



2022-2023 SCHOOL YEAR

Progress Component Technical Documentation

TRADITIONAL DISTRICT AND SCHOOL REPORT CARDS

Introduction

Progress looks closely at the growth all students are making based on their past state test performances. The Progress Component measures the academic performance of students compared to expected growth on Ohio’s State Tests. This calculation uses a “value-added” model of measuring academic growth that compares the change in achievement of a group of students to an expected amount of change in achievement that is based on the students’ prior achievement history.

The Progress Component has one measure, the overall value-added progress measure, that contributes fully to the star rating. Students’ state tests results are examined through a series of calculations by the department’s vendor, SAS, to produce an overall value-added score. The overall value-added score is used to assign a star rating to schools and districts. There are additional data reported with the Progress Component which do not factor into the star rating and are noted below.

Previous component ratings were assigned based solely on a “growth index.” The growth index provides a level of evidence that the growth observed is statistically different than the growth expected. Another way to interpret this is that the growth index tells us how sure we are that the growth happened in comparison to what we expected.

As set forth in legislation, and through consultation with stakeholders, the updated Progress Component includes a second step to assign ratings. The second step uses an “effect size” to measure the magnitude and it helps standardize and interpret the value-added growth measurement. Another way to say this is that the effect size helps measure the amount of the growth that took place between the two years’ tests.

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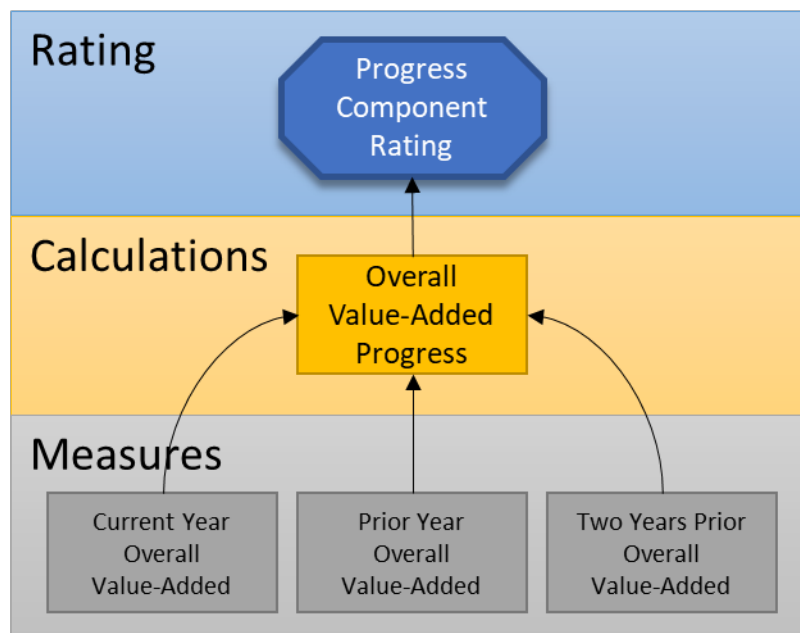


Overview of the Component

This section includes descriptions of how the Progress Component is calculated and rated. References to Ohio Revised Code (ORC – state law) and Ohio Administrative Code (OAC - rule) are included.

The Progress Component will use the overall value-added score for a district or building with three consecutive years of value-added data as described in state law (ORC 3302.03). Since 2021-2022 was the first year that the Department used the new two-step calculation, the 2022-2023 ratings are based on two years of data (tests from 2021-2022 and 2022-2023). In 2023-24, the rating will be based on three consecutive years of data. When three consecutive years of data are available, the Department will weight the most recent year at 50% of the component rating, and 25% to each of the other years. If three consecutive years are not available, then the following applies:

- If two consecutive years of data are not available, the Department will use a single year to calculate the measure and component; weighted at 100%.
- If two consecutive years of data are available, the Department will weight the most recent year at 67% of the component rating, and 33% to the other year available.



Additionally, the Department reports the overall value-added score for a district or school for the most recent school year, and the trend data with the composite for the previous three school years (or two if only two available) in the Department's [Report Portal](#). These data points will not factor directly into the ratings and are reported for additional information only as required in state law ([ORC 3302.03](#)).

Overview of the Measure

The term “value-added” refers to a statistical analysis used to measure the impact of districts, schools, and teachers on the academic growth (or progress rates) of groups of students from year to year. More simply put, academic growth is measured by looking at current achievement compared to prior achievement results on Ohio’s State Tests (OSTs).



DEFINITIONS

Effect Size: an effect size is a value which measures how strong the relationship is between two variables in a population, or a sample-based estimate of that quantity or magnitude. For the Progress component, it means a composite measure of academic growth relative to the mean of the state as a whole that reflects the amount of academic growth of the school or district ([OAC 3301-28-01](#)). The numerical values for this element can be positive or negative numbers. On the positive side, the larger the effect size, the stronger the relationship between the two variables. When looking at a negative number, the smaller the effect size, the stronger the relationship between the two variables. For the current calculation, some districts or schools will have effect sizes of +0.7 at the high end or -0.7 at the low end. Effect size of +0.1 and greater and less than -0.1 are deemed to be statistically significant for districts. For school buildings the numbers reach statistical significance at +0.2 and -0.2.

Growth Index: a growth index is a measure of statistical certainty. For the Progress component, it means a composite measure of statistical significance that reflects the reliability of the data to indicate the academic growth of the school or district in relation to the state as a whole ([OAC 3301-28-01](#)). The growth index, also sometimes called the gain index, will fall in the range of +2.0 to -2.0 for almost all schools and districts. For this calculation, a growth index of +2.0 and higher meets the criteria to be deemed statistically significant. On the low end, a growth index less than -2.0 is deemed statistically significant.

DATA ELEMENTS

- Score (converted to a normal curve equivalent)
- Test grade level
- Test date
- Majority of Attendance IRN
- Assessment Area

TESTS USED IN CALCULATION

Grades 4-8:

- English Language Arts, Math

Grades 5, 8:

- Science

End of Course Tests

- English Language Arts II, Algebra I, Integrated Math I, Geometry, Integrated Math II, Biology, American History, American Government

IMPACT OF SCHOOL GRADE SPANS

When using multiple years of data, there is a chance that a school will change the grades it serves from one year to the next. In cases where a school no longer serves a specific grade, the prior year data from that grade continues to be included in the calculation for the years it is relevant. For example, if an elementary school served kindergarten through sixth grade in 2022-2023 and then switches to only serve kindergarten through fifth grade in 2023-2024, the school's sixth grade tests from 2023-2024 will be included in the building level calculation for the two-year composite calculated for the 2024 report card and the three-year composite calculated for the 2025 report card.

Similarly, when a school adds a grade (e.g. – the sixth grade from the example above moves over to the middle school that formerly had served only grades 7 and 8), the data from that grade does not follow to the new building. Thus, for this example, the middle school would only have one year of 6th grade data in 2023-24 but would use two years' data to calculate the growth for 7th and 8th grade. In 2024-25, the school would have two years' data for 6th grade and three years' data for grades 7 and 8.



Component Rating

School level effect sizes are much more variable than district level effect sizes. This is because growth is the average across a group of students, and districts tend to be much larger than schools. The combination of maintaining consistent policy and accounting for the differences between schools and districts results in small, but important, differences for the cut points as they impact schools and districts. The table below shows the differences in the data needed to assign the five-star ratings.

DISTRICT RANGE	RATING	RATING DESCRIPTION
Growth index of at least +2 and effect size of at least +0.1	5 Stars	Significant evidence that the district exceeded student growth expectations by a larger magnitude
Growth index of at least +2 and effect size of less than +0.1	4 Stars	Significant evidence that the district exceeded student growth expectations
Greater than or equal to -2 but less than +2	3 Stars	Evidence that the district met student growth expectations
Less than -2 and effect size of at least -0.1	2 Stars	Significant evidence that the district fell short of student growth expectations
Less than -2 and effect size of less than -0.1	1 Star	Significant evidence that the district fell short of student growth expectations by a larger magnitude

SCHOOL RANGE	RATING	RATING DESCRIPTION
Growth index of at least +2 and effect size of at least +0.2	5 Stars	Significant evidence that the school exceeded student growth expectations by a larger magnitude
Growth index of at least +2 and effect size of less than +0.2	4 Stars	Significant evidence that the school exceeded student growth expectations
Greater than or equal to -2 but less than +2	3 Stars	Evidence that the school met student growth expectations
Less than -2 and effect size of at least -0.2	2 Stars	Significant evidence that the school fell short of student growth expectations
Less than -2 and effect size of less than -0.2	1 Star	Significant evidence that the school fell short of student growth expectations by a larger magnitude

Additional Resources on Value-Added

SAS TECHNICAL DOCUMENTATION

Ohio uses a contractor, SAS, Inc., to calculate the value-added progress dimension scores. Additional technical documentation about the calculations can be found on the Department's [Value-Added Resources](#) page. These documents will provide readers with information about the older calculations and the one used today.

EVAAS WEBSITE

Ohio's value-added data is available to members of the public on the [Ohio EVAAS](#) webpage. School and district personnel can review their unmasked student-level growth data by logging in to the restricted EVAAS website with a username and password. Members of the general public cannot gain access to the restricted site due to student-privacy laws, but appropriate school district personnel may contact their district's EVAAS Administrator (a role in OEDS-R) to request that access be established for them.

The 2023 school and district report card grades must be released no later than September 15, 2023. The EVAAS website will not be updated with 2023 value-added data until several weeks later (usually in



early October). Thus, there is a period of about 3 weeks when the two sites do not align with the ratings and data. The EVAAS site reports the school year being displayed at the top of each report with a heading that says “Year”. Users who are visiting the EVAAS site can review the “Year” label to determine whether the data have been updated and thus align to the latest report card.