores needed on the ACT English, Mathematics, Reading, and Science Tests to demonstrate readiness for credit-bearing entry-level college coursework in each subject area. The ACT College Readiness Benchmark for Mathematics is 22.

**Figure 2**  
**ACT College Readiness Benchmark Attainment in Reading,<sup>2</sup>**  
**by EXPLORE Score**



<sup>2</sup>The ACT College Readiness Benchmark for Reading is 21.

ACT data suggest that students who enter high school lacking prerequisite skills rarely ever catch up. What’s more, keeping students on target for college readiness during elementary and middle school offers gains in college readiness that are dramatically greater than those associated with high school–level interventions such as taking one or two additional rigorous high school courses or improving high school course grades by one letter.

These results clearly show that if students are even slightly better prepared academically by eighth grade, their average levels of readiness for college can increase substantially in high school. If students are to have a fighting chance at college readiness, their progress must be monitored so that deficiencies in the foundational skills can be identified early—in the upper elementary grades and at the start of middle school—and interventions can be begun with these students during the middle-school years. While intervention is not the sole solution to the college readiness problem, it is a key element in guaranteeing that these students will have the foundational skills they need to graduate from high school with the skills necessary to succeed in college.

## Recommendations for Policymakers

- Adopt academic standards that reflect the skills and knowledge students need to attain in order to be on target for college readiness at each stage of their K–12 careers.
- Articulate and align curriculum and instruction among high schools, middle schools, and elementary schools to focus on college readiness skills.
- Provide funding for schools to assess regularly the progress their students are making at becoming ready for college, beginning in upper elementary school and continuing through middle school and high school.
- Increase support for schools to implement interventions designed to bring these students back on target for college readiness. This support should focus both on increasing academic preparation and on improving nonacademic factors that research shows have a positive impact on student success, such as academic self-discipline, consistency in completing homework, regular attendance, and orderly conduct.

We must take the steps necessary to ensuring that every student learns the skills necessary to handle the rigorous high school coursework that prepares them for college and careers.

### References

ACT. (2006). *Ready for college and ready for work: Same or different?* Iowa City, IA: Author.

ACT. (in press). *Benefits of additional high school course work and improved course performance in preparing students for college and work.* Iowa City, IA: Author.