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High school GPAs are stronger predictors of college graduation than ACT scores

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Summary: Students' high school grade point averages are five times stronger than their ACT scores at predicting college graduation, according to a new study.

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FULL STORY

Students' high school grade point averages are five times stronger than their ACT scores at predicting college graduation, according to a new study published today in *Educational Researcher*, a peer-reviewed journal of the American Educational Research Association.

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The authors of the new study, Elaine M. Allensworth and Kallie Clark, both of the University of Chicago, also found that the predictive power of GPAs is consistent across high schools. The relationship between ACT scores and college graduation depends on which high school a student attends; at many high schools there is no connection between students' ACT scores and eventual college graduation.

"It was surprising not only to see that there was no relationship between ACT scores and college graduation at some high schools, but also to see that at many high schools the relationship was negative among students with the highest test scores," said Allensworth, who is the director of the University of Chicago Consortium on School Research.

Across all high schools in the study, each incremental increase in GPA is associated with an increase in the odds of graduating college. The chance of graduating from college ranges from 20 percent for students with high school GPAs under 1.5 to about 80 percent for those with GPAs of 3.75 or higher, after controlling for student backgrounds and college characteristics.

"While people often think the value of GPAs is inconsistent across high schools, and that standardized test scores, like the ACT, are neutral indicators of college readiness because they are taken by everyone under the same conditions, our findings indicate otherwise," Allensworth said. "The bottom line is that high school grades are powerful tools for gauging students' readiness for college, regardless of which high school a student attends, while ACT scores are not."

According to the authors, their study confirms prior research that finds high school GPAs are more predictive than SAT and ACT scores of college freshman GPA and college graduation. This study is the first to explicitly test whether standardized assessments are comparable across high schools as measures of college readiness.

The study examined 55,084 students who graduated from the Chicago public school district between 2006 and 2009 and immediately enrolled in a four-year college. The Chicago district contains schools with varying academic profiles, ranging from extremely high-achieving, selective schools to schools with very low average test scores. At the time the study students were in high school, all students in Illinois took the ACT in the spring of 11th grade.

In the authors' view, the fact that high school GPAs are based on many

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factors -- including effort over an entire semester in many different types of classes, demonstration of academic skills through multiple formats, and different teacher expectations -- might be why GPAs are strong indicators of college readiness.

"GPAs measure a very wide variety of skills and behaviors that are needed for success in college, where students will encounter widely varying content and expectations," said Allensworth. "In contrast, standardized tests measure only a small set of the skills that students need to succeed in college, and students can prepare for these tests in narrow ways that may not translate into better preparation to succeed in college."

"Extensive time spent preparing for standardized tests will have much less pay-off for postsecondary success than effort put into coursework, as reflected in students' grades," said Clark, a doctoral student at the University of Chicago. "The more that middle and high school educators can support strong engagement in school -- helping students overcome barriers to engagement in class, helping them succeed at different types of academic tasks, so that they earn strong grades -- the better these educators are supporting academic skills broadly and preparing students for college."

The authors also note that most states and districts in the United States rely heavily on standardized test scores in their accountability systems as indicators of whether students are meeting state college readiness goals. Because the relationship of test scores with college graduation is not strong or consistent, states and districts that choose this metric may misestimate the effects of policies and school practices on students' college readiness. The authors suggest that measures of students' actual performance in college would provide better information.

Above and beyond students' individual achievement on high school coursework and the ACT, Allensworth and Clark found that students are more likely to graduate college if they come from some high schools rather than others. These school effects may be the result of more rigorous academic programs at some high schools, different non-academic supports for preparing students for college, or simply a tendency of families with more resources for college to send their students to particular high schools.

"There are large high school effects on college graduation that are not explained by students' high school GPA, their individual ACT scores, or the two of them combined," Clark said. "Understanding why students from some high schools succeed in college more than students at other schools is an important next step for better supporting all students' ability to earn a college degree."

This research was supported by the Bill and Melinda Gates Foundation.

Story Source:

Materials provided by **American Educational Research Association**.

Note: Content may be edited for style and length.

Journal Reference:

1. Elaine M. Allensworth, Kallie Clark. **High School GPAs and ACT Scores as Predictors of College Completion: Examining Assumptions About Consistency Across High Schools.** *Educational Researcher*, 2020; 0013189X2090211 DOI: [10.3102/0013189X20902110](https://doi.org/10.3102/0013189X20902110)

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