



# Interpreting Scores on the Enhanced ACT: Guidance for K-12 and Higher Education Institutions

James Riddlesperger

ACT State and Federal Policy



## Enhancing the ACT

Last year, ACT announced a series of enhancements designed to modernize the ACT test and offer students more choice and flexibility in demonstrating their readiness for life after high school. The enhancements provide students more flexibility by allowing them to choose whether to take the science assessment, thereby reducing the test length by up to one-third. States and districts that administer a school-day ACT are also given more flexibility: they can choose to offer the ACT with or without science, as they currently choose for writing. When science and writing are part of their administration, they have the choice to administer those sections on a separate day from the three core sections of English, mathematics, and reading.

***We seek to create a fairer, more accessible experience while preserving the ACT's historic role as a nationally recognized measure of academic achievement and college readiness.***

These updates address feedback from educators and researchers about balancing efficiency and accuracy in large-scale assessments. By reducing test fatigue and simplifying certain elements of the assessment, we seek to create a fairer, more accessible experience while preserving the ACT's historic role as a nationally recognized measure of academic achievement and college readiness. We have made these enhancements while maintaining the test's reliability, predictive validity, and alignment with state academic standards.

In preparation for the launch of the enhancements, we recently published technical documentation detailing the test development process and the data analyses used to verify that the ACT continues to be a powerful tool for measuring college readiness.<sup>1</sup> This brief serves as a guide for stakeholders in secondary and higher education to two key findings of these analyses:

1. We developed the test enhancements to ensure the section scores on the legacy ACT are interchangeable with section scores on the enhanced ACT. As a result, we do not anticipate a need for states or other institutions to revisit the use of ACT section scores in decision-making.
2. The Composite score on the enhanced ACT will be calculated using English, math, and reading section scores (referred to hereafter with the shorthand "EMR"). This Composite score can be used interchangeably with the Composite score on the legacy ACT, which is calculated with the English, math, reading, and science scores (referred to hereafter with the shorthand "EMRS"), though there are some practical differences in the two scores. It is expected that the scores will differ for some

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<sup>1</sup> [Initial Evidence Supporting Interpretations of Scores from the Enhanced ACT Test](#) summarizes some of the evidence supporting interpretations of the scores from the enhanced ACT. [The Enhanced ACT Linking Study Report](#) focuses on psychometric analyses and findings from the June 2024 linking study.

students, and individual student differences could result in slightly different score distributions. For most uses, these differences are of a similar magnitude to what stakeholders would experience with the annual variation they see in Composite score distributions.

These findings are detailed below. In the following discussion, the “legacy” ACT refers to the version of the test that is being phased out over the 2025-26 calendar years, and the “enhanced” ACT refers to the updated, shortened ACT test experience. Additional information about the enhancements is available on our website.<sup>2</sup>

## Designing the Enhancements

Underlying the ACT test is the belief that students’ preparation for college and the workplace is best assessed by measuring, as directly as possible, the skills learned in high school that are required for success in first-year college-level courses. The required academic skills can be assessed most directly by reproducing the complexity of the work students complete in high school and are expected to complete in college in the classroom. Therefore, the ACT is designed to determine how skillfully students solve problems, grasp implied meanings, draw inferences, evaluate ideas, and make judgments in subject matter areas important to success in college. These philosophical foundations of the ACT test are not changing with the enhancements.

***The ACT Enhancements provide more flexibility for students, states, and districts.***

As happened after other periodic reviews, external expert panels were brought together to evaluate the proposed changes to the legacy ACT and to evaluate the knowledge and skills tested by the ACT. We conducted a separate panel for each test section, with reviewers chosen because of their knowledge, expertise, and experience. These panels also evaluated the alignment of specifications and blueprints to several state high school standards for ELA, math, and science. Additionally, our Technical Advisory Council (TAC) evaluated draft and final versions of the enhanced ACT blueprints and specifications to validate that the assessment will continue to predict college and career readiness. Full details about the changes made to test specifications and blueprints can be found in the forthcoming “Design Framework for the Enhanced ACT Test.”

## Linking the Enhanced and Legacy ACT Tests

In 2024, after the new forms of the enhanced ACT had been constructed, we conducted a “linking” study to ensure that the enhanced ACT measures the same skills and knowledge as the legacy ACT while maintaining high standards of accuracy, fairness, and consistent score interpretation. The study used a large representative sample of ACT test takers who were randomly assigned to take either the legacy ACT test form or one of the two

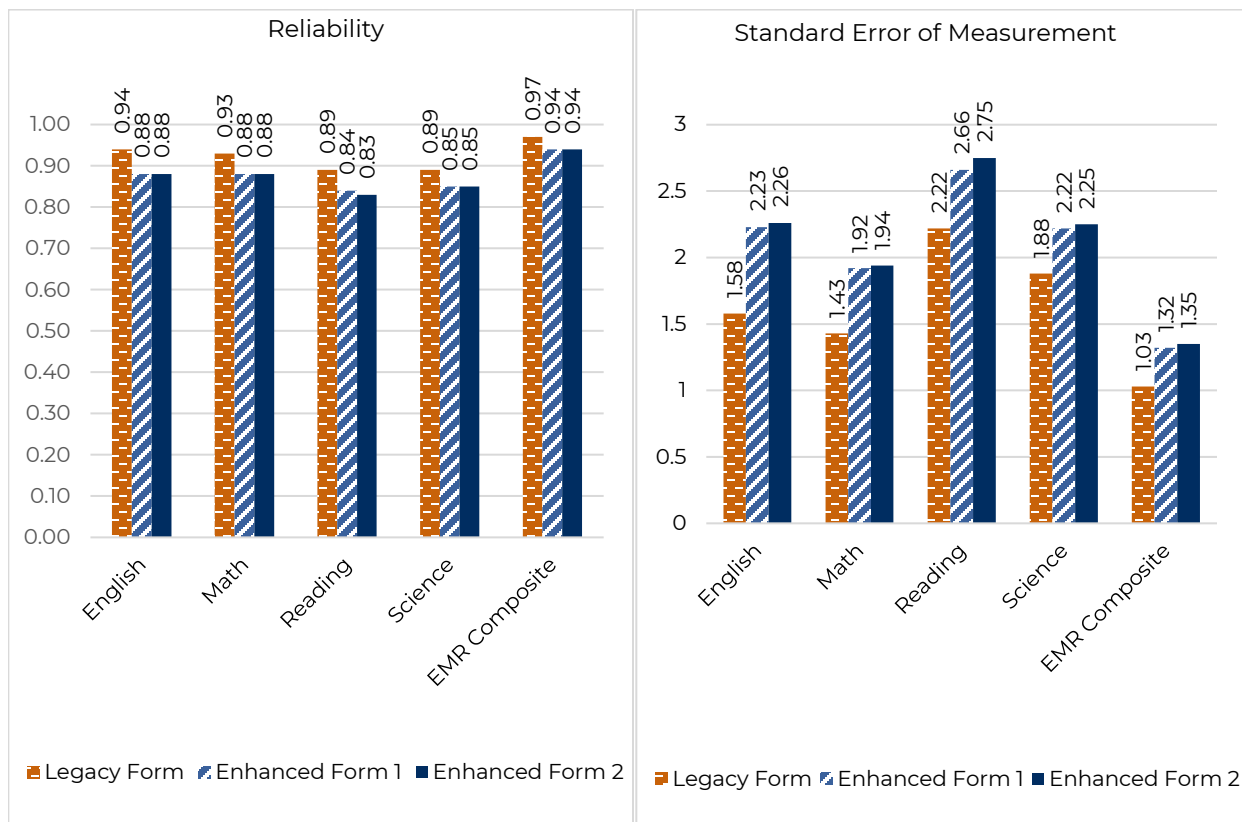
<sup>2</sup> [ACT Test Enhancements | ACT](#)

enhanced ACT forms. The results confirmed that section test scores from the enhanced ACT are interchangeable with those from the legacy ACT.

The findings affirm that the enhanced ACT provides a reliable and valid measure of students’ academic readiness, supporting consistent interpretation and use of scores across educational contexts. As a result, we do not anticipate a need for states or other institutions to change their use of ACT section test scores in decision-making. For example, performance levels that were set through a standard-setting processes and other ACT section cut scores can continue to be used.

**Reduced test length had minor effects on precision and did not affect the constructs measured**

One of the main differences between the legacy ACT and the enhanced ACT is that the enhanced version has fewer questions and a shorter testing time but more time per question. This change aims to reduce test fatigue and improve the testing experience. However, such modifications could potentially result in changes to the constructs measured in the test sections and reduced score precision. These factors were evaluated as part of the cognitive labs and external panel reviews described above. Then, our analyses in



**Figure 1. Reliability and Standard Error of Measurement for the Legacy and Enhanced Forms of the ACT** Note that two separate forms of the enhanced ACT were used in the linking study, and each is shown in the figure.

the linking study ensured that the construct equivalence required for effective linking was met empirically; the linking study is described below and in full detail in “The Enhanced ACT Linking Study Report.”<sup>3</sup>

To ensure that this change did not affect the constructs being measured in each test section, we conducted confirmatory factor analyses using various models. The results of these analyses

showed consistency in the construct equivalence of measurement, with fit indices and factor loadings of the enhanced ACT forms similar to those of the legacy ACT form. In other words, the analyses showed that the legacy and enhanced test sections measure the same underlying academic skills. As anticipated, reducing the number of questions did lead to a small decrease in reliability and a small increase in the standard error of measurement. However, these changes were minor and well within acceptable industry standards. In particular, the reliability of every section test remained well over 0.80. This result indicates that, overall, the test enhancements do not fundamentally change the accuracy of the scores.

	Form	Mean	Standard Deviation
English	Legacy Form	20.68	6.31
	Enhanced Form 1	20.78	6.40
	Enhanced Form 2	20.76	6.44
Math	Legacy Form	20.85	5.44
	Enhanced Form 1	20.84	5.60
	Enhanced Form 2	20.93	5.57
Reading	Legacy Form	22.44	6.59
	Enhanced Form 1	22.37	6.67
	Enhanced Form 2	22.41	6.71
Science	Legacy Form	21.76	5.74
	Enhanced Form 1	21.79	5.73
	Enhanced Form 2	21.78	5.83

**Table 1. Scale Score Descriptive Statistics**

**Section scores from the enhanced ACT are interchangeable with section scores from the legacy ACT**

After establishing that the legacy and enhanced ACT tests were sufficiently similar, we linked the enhanced test to the legacy test using a well-established methodology known as IRT true-score equating. Three significant findings emerged from this part of the study:

- We compared the difficulty of questions on the enhanced and legacy forms to ensure that the enhanced forms met the test specifications. The analysis confirmed that the enhanced forms did meet test specifications and that slight differences in difficulty did not impact the comparability of the scores between the forms.

***States and other institutions will not need to revisit how they interpret ACT section scores for decision-making and accountability.***

<sup>3</sup> [The Enhanced ACT Linking Study Report](#)



- The linking results led to nearly identical score distributions of the legacy and enhanced forms, meaning that scores represent the same level of achievement between the legacy and enhanced forms, as shown in Table 1.
- The results of population invariance evaluation showed consistency between legacy and enhanced forms, indicating the linking results are robust.

Together, these findings show that the enhanced ACT maintains consistent measurement properties with the legacy ACT, and section scores on the enhanced ACT are interchangeable with section scores on the legacy ACT, allowing for direct comparison between student scores on each of the two assessments. Therefore, states and other institutions will not need to revisit how they interpret ACT section scores for decision-making and accountability.

## Understanding the New Composite Score Calculation

Giving students the flexibility of an optional science section required us to change the way we calculate the ACT Composite score. On the legacy ACT, the Composite score is the rounded average of the student's scores on the English, math, reading, and science sections ("EMRS"). On the enhanced ACT, the Composite score is the rounded average of the English, math, and reading section scores ("EMR"). The science section score and the STEM score (average of science and mathematics section scores) will continue to be reported for students who take the science test. While the science score will no longer be included in the Composite calculation, it remains a valuable indicator of students' scientific reasoning skills and preparedness for STEM-related fields, and organizations may continue to consider science and STEM scores for admissions and scholarship decisions.

Legacy Composite Score ("EMRS")	New Composite Score ("EMR")
English, math, reading, and science tests	English, math, and reading tests
ACT Composite = $\frac{(E+M+R+S)}{4}$	ACT Composite = $\frac{(E+M+R)}{3}$

**Table 2. Legacy and New Composite Score Calculations**

Because the Composite score is a measure of general academic readiness that plays a vital part in decision-making for many institutions, it is important to understand the properties of the new EMR Composite score and its relationship to the legacy EMRS version. Our investigation into these changes is summarized below. Full details can be found in the technical report: "Initial Evidence Supporting Interpretations of Scores from the Enhanced ACT Test."<sup>4</sup> Our analyses demonstrate that the Composite scores from the enhanced ACT can be used interchangeably with the legacy Composite scores for the same purposes. In

<sup>4</sup> [Initial Evidence Supporting Interpretations of Scores from the Enhanced ACT Test](#)

In addition, there are some practical differences between the distributions of the two scores that institutions should anticipate, which are discussed below.

**The Composite Score Calculations are Interchangeable**

Our research has determined that, except for very low Composite scores, the EMRS and EMR scores concord with each other point for point. That is, when we established an equipercentile score concordance between the EMR and EMRS Composite scores, the closest EMR score to any EMRS score above 13 is the same score. The same analysis shows that the EMR score is a near-perfect predictor of the EMRS score, with a correlation of 0.99. For this reason, no conversion between legacy ACT Composite scores and enhanced ACT Composite scores is needed, and we will report EMRS- and EMR-calculated Composite scores as interchangeable with each other. In all official score reporting, a student will only receive one Composite score, and there will be no label indicating whether it is EMR or EMRS. Stakeholders can determine the Composite score version based on the test date — online National test administrations starting in April 2025 and all test administrations beginning in September 2025 will report the new EMR composite score.

Our analyses confirmed the appropriateness of using Composite scores for decision-making because the EMR and EMRS Composite scores have nearly identical predictive power when it comes to student success in college. In fact, as shown in Figure 2, the correlations between Composite score and college outcomes (first-year GPA, likelihood of earning a bachelor’s degree, and likelihood of earning any degree) were identical for the EMRS score obtained from the legacy ACT and for EMR obtained from a simulated enhanced ACT. (Note that the simulation accounted for the enhanced ACT’s shorter test length).

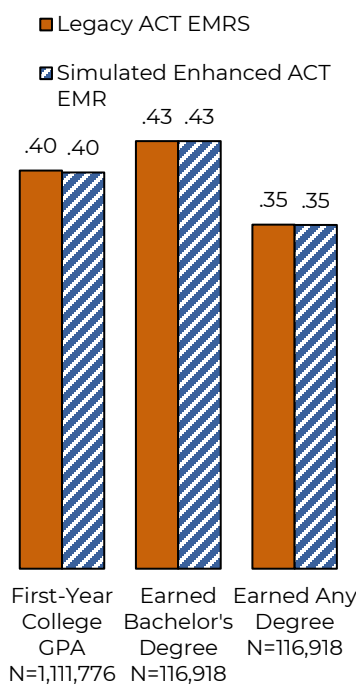
Legacy ACT Composite (EMRS)	Enhanced ACT Composite (EMR)
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36

**Table 3. Concordance between Legacy and Enhanced Composite Scores<sup>5</sup>**

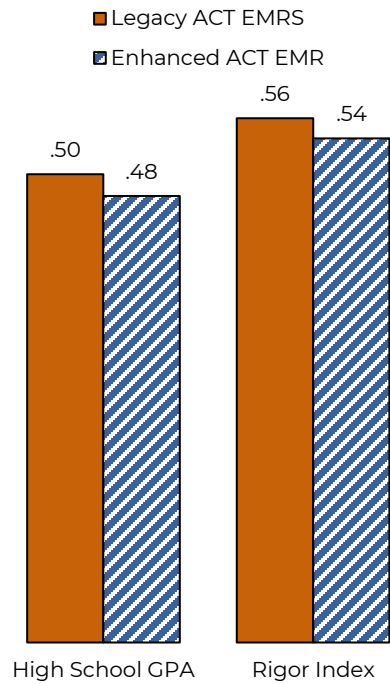
<sup>5</sup> Note that concordance estimates for EMRS scores below 14 were not obtained because the cumulative frequency of scores was less than 50 in that score range, resulting in unreliable estimates.

Similarly, Figure 3 shows that the EMRS and EMR Composite scores correlate with high school GPA and the ACT Rigor Index, which is a measure that can be used to compare students' course performance fairly across different coursework taken, at levels nearly identical to each other.

Therefore, we will report the EMR and EMRS Composite scores interchangeably, and the evidence should encourage stakeholders to continue to use the Composite score as they have in the past. In addition, the current ACT-SAT concordance can continue to be used.<sup>6</sup>



**Figure 2. Correlations of EMRS and EMR Composite Scores with First-Year College GPA and Degree Attainment**



**Figure 3. Correlations of EMRS and EMR Composite Scores with High School GPA and the ACT Rigor Index.<sup>7</sup>**

**Practical Implications of the New Composite Score Calculation**

Although our research provides a strong basis for using the EMR Composite score interchangeably with the EMRS Composite score, there are some practical considerations that stakeholders should understand.

First, there will be a transition period in which some test-takers receive an EMR Composite score, and others receive an EMRS Composite score. In the spring of 2025, most juniors will

<sup>6</sup> ACT recommends stakeholders continue to use the [ACT/SAT Concordance](#) to align:

- ACT Composite scores with SAT Total scores
- ACT math scores with SAT math scores
- ACT English + reading scores with SAT reading/writing scores

While formal progress on updating the concordance has not yet begun, ACT researchers are prepared to collaborate with College Board counterparts when the timing is appropriate, should it be determined that an update is necessary. A review and update of the concordance between ACT and SAT scores would require sufficient data from students who have taken both the enhanced ACT and the digital SAT.

<sup>7</sup> Note that the differences do not reach the standard  $p < .05$  level often used as a threshold for statistical significance.



receive an EMRS Composite score,<sup>8</sup> whereas we will begin reporting EMR Composite scores for all examinees in September 2025. For this reason, we anticipate that the ACT-tested graduating class of 2025 will nearly universally have EMRS-calculated Composite scores, the ACT-tested graduating class of 2026 will have a mix of EMR-calculated and EMRS-calculated Composite scores, and the ACT-tested graduating class of 2027 will nearly universally have EMR-calculated scores. Projections based on historical graduating class data using a student's last ACT score are provided in Table 4. Institutions of higher education will likely see a greater proportion of EMR scores for the class of 2026 than those projected here because students who apply to college are more likely to take the ACT more than once, making their most recent test (and also Superscore<sup>9</sup>) likely to be the new EMR Composite score.

Graduating Class Year	Projected Percentage of Graduates with EMR Score	Projected Percentage of Graduates with EMRS Score
2025	0.3%	99.7%
2026	33.5%	66.5%
2027	98.9%	1.1%

**Table 4. Projected Share of EMR and EMRS Composite Scores by Graduating Class Year**

The second practical consideration is that we anticipate a slight increase in the number of students who will score at the bottom of the Composite score distribution. Because of this, we anticipate that average ACT Composite scores will decline by approximately 0.1 to 0.4 points for most populations, as shown in Figure 4. It is important to note that the anticipated declines, though real in the sense that they may have actual consequences, are of a magnitude that is well within the range of normal annual variation of the Composite score. Further, if all students took the science test, we would expect more than 90% to have an EMR Composite score that is within one point of what their EMRS Composite score would have been if the legacy Composite score were reported.

Out of a desire to fully support institutions in organizational planning, we are providing supplemental reports to higher education institutions that receive ACT scores that will help them understand and plan for any minor impacts from the change in Composite score calculation. The reports show a projection of the number of students at or above each score

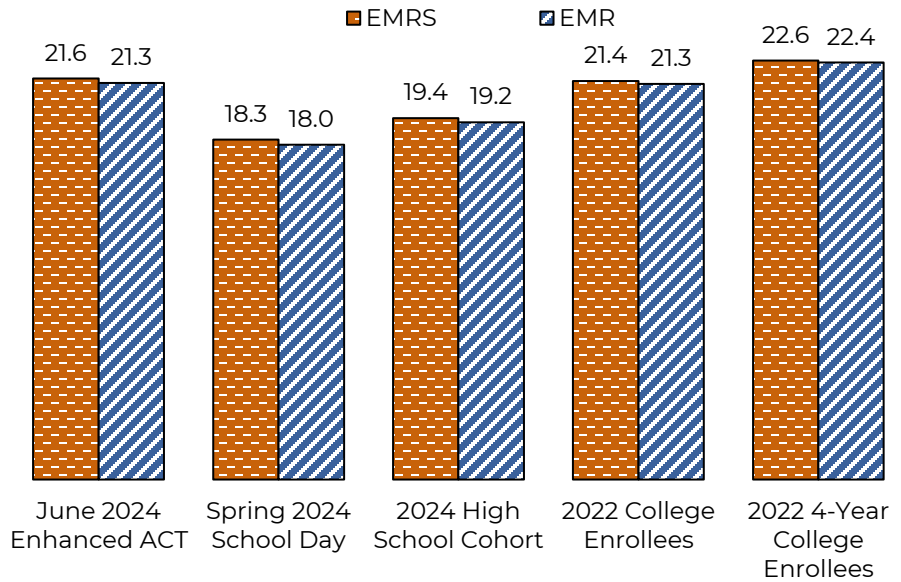
<sup>8</sup> Only examinees who take the ACT National (Saturday) online test starting in April 2025 will receive the new EMR-calculated Composite score. All other examinees in Spring 2025 will take the legacy ACT and will receive an EMRS-calculated Composite.

<sup>9</sup> The ACT Superscore will no longer include the science score after the transition to the new EMR-calculated Composite score. When generating the ACT Superscore report, we will use a student's best score from each section, regardless of which version of the test that section score came from. The report will still display the highest science and STEM scores if the student has taken the science section. If not, the report will show "-/-" for that section.

point for the new EMR Composite score alongside historical data showing the legacy EMRS Composite score. This information can be used to assess potential impacts to existing programs based on Composite score cutoffs.

### Additional Resources

To support stakeholders with information about the transition to the enhanced ACT, several resources are available through the ACT Test Enhancements section of ACT.org.



**Figure 4. Average ACT Composite Score, Selected Populations**

- Practice Tests:** We have released timed and untimed practice tests aligned to the new test blueprint. These practice tests are delivered in the same platform that students will use on test day, with all the appropriate tools and formatting.
- Preparing for the ACT Guide:** This spring we are releasing an addendum to the 2024-2025 Preparing for the ACT guide, found on the [Free ACT Practice Tests and Prep](#) page, that highlights the different experiences students will encounter if they take the national online administration this year.
- Comparison of the Legacy and Enhanced ACT Test:** This short informational document provides side-by-side comparisons of the test blueprints, including test times and detailed information about the reporting categories on each section.

## Summary

The ACT test enhancements improve and modernize the test-taker experience while ensuring that the assessment remains a valid and reliable measure of high school achievement and college readiness. The findings summarized in this brief and fully detailed in the “Linking Study Report for the Enhanced ACT” and “Initial Evidence Supporting the Interpretations of Scores from the Enhanced ACT Test” confirm that:

- Section test scores on the enhanced ACT are interchangeable with those from the legacy ACT.
- EMR-calculated Composite scores can be used interchangeably with EMRS-calculated Composite scores for the purposes that they have historically been used, though there are some practical differences.

No changes to admissions, scholarship, or accountability policies are required as a result of the enhancements for either K-12 or higher education institutions. We will continue to support stakeholders in understanding the practical considerations driven by these updates to the test.

Going forward, the ACT will continue to be the fair, valid, and reliable tool for assessing student readiness that institutions have relied upon for decades while offering enhanced flexibility for our stakeholders.



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