# A Technical Guide for the Fourth Grade Adequate Growth Methodology

June 2025

## Background

The Tennessee General Assembly passed two key pieces of legislation during the 1st Extraordinary Session of 2021—the Tennessee Literacy Success Act (T.C.A. § 49-1-901 et seq.) and the Tennessee Learning Loss Remediation and Student Acceleration Act (T.C.A. § 49-6-1501 et seq.)—to help ensure Tennessee students received supports to help recover from the challenges of the COVID-19 pandemic and close gaps in students' learning. As part of this legislation, the General Assembly revised the state's law regarding the promotion of students from third grade, T.C.A. § 49-6-3115. The statute was also revised during the regular 2021 legislative session. T.C.A. § 49-6-3115, which applies to the 2022-23 school year and subsequent years, ensures students who are determined to need additional support in reading receive them to be promoted to fourth grade.

According to T.C.A. § 49-6-3115, beginning with the 2022-23 school year, a student who is not proficient in English language arts (ELA) may access promotion from Grade 3 to Grade 4 by meeting at least one exemption criteria as permitted by the law[1] *OR* through certain promotion pathways. Two of the pathways include the following:

1. Score "approaching" on the Spring Tennessee Comprehensive Assessment Program (TCAP) ELA test or the TCAP ELA retake and be assigned a tutor through the Tennessee Accelerating Literacy and Learning Corps (TN ALL Corps) for the following year; or
2. Score "below" on the Spring TCAP ELA test, attend a learning loss bridge summer camp, maintain 90 percent attendance at the camp, and be assigned a tutor through TN ALL Corps for the following year.

Additionally, the law and State Board of Education Promotion and Retention Rule 0520-01-03-.16 requires students who are promoted to fourth grade via the above two pathways to demonstrate "adequate growth (AG)" before being promoted to fifth grade:

> *A student who is promoted to the fourth (4th) grade pursuant to…[1 above] or …[2 above]… must show [AG] on the fourth (4th) grade ELA portion of the TCAP test as further defined in State Board Promotion and Retention Policy 3.300, before the student may be promoted to the fifth (5th) grade.*

This technical guide describes the definition of AG and provides detailed information regarding the fourth grade AG methodology and business rules applied when calculating the fourth grade AG. Frequently asked questions (FAQ) are included.

If a student does not demonstrate AG on the 4th grade ELA portion of the TCAP, the student may be promoted to the 5th grade through a conference committee pathway pursuant to T.C.A. § 49-6-3115(a)(3)(B)

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[1] Consult the Frequently Asked Questions on the Promotion and Retention of Third Grade Students.

Please refer to the Promotion and Retention Guidelines and Toolkit for additional information on this pathway.

## What Is Fourth Grade AG?

As specified in T.C.A. § 49-6-3115, students promoted to the fourth grade by participation in tutoring intervention programs must demonstrate improvement from the ELA section of the third grade TCAP to the ELA section of the fourth grade TCAP assessment. Implicit in the law is an expectation that the growth observed from third to fourth grade is sufficient to make it reasonable to assume the child is on an improved trajectory to achieve proficiency in the future. Students who demonstrate AG will, from third grade to fourth grade, significantly increase the likelihood that they will achieve proficiency in the future.

## How Is AG Evaluated?

Tennessee's Value-Added Assessment System (TVAAS) has always provided an estimate for how likely a student is to be proficient on a future TCAP assessment based on their prior testing history. This metric, referred to as a *proficiency projection*, provides an individualized estimate of the likelihood that a student will ultimately become proficient on the ELA section of the TCAP assessment. Based on their third grade TCAP performance, each student receives an estimate of how likely they are to be proficient in fourth grade ranging from 0.1 percent to 99.9 percent.

To evaluate whether a student meets AG, each student will receive a target for how much their proficiency projection must increase after fourth grade—a simple example:

> *A student scored "below" on the third grade TCAP. His/her fourth grade proficiency projection is 26.0 percent. His/her growth target is 3.0 percent (methodology described below). He/she must achieve a fifth grade proficiency projection (based on the fourth grade TCAP) of 29.0 percent or higher (fourth grade proficiency projection—26.0 percent plus the growth target—3.0 percent) to demonstrate AG.*
>
> *He/she demonstrates AG by increasing the likelihood of being proficient from 26.0 percent after third grade to at least 29.0 percent after fourth grade.*

### Step 1. Calculate Individual Student Proficiency Projections

Proficiency projections use a simple regression to produce a projected score for each student. These projected scores are based on each student's unique TCAP testing history and an expectation for how much growth is typically observed by students scoring similarly.

The proficiency projection is calculated by producing a standard error of measure around each student's projected score. The actual probability is derived from the percentage of the standard error of measure above the proficiency cut point—a simple example.

> *A student's projected scale score of 242 (hypothetically) falls exactly at the met expectations cut score. An error band centered right on the proficiency cut point would result in 50 percent of the error band located above and 50 percent below. As a result, his/her proficiency projection, based on a projected score right at the proficiency cut point, would be 50 percent.*

In essence, the proficiency projection estimates how likely a student is to score proficient if they grow the average expected amount from wherever they scored in the previous year.

More detailed information about the production of projected scores and proficiency projections can be found in the TVAAS technical manual.

**Data Handling Business Rules.** Proficiency projections are calculated based on a student's unique testing history. When evaluating AG, two projections are necessary. First, a fourth grade ELA proficiency projection is calculated as an estimate of the likelihood of a student achieving ELA proficiency in fourth grade based on the student's third grade achievement across all subject areas. Students must have at least one third grade test score to receive a fourth grade projection. If a student has both a spring TCAP ELA and a re-take ELA score, the re-take score will be used in the projection calculation **ONLY IF** it helps with the student's AG attainment in fourth grade. If a student does not have a spring TCAP ELA score but has a retake ELA score, the retake ELA score is included in the projection calculation.

Second, a fifth grade ELA proficiency projection is calculated as an estimate of the likelihood of a student achieving ELA proficiency in fifth grade based on the student's fourth grade achievement. Two fifth grade ELA proficiency projections will be calculated—one with all available fourth grade tests included and the other with only the ELA test included in the projection calculation. Whichever projection is more advantageous to the student is used for the evaluation.

### Step 2. Calculate the Individualized Growth Target for AG

In the vast majority of circumstances, the department, as approved by the state board, operationally defines AG as achieving a fifth grade proficiency projection that meets or exceeds their fourth grade proficiency projection plus their growth target (State Board of Education Promotion and Retention Policy, 3.300).

The logic of the growth target is to reduce the gap between existing performance and a determination of success over the life of the TCAP testing program. In this application, current performance is the student's probability of being proficient on the fourth grade ELA assessment based on third grade performance. Success is the student achieving the *probability associated with a student scoring right at the proficient cut score*, a 50 percent probability of being proficient. The AG target is determined by spreading the gap between a 50 percent probability estimate and the students' fourth grade ELA probability estimate over the eight years remaining in the TCAP program. When calculating the AG target, proficiency projections are rounded to one decimal place, and the AG target is rounded to one decimal place.

$$AG\ Target\ formula = \frac{(50.0\%\ Probability - 4th\ Grade\ ELA\ Probability)}{8\ years}$$

The AG target for a student with a 20.0 percent probability of achieving proficiency on the fourth grade ELA TCAP is 3.8 percent, as presented below.

$$AG\ Target = \frac{(50.0\%\ Probability - 20.0\%\ Probability)}{8\ years}$$

$$= \frac{30.0\%}{8} = 3.8\%$$

To be promoted to fifth grade, the student must demonstrate at least a 3.8 percentage point increase from his/her fourth to fifth grade ELA proficiency projection. For example: the student's fifth grade ELA proficiency projection target is 23.8 percent, as presented below. If, based on the fourth grade ELA assessment, the student earns a fifth grade ELA proficiency projection of 23.7 percent, the student will not demonstrate AG. If the student has a fifth grade ELA proficiency projection of 24.0 percent, the student will demonstrate AG.

$$Fifth\ Grade\ ELA\ Proficiency\ Projection\ Target = 20.0\% + 3.8\% = 23.8\%$$

### Step 3. Determine Individual Students' AG Attainment Status

The final AG determination can be achieved in one of two ways.

1. Students scoring *met* or *exceeded expectations* level on the fourth grade ELA assessment will automatically demonstrate AG regardless of their fifth grade ELA proficiency projection; OR
2. Students *below* or *approaching expectations* level on the fourth grade ELA assessment must meet his/her AG target to be promoted to fifth grade.
   a. Students with a fourth grade ELA proficiency projection **equal to or greater than 42.5 percent** will be promoted to fifth grade if their fifth grade ELA proficiency projection is **at least 0.1 higher than their fourth grade proficiency projection**;
   b. Students with a fourth grade ELA proficiency projection **less than 42.5 percent** will be promoted to fifth grade if they **meet their AG target** (see Step 2 for AG target formula).

Table 1 provides use cases for AG targets, fifth grade ELA proficiency projection target calculations, and AG attainment status.

**Table 1. Use Cases of AG Targets, Fifth Grade ELA Proficiency Projection Target Calculations, and AG Attainment Status**

| Scenario:<br>*A student with a fourth grade ELA proficiency projection of…* | AG Target | Fifth Grade ELA Proficiency Projection Target | Actual Fifth Grade ELA Proficiency Projection | AG Attainment Status |
|---|---|---|---|---|
| 10.0% | 5.0% | 15.0% | 14.0% | Did not meet AG |
| 25.0% | 3.1% | 28.1% | 30.0% | Met AG |
| 42.4% | 1.0% | 43.4% | 42.7% | Did not meet AG |
| 42.5% | 0.1% | 42.6% | 42.7% | Met AG |
| 45.0% | 0.1% | 45.1% | 45.2% | Met AG |
| 50.0% | 0.1% | 50.1% | 45.0% | Did not meet AG |
| 51.0% | 0.1% | 51.1% | 52.0% | Met AG |

# Data Release Timeline and File Layouts

On July 1, 2025, the department will release two data files on the Accountability application. The first data file is the **2024-25 Adequate Growth attainment projections for 4th grade students,** which includes  fifth grade ELA proficiency projections for the students who are subject to AG evaluation during the 2024-25 school year. This data file includes all data elements used to determine students' fifth grade proficiency projection targets, plus additional data indicating whether they have met their AG attainment status based on their fourth grade achievement (see Table 2 for file layout; AG attainment status indicators are in red text). In this data file, all data pertaining to their fourth grade projections, AG targets, fifth grade proficiency projection targets, and the chosen fifth grade proficiency project target have been previously released to districts on the Accountability application. The last update was provided to districts via the Accountability application reflecting student enrollment as of May 23, 2025. The only new data that are added to the data file are the fifth grade ELA proficiency projections data based on fourth grade performance.

It is important to note, **this data file contains fifth grade ELA proficiency projections for all fourth grade students in 2024-25. Districts shall use this data file to determine the AG attainment status for students who are subject to AG evaluation in fourth grade in 2024-25.** In this file, students will be assigned to schools and districts in which they were last enrolled as of the last day of the 2024-25 school year. Students with more than one enrollment will be assigned to any school and district in which their enrollment status was shown as active on the last day of the 2024-25 school year.

**Table 2. 2024-25 Grade 4 Students AG Attainment: File Layout**

| Variable Name | Definition |
|---|---|
| **system** | System ID number in most recent 4th grade enrollment (primary enrollment only) |
| **system_name** | System name in most recent 4th grade enrollment (primary enrollment only) |
| **school** | School ID number in most recent 4th grade enrollment (primary enrollment only) |
| **school_name** | School name in most recent 4th grade enrollment (primary enrollment only) |
| **student_key** | State student ID number |
| **student_name** | Student's first name, last name, and middle initial |
| **projection_w_retake** | Probability of a student having a performance level of either Met or Exceeded Expectations in 4th grade ELA, ***including the 3rd grade ELA retake*** |
| **projection_wo_retake** | Probability of a student having a performance level of either Met or Exceeded Expectations in 4th grade ELA, ***excluding the 3rd grade ELA retake*** |
| **ag_target_w_retake** | Target improvement from 4th grade projection to 5th grade projection when applying the AG formula to the 4th grade projection ***with retake*** |
| **ag_target_wo_retake** | Target improvement from 4th grade projection to 5th grade projection when applying the AG formula to the 4th grade projection ***without retake*** |
| **fifth_grade_ela_proficiency_ projection_target_w_retake** | Target probability of a student having a performance level of either Met or Exceeded Expectations in 5th grade ELA to meet AG, based on 4th grade projection ***including the 3rd grade ELA retake*** |
| **fifth_grade_ela_proficiency_ projection_target_wo_retake** | Target probability of a student having a performance level of either Met or Exceeded Expectations in 5th grade ELA to meet AG, based on 4th grade projection ***excluding the 3rd grade ELA retake*** |
| **chosen_fifth_grade_ela_profi ciency_projection_target** | ***The chosen fifth grade ELA proficiency projection target for AG attainment evaluation.*** This is the lower target between the 5th grade proficiency projection with and without factoring in the 3rd grade ELA retake to the 4th grade projection. |
| <span style="color:red">**fifth_grade_ela_proficiency project_all_subjects**</span> | <span style="color:red">Probability of a student having a performance level of either Met or Exceeded Expectations in 5th grade ELA ***based on all fourth grade testing scores across all subjects.***</span> |
| <span style="color:red">**fifth_grade_ela_proficiency project_ela_only**</span> | <span style="color:red">Probability of a student having a performance level of either Met or Exceeded Expectations in 5th grade ELA ***based on fourth grade ELA test only***.</span> |
| <span style="color:red">**chosen_fifth_grade_ela_profi ciency_projection**</span> | <span style="color:red">***The chosen fifth grade ELA proficiency projection for AG attainment evaluation.*** This is the higher projection between the fifth grade ELA proficiency projection using all subjects versus the projection using ELA test score only.</span> |
| <span style="color:red">**adequate_growth_attainme nt_status**</span> | <span style="color:red">***Did not meet AG vs. Met AG.*** *When a student has a higher score on the chosen_fifth_grade_ela_proficiency_projecct than the chosen_fifth_grade_ela_proficiency_projection_target, the student met AG, vice versa.*</span> |

The second data file is the ***2024-25 Adequate Growth attainment projections for third grade students,*** which includes fourth grade ELA proficiency projections for students who were in grade 3 during the 2024-25 school year. This data file will include two sets of projections and AG targets (see Table 3 for file layout), including two sets of fourth grade ELA proficiency projection, AG target, and the fifth grade ELA proficiency projections. The first set of calculations presents the projections and targets without the retake score. The second set of calculations presents the projections and targets when a higher re-take score is available, which include the projections and AG target for students without a spring TCAP ELA score but with a retake score. Ultimately, the projection and the associated AG target that helps students' final AG attainment (i.e., a lower fifth grade ELA proficiency projection target) will be used to determine students' fifth grade promotion decision. That is, the "***chosen_fifth_grade_ela_proficiency_projection_target***" represents the fifth grade ELA proficiency projection target that will be used to evaluate students' AG attainment status; this projection is the lower target comparing between the fifth grade ELA proficiency projection target with and without

retake score factoring in the projection calculation. Students who did not have any third grade testing records, including retake, will remain in the data file and be marked as "No Testing Records" under the "**chosen_fifth_grade_ela_proficiency_projection_target**" column.

**Table 3. 2024-25 Grade 3 Students 4th Grade Projections: File Layout**

| Variable Name | Definition |
|---|---|
| **system** | System ID number in most recent 4th grade enrollment (primary enrollment only). In the July 1 release, it would be the system in which students were last enrolled as of the last day of the 2024-25 school year |
| **system_name** | System name in most recent 4th grade enrollment (primary enrollment only) |
| **school** | School ID number in most recent 4th grade enrollment (primary enrollment only). In the July 1 release, it would be the school in which students were last enrolled as of the last day of the 2024-25 school year |
| **school_name** | School name in most recent 4th grade enrollment (primary enrollment only) |
| **student_key** | State student ID number |
| **student_name** | Student's first name, last name, and middle initial |
| **projection_w_retake** | Probability of a student having a performance level of either Met or Exceeded Expectations in 4th grade ELA, **including the 3rd grade ELA retake** |
| **projection_wo_retake** | Probability of a student having a performance level of either Met or Exceeded Expectations in 4th grade ELA, **excluding the 3rd grade ELA retake** |
| **ag_target_w_retake** | Target improvement from 4th grade projection to 5th grade projection when applying the AG formula to the 4th grade projection **with retake** |
| **ag_target_wo_retake** | Target improvement from 4th grade projection to 5th grade projection when applying the AG formula to the 4th grade projection **without retake** |
| **fifth_grade_ela_proficiency_projection_target_w_retake** | Target probability of a student having a performance level of either Met or Exceeded Expectations in 5th grade ELA to meet AG, based on 4th grade projection **including the 3rd grade ELA retake** |
| **fifth_grade_ela_proficiency_projection_target_wo_retake** | Target probability of a student having a performance level of either Met or Exceeded Expectations in 5th grade ELA to meet AG, based on 4th grade projection **excluding the 3rd grade ELA retake** |
| **chosen_fifth_grade_ela_proficiency_projection_target** | *The chosen fifth grade ELA proficiency projection target for AG attainment evaluation.* This is the lower target between the 5th grade proficiency projection with and without factoring in the 3rd grade ELA retake to the 4th grade projection. |

It is important to note, **this data file contains data for all third grade students in 2024-25. Districts shall use this data file to identify the appropriate AG target for students who are subject to AG evaluation when they are in fourth grade in 2025-26**. Students will be assigned to schools and districts in which they were last enrolled as of the last day of the 2024-25 school year. Students with more than one enrollment will be assigned to any school and district in which their enrollment status was shown as active on the last day of the 2024-25 school year. Following the July 1 release, the department will update the data file reflecting current student enrollment throughout the 2025-26 school year on the following timeline:

- *August 15, 2025*
- *October 17, 2025*
- *January 16, 2026*
- *March 20, 2026*
- *May 22, 2026*

# Frequently Asked Questions (FAQ)

This section provides answers to frequently asked questions.

**Q1. Which students are eligible for AG evaluation?**

Third grade students who are not proficient in ELA and are promoted to fourth grade through pathways available in the law are eligible to be evaluated for AG in fourth grade. More information about the promotion and retention law, please consult the please consult the Third & Fourth Grade Promotion FAQ.

**Q2. What is the AG target for students close to meeting proficiency (i.e., have an AG target of less than 1 percent)?**

The department, with the approval of the State Board of Education, has established a special rule for students who are close to meeting proficiency based on their fourth-grade proficiency projection. That is, a student with a proficiency projection equal to or greater than 42.5% will have their AG target fixed at 0.1.

A simple example follows:

*A student scored "below" on the third grade TCAP. His/her fourth grade proficiency projection is 43.0 percent. His/her AG target is fixed at 0.1. To demonstrate AG, he/she must achieve a fifth grade proficiency projection of 43.1 percent or higher (43.0 + 0.1).*

**Q3. Why does the department set the 50 percent proficiency projection as the target for gap closure?**

The department defines success as a student achieving a projected score right at the proficiency cut score, which is the exact interpretation of the 50 percent proficiency projection. Additionally, for low-achieving students to catch up and become proficient in the future, it takes quality instruction, time, and continuous support. Therefore, the department will stretch the time to eight years for students to fully close the gap. If students continue to receive high-quality instruction and support throughout the remainder of their K-12 learning journey, these students, even the very low-performing students, can ultimately be proficient in the future if they continue to demonstrate growth and meet the AG target year over year.

**Q4. Why are math and science tests included in the calculation of the fourth grade and fifth grade ELA projections?**

The department allows for multiple subject area assessments to contribute to the proficiency projection because both internal and external research has shown conclusively that it results in a more accurate proficiency estimate. To provide an additional lens on the analysis by considering only ELA, the department has also provided a second projection solely based on the fourth grade ELA test score. The projection more likely to identify a student as achieving AG is used to determine their AG attainment status.

**Q5. Is the third grade ELA retake used in the determination of the AG attainment?**

The third grade retake score is used to determine AG attainment **ONLY IF** it helps the student achieve AG. If a student has a retake score resulting in a lower fifth grade ELA proficiency projection, the retake score is factored into the fourth grade ELA proficiency projection.

**Q.6 When will districts know which students will have made AG?**

The department will release the fifth grade projection and the final list of students who have met their AG target in fourth grade to districts by July 1, 2025, via the accountability application.