

---

# Section Retest Scores Are as Predictive of First-Year Grades as Full ACT Test Scores

---

Justine Radunzel, PhD, and Krista Mattern, PhD

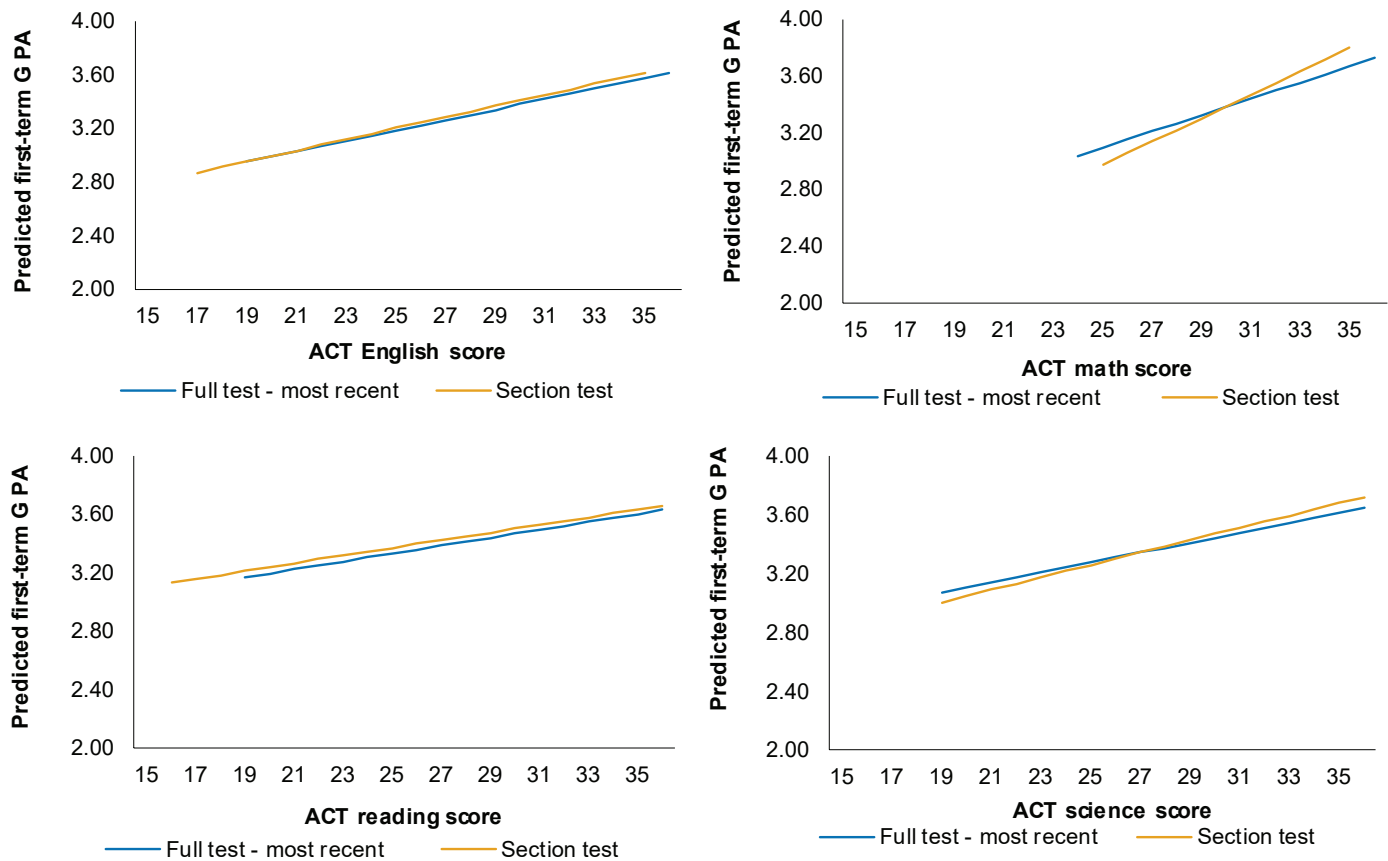
Beginning in September 2020, three new testing options will be available on national ACT® test dates: online testing, section retesting, and superscoring. Given that ACT scores are used to help inform college admissions, scholarship, and course placement decisions, it is of interest to examine the relationship between ACT scores obtained via section retesting and first-year college outcomes. Results from a recent case study suggest that ACT scores earned in a modular setting are predictive of first-term grade point average (GPA) and provide a valid indicator of college readiness. The purpose of this brief is to showcase the findings from this study.

The study was conducted in collaboration with a four-year public university with a highly selective admissions policy.<sup>1</sup> The institution recruited 118 first-time entering students who previously took the ACT test while in high school to take one or more single-section ACT test(s) during the first few weeks of classes and subsequently provided data on students' course grades at the end of their first term. Students who tested in multiple subject areas took each section test on different days to simulate section retesting. Our analyses indicated that despite incentives being offered, some students performed considerably worse on the section retest than on the full ACT test they took in high school. For this reason, analyses were conducted on the full sample as well as on a subsample that excluded students who experienced large score declines (i.e., greater than two standard errors of measurement).

Figure 1 provides the predicted first-term GPA as a function of ACT subject score by testing event for the subsample. As shown in the figure, the regression lines associated with section retest scores in English and reading were similar to those estimated using students' most recent full ACT test scores from high school ( $R = .44$  in English and  $.29$  in reading).<sup>2</sup> In math and science, the slope appeared to be slightly steeper for the section retest scores than for the full ACT test scores ( $R = .52$  vs.  $.42$  in math and  $.40$  vs.  $.30$  in science, respectively), though the differences in intercepts, slopes, and correlations were not statistically significant.<sup>3</sup> Study findings provide empirical support that students' ACT scores obtained via section retesting are as predictive of first-term GPA as ACT scores obtained via the traditional full ACT testing.



[ACT.org/research](https://act.org/research)

**Figure 1.** Predicted First-Term GPA by ACT Subject Score and Testing Event for Subsample

## Notes

1. For more details, refer to the full report: Radunzel, J., & Mattern, K. (2020). *A case study: ACT section retest scores and superscores are predictive of first-term grades*. Iowa City, IA: ACT.
2. *R* refers to the Pearson correlation coefficient that measures the strength of the linear relationship between ACT scores and first-term GPA. For English and reading, the section retest correlations were identical to the full test-most recent correlations.
3. Similar conclusions were reached for the full sample.

### Justine Radunzel, PhD

Justine Radunzel is a principal research scientist in Validity and Efficacy Research specializing in postsecondary outcomes research and validity evidence for the ACT test.

### Krista Mattern, PhD

Krista Mattern is a senior director in Validity and Efficacy Research whose research focuses on predicting education and workplace success through evaluating the validity and fairness of cognitive and non-cognitive measures. Also known for work in evaluating the efficacy of learning products to help improve intended learner outcomes.