■ ACT Research & Policy

**DATA BYTE 2016-19** 

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ACT Aspire reports predicted ACT score ranges for students tested in grades 9 and 10.

Grade 10 ACT Aspire Composite score is highly correlated with grade 11 ACT Composite score (correlation=0.88).

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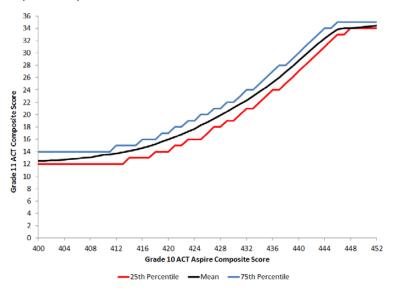
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## ACT

## How Do Grade 10 ACT Aspire® Scores Relate to Grade 11 ACT® Scores? 2016 Update

JEFF ALLEN, PHD AND RUITAO LIU, PHD

Predicted Grade 11 ACT Composite Score Ranges, by Grade 10 ACT Aspire Composite Score



This brief summarizes the relationship between ACT Aspire and ACT test scores for students who took the ACT test approximately one year after taking ACT Aspire's early high school assessments. We provide an update to results originally provided in 2015.<sup>1</sup>

ACT Aspire data through spring 2015 were matched to ACT data through spring 2016. The sample sizes and correlations between ACT Aspire and ACT test scores are given below, by subject area. The correlations range from 0.56 for Writing to 0.88 for Composite. The higher correlations for English (0.83) and Mathematics (0.83) relative to Reading (0.70) and Science (0.73) may be attributed to differences in test lengths for both ACT Aspire and the ACT test. Correlations between Writing test scores are typically lower than correlations between other subject test scores. The ACT Aspire and ACT Writing tests are single writing tasks.

Correlations of Grade 10 ACT Aspire and Grade 11 ACT Scores

Subject Area	N	Correlation
English	99,689	0.83
Mathematics	100,274	0.83
Reading	99,835	0.70
Science	98,934	0.73
Writing <sup>2</sup>	67,277	0.56
Composite	95,611	0.88

For students who take ACT Aspire's early high school assessments (grades 9 and 10), score reports include predicted ACT score ranges. The predictions assume the student will take the ACT test two years (grade 9) or one year (grade 10) after the ACT Aspire test. The predicted ACT score ranges are based on estimates of the 25th and 75th percentile of the ACT score distribution, for each possible ACT Aspire score. For example, among students who earn an ACT Aspire Composite score of 429 in 10th grade, the mean ACT Composite score is 20.5, the 25th percentile is 19, and the 75th percentile is 22 (see figure). Predicted ACT score ranges indicate whether students are on track to meet the ACT College Readiness Benchmarks. For students not on track, schools and districts may use this information to determine the allocation of academic services and resources to best prepare all students for future success.

www.act.org/research-policy databyte@act.org for more information or to suggest ideas for future ACT Data Bytes.

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<sup>1</sup> Original paper available at http://www.act.org/content/dam/act/unsecured/documents/4970-Data-Byte-2015-7-How-Do-Grade-10-Aspire-Scores-Related-to-Grade-11-ACT.pdf.

<sup>&</sup>lt;sup>2</sup> The ACT Writing test changed effective for the 2015-2016 testing year and this analysis only uses ACT Writing tests from 2015-2016. Scores were reported on a 1-36 scale, but for this analysis were transformed to the 2-12 scale that will be used after 2015-2016.

