Teacher Incentive Allotment 2023-24 Guidebook

Contents

Introduction

The Texas Commission on Public School Finance was created in the 85th Texas Legislature's First Special Session (2017) to address the teacher turnover rate and number of beginning teachers. The commission heard over 80 hours of testimony from more than 155 individuals, including representatives from 19 school districts, six institutions of higher education, and more than 100 advocates, policy experts, and stakeholders. After months of research, discussion, and deliberation, the commission produced their 2018 report, *Funding for Impact: Equitable Funding for Students Who Need It the Most*. The report gave recommendations for improvements to the current public school finance system and proposed new methods for financing public schools.

Thanks to the efforts of the commission and the bipartisan work between the members of the Texas House and Senate, House Bill 3 (HB 3) was passed by the 86th Texas Legislature in 2019 and signed by Governor Greg Abbott. This sweeping and historic school finance bill provided more money for Texas classrooms, increased teacher compensation, and established the Teacher Incentive Allotment (TIA). HB 3 is one of the most transformative Texas education bills in recent history.

This guidebook was created for districts as a comprehensive guide to the Teacher Incentive Allotment and outlines policies, timelines, and best practices

What is the Teacher Incentive Allotment?

TIA was established with the goal of providing outstanding teachers an accessible pathway to a six-figure salary. Unlike previous education programs, the Teacher Incentive Allotment is not a grant. TIA is based in two sections of the Texas Education Code (TEC), **§21.3521 (Local Optional Teacher Designation System)** and **§48.112 (Teacher Incentive Allotment)**. Local optional teacher designation systems (local designation systems or systems) allow districts to identify and designate highly effective teachers using single or multi-year appraisal data. The allotment component allows districts employing designated teachers to receive additional funding through the Foundation School Program.

TIA elevates the education profession by recognizing and rewarding effective teaching and incentivizing outstanding teachers to remain in the classroom and improve student outcomes. Districts use TIA funds to retain their best teachers, recruit promising new teachers, and incentivize teachers to work in high-needs schools and difficult-to-staff positions.

Designations and Allotments

Designations are distinctions awarded to highly effective teachers. There are three levels of designation: Recognized, Exemplary, and Master. Designations are awarded to teachers through a district local optional teacher designation system. A district local designation system can designate teachers at any level. Teachers with an active National Board Certification may be designated as Recognized by the Texas Education Agency (TEA).

Districts receive an annual allotment for each eligible designated teacher they employ. Allotments are based on the teacher's designation level and campus of employment, with greater funding for high-needs and rural campuses. Districts may use TIA funds to incentivize effective teachers to remain in the classroom and prioritize high-needs campuses.

$3K-$9K

Recognized designations represent the top 33% of Texas teachers

$6K-$18K

Exemplary designations represent the top 20% of Texas teachers

$12K-$32K

Master designations represent the top 5% of Texas teachers

Local Optional Teacher Designation Systems Overview

Under **TEC §21.3521**, districts may create a local system to designate high-performing teachers as Recognized, Exemplary, or Master for a five-year period based on the results of single or multi-year appraisal data.

A local designation system allows districts to identify their top-performing teachers and target areas of improvement for teachers who did not qualify. Alongside statewide performance standards, districts set their own criteria for evaluating teachers and determining which teachers qualify for each level of designation. Teacher designations must align with the performance and validity standards outlined in Texas Administrative Code **(TAC) §150.1012**. At minimum, teacher performance data must be based on data from:

$\rightarrow$ Teacher observation based on the Texas Teacher Evaluation and Support System (T-TESS) or a third-party rubric, such as the National Institute for Excellence in Teaching TAP System for Teacher and Student Advancement (NIET TAP), Marzano's Teacher Evaluation Model (Marzano), or the Danielson Group rubric (Danielson). Locally developed rubrics must comply with **TEC §21.351**, **TEC §21.352**, and **TAC §149.1001**.

$\rightarrow$ Student growth measures determined by district. Districts are not required to use **approved standardized assessments** for purposes of designation. Districts may use third-party or district-created pre-tests and post-tests, Value-Added Model (VAM), Student Learning Objectives, and/or portfolios.

Prior to issuing designations, districts go through a three-year application and approval process. In year one, the Application Year, districts attend TIA technical assistance sessions and submit their System Application. In year two, districts go through a Data Capture Year, implementing their systems and collecting teacher performance data. In the third year, districts submit the data they collected to Texas Tech University (Texas Tech) for data validation. In partnership with Texas Tech, TEA annually monitors the quality and fairness of local designation systems.

Year 1 — **Application Year**

Year 2 — **Data Capture Year**

Year 3 — **Data Submission and Validation**
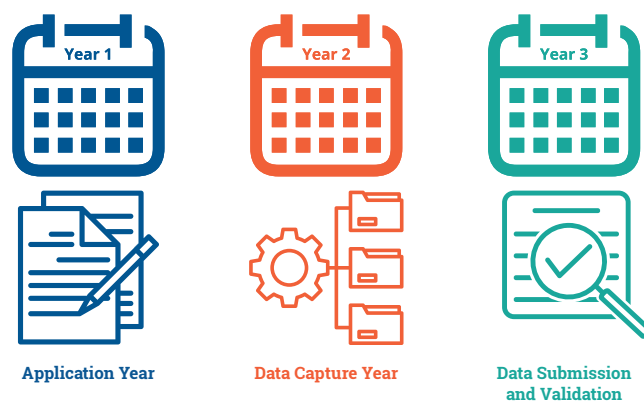
Allotment Funding

TIA is a Tier 1 allotment through the Foundation School Program (FSP), the system through which the state provides funding to districts. This system, grounded in the Texas Education Code, creates a sustainable funding source for districts implementing TIA. The allotment formula is campus-based, with increased allotments for high-needs and rural campuses.

No Funding or Designation Caps

Unlike previous state incentive programs, there is no cap on TIA allotment funds or the number of teachers who may earn a designation.

Districts receive annual allotment funds when they employ eligible designated teachers. These funds must then be used for teacher compensation on the campus where the designated teacher works. All TIA teacher compensation is Teacher Retirement System (TRS) eligible.

90%	10%

Districts are **required** to spend at least **90% of their allotment funds on teacher compensation** on the campus where the designated teachers works. Districts **may** use up to 10% for costs associated with implementing a local designation system or supporting teachers in earning a designation.

Districts are notified of the annual allotment amount in April and must spend the funds by August 31 of the same year. All Texas school systems are eligible to receive TIA funds for designated teachers whom they employ.

The allotment formula takes three factors into account:

| TEACHER DESIGNATION LEVEL | CAMPUS SOCIOECONOMIC LEVEL | CAMPUS RURAL STATUS |

Each teacher designation level starts with a base amount and a multiplier rate.

Designation Level	Base Allotment	Multiplier Rate
Recognized	$3,000	$1,500
Exemplary	$6,000	$3,000
Master	$12,000	$5,000

Socioeconomic levels are then determined by assigning a point value to each student based on the Compensatory Education block tier. These levels are tied to student enrollment.

Tier	0	1	2	3	4	5
Point Value	0	.5	1	2	3	4

Students at rural campuses receive a two-tier boost to their point value with a maximum value of Tier 5.

Base Tier	0	1	2	3	4	5
Tier with Rural Boost	2	3	4	5	5	5

Rural Campus Status Definition

a. A campus within a school district with fewer than 5,000 enrolled students in an area that is not designated as an urbanized area or urban cluster by the United States Census Bureau; or

b. A campus within a school district with fewer than 5,000 enrolled students that is categorized as a rural, non-metropolitan: stable, or non-metropolitan: fast growing district type by TEA; or

c. A campus within a school district with fewer than 5,000 enrolled students categorized as rural by the National Center for Education Statistics.

An average student point value for each campus is calculated by adding all student tier numbers and then dividing by the total number of students. The average point value is then multiplied by the designation's multiplier rate. That value is added to the designation's base allotment, resulting in the total incentive allotment. The allotment values are updated annually.

BASE ALLOTMENT	+	MULTIPLIER RATE	×	AVERAGE STUDENT POINT VALUE	=	ALLOTMENT PER DESIGNATED TEACHER

Districts receive annual allotment funds when they employ eligible designated teachers. These funds must then be used for teacher compensation on the campus where the designated teacher works. All TIA teacher compensation is TRS eligible.

Districts receive notification of the annual allotment amount in April and must spend the funds by August 31 of the same year. Districts are **required** to spend at least **90% of their allotment funds on teacher compensation** on the campus where the designated teacher works. Districts **may** use up to 10% for costs associated with implementing a local designation system or supporting teachers in earning a designation. All Texas school systems are eligible to receive TIA funds for designated teachers whom they employ.

For all districts with fully approved systems, annual spending must be reported in the Annual Program Submission to stay in compliance. The Annual Program Submission is an important, statutorily required process that all fully approved districts must complete by August 31 of each year. For more information on the Annual Program Submission, review the **2023 Annual Program Submission**.

Funding Example

Non-Rural Campus		Rural Campus
Tier 0 = 20 Students $\longrightarrow$	+2 $\longrightarrow$	Tier 2 = 20 Students
Tier 1 = 12 Students $\longrightarrow$	+2 $\longrightarrow$	Tier 3 = 12 Students
Tier 2 = 15 Students $\longrightarrow$	+2 $\longrightarrow$	Tier 4 = 15 Students
Tier 3 = 13 Students $\longrightarrow$	+2 $\longrightarrow$	Tier 5 = 13 Students
Tier 4 = 24 Students $\longrightarrow$	+2 $\longrightarrow$	Tier 5 = 24 Students
Tier 5 = 16 Students $\longrightarrow$	+2 $\longrightarrow$	Tier 5 = 16 Students

Average Student Point Value:	Average Student Point Value:
1.83	**3.01**
RECOGNIZED: $5,745	**RECOGNIZED: $7,515**
$3,000 + ($1,500 x 1.83)	$3,000 + ($1,500 x 3.01)
EXEMPLARY: $11,490	**EXEMPLARY: $15,030**
$6,000 + ($3,000 x 1.83)	$6,000 + ($3,000 x 3.01)
MASTER: $21,150	**MASTER: $27,050**
$12,000 + ($5,000 x 1.83)	$12,000 + ($5,000 x 3.01)

Key

- Tier 0 = 0 points
- Tier 1 = .5 points
- Tier 2 = 1 point
- Tier 3 = 2 points
- Tier 4 = 3 points
- Tier 5 = 4 points

Statewide Performance Standards

Designation criteria and cut points for each level of designation are determined by the district; TEA does not select which teachers qualify nor reject individual teacher designations. TEA established performance standards to serve as guidelines for districts when evaluating teacher effectiveness and setting designation criteria. Prior to approving local designation systems, TEA studies the overall alignment of district designations to the statewide performance standards. Exact alignment is not required.

The Teacher Incentive Allotment established performance standards for teacher observation and student growth ratings for each level of designation using statewide teacher performance data. For teacher observation, the performance standards were determined using statewide T-TESS observation data. Student growth performance standards were determined through a value-added model using State of Texas Assessments of Academic Readiness (STAAR) data across five years (2014–2019). Each level of designation represents teacher performance relative to all Texas teachers.

Statewide Performance Standards

Designation Level	Statewide Percentages	Teacher Observation Performance Standards*	Student Growth Performance Standards
Recognized	Top 33%	3.7 or 74% of possible points	55% met or exceeded
Exemplary	Top 20%	3.9 or 78% of possible points	60% met or exceeded
Master	Top 5%	4.5 or 90% of possible points	70% met or exceeded

*Represents average of all dimensions in T-TESS Domains 2 and 3. **Teachers must have a minimum score of Proficient in all observable dimensions to be eligible for a new designation.**

Percentages May Vary

While designations represent the top-performing teachers in the state of Texas, districts that submit teachers for designations through their local designation system may find that they have more or less than the numbers represented. Any teacher that meets a local designation system's eligibility requirements and the minimum proficiency observation ratings may be submitted for designation.

As districts design their local designation system, they must consider how they will incorporate the statewide performance standards when determining designation criteria. Note that performance standards represent statewide percentages. A district's top 5% of teachers may align, exceed, or fall below the observation and student growth performance standards. Before establishing designation cut points, districts may study how their teachers perform in comparison to teachers across the state. Designated teachers may perform above or below the performance standards, and designation levels may not align for each teacher's observation and student growth data.

Developing a Local Designation System

Creating a local designation system takes thoughtful planning and stakeholder engagement. TEA allows flexibility in system design to align with each district's goals for retention, recruitment, and staffing.

The guidance in this section outlines timelines, key considerations, and foundational steps prior to submitting an application to TEA.

Initial Steps

◢ Review TIA Requirements and Establish a TIA Lead(s)

For districts just getting started, the first step is to review the requirements outlined in this guidebook and designate a TIA Lead(s). The TIA Lead(s) drive the work of creating the local designation system and serve as a point of contact for TEA. TIA Leads coordinate with district departments and key stakeholders to complete the System Application and oversee system implementation.

The TIA Lead must have the expertise, capacity, and high-level support to lead the work. While some districts may create a position specific to leading their TIA local designation system development, most designate existing personnel to lead TIA while performing other essential functions. The TIA Lead should have regular access to district leadership when key decisions are made.

Best Practice

District TIA Leads often work in human resources, teacher appraisal, or curriculum and instruction. A best practice for larger districts is to select two or more TIA Leads working in different departments.

System Development & Implementation Timeline

Year 0–1

Develop a Local Designation System

Districts work with stakeholders to design a local designation system.

Year 1

Application Year

Districts attend TIA technical assistance sessions as they continue to outline details of their proposed designation system and submit a formal application to TEA..

Year 2

System Implementation and Data Capture Year

Districts implement their system as outlined in their accepted application, collect teacher performance data, and conduct the Teacher Buy-In Survey.

Year 3
Fall & Winter

Data Submission & Validation

Districts identify which teachers qualify for each level of designation using prior year performance data. They submit teacher designations and performance data for all teachers in eligible assignments to Texas Tech for data validation. TEA conducts a final holistic review of systems for approval.

Year 3
Spring

Designation & Allotments
Awarded for Approved Systems

Districts are notified if the system and designations are approved or denied. TEA processes new and higher designations for approved districts and notifies districts of the annual allotment.

Fully Approved Systems

Issue New & Higher Designations
Monitor System Implementation

Districts identify which teachers qualify for each level of designation using prior year performance data. They submit teacher designations and performance data for all teachers in eligible assignments to Texas Tech University for data validation. TEA conducts a holistic review of systems for approval.

When Can Districts Begin Expanding and Modifying their Systems?

Districts may begin submitting Expansion and Modification Applications once their System Applications have been accepted. **See Expanding or Modifying a Local Designation System for more information.**

◢ **Recruit a TIA Planning Committee**

A TIA Planning Committee is recommended. The committee should understand the mechanics of TIA as well as key dates and timelines. Guided by the TIA Lead(s), the planning committee oversees the creation of the local designation system in alignment with district goals and core values.

The committee should include key personnel such as human resources, finance, curriculum and instruction, appraisal leads, administrators, and teachers. The size of the committee is often determined by the size of the district.

Best Practice —————————

Teachers and campus-based staff make up 50% or more of the committee membership.

Districts may consider who will be most impacted at each stage of implementing the local designation system and include those personnel at various points in the planning process.

◢ **Select an Application Year and Submit an Online Letter of Intent**

To ensure access to relevant TEA resources and training, districts are advised to set a target school year to submit their System Application. This school year ties the district into an Application Year (Cohort) of districts on track to apply within the same school year. TEA provides regular technical assistance throughout system development and implementation.

TEA strongly recommends that districts submit an online Letter of Intent (LOI) to indicate their anticipated Application Year and establish points of contact. The LOI is nonbinding and not required. Districts may update their LOI at any time if they wish to move to a later Application Year or update points of contact. Completing the LOI grants access to training and webinars and ensure the district receives timely updates.

To submit an LOI, districts should email the TIA inbox at **tia@tea.texas.gov**. Once received, TIA verifies if the email belongs to a TIA point of contact on file and send the LOI link.

◢ **Develop a Documentation Plan**

Another key initial step is determining where and how district plans will be documented, stored, and shared. The creation of a local designation system is a multi-year process and must be sustainable despite turnover or role changes. If a district changes the TIA Lead(s) or members of their committee, proper documentation and shared access will allow the new lead to successfully transition and take over. A best practice is to maintain both digital and hard-copy records of meeting minutes, decisions, timelines, and involved personnel.

If the TIA Lead retires, resigns, or moves into a new role, districts should update their point of contact by emailing the TIA inbox. TEA encourages districts to have at least one backup point of contact who is aware of the district's TIA plans and can access documentation.

Designing a Local Designation System

As with most new initiatives, districts need time to engage stakeholders, make key decisions, and plan for documenting and communicating changes to existing systems. Prior to engaging stakeholders, the TIA Planning Committee should develop a clear understanding of key decisions regarding the local designation system. There are three main components to a local designation system: eligible teaching assignments and campuses, teacher performance data and designation criteria, and a teacher spending plan.

◢ Eligible Teaching Assignments and Campuses

Each eligible teaching assignment in the local designation system must be appraised using an approved teacher appraisal rubric and have a valid and reliable student growth measure. All teachers may be included in the local designation system or a district may opt to limit designation eligibility to specific teaching assignments and/or campuses.

◢ Teacher Performance Data and Designation Criteria

Teacher performance data includes the teacher observation data, student growth data, and data from optional components the district chooses to include in their system. Designation criteria refers to the teacher performance data and mathematical process a district uses to determine which teachers qualify for each level of designation.

◢ TIA Spending Plan

Funds from TIA must be spent according to statute. 90% percent or more of the allotment must be spent on teacher compensation on the campus where the designated teacher worked. Up to 10% of the allotment may be used by the district to support the local designation system or in teachers earning designations.

Decisions for each component require time, investment of personnel and stakeholders, and thoughtful consideration of current systems and practices.

Eligible Teaching Assignments and Campuses

Each eligible teaching assignment must be appraised using an approved teacher appraisal rubric and have a valid and reliable student growth measure. Districts may choose to include all teaching assignments in the first year of their local designation system, or they may choose to start with a smaller number of eligible teaching assignments and expand their system over time. Some districts begin with a subset of teaching assignments or campuses, and then create plans to expand their system after initial approval. Other districts submit an application only after establishing student growth measures for all teaching assignments.

Best Practice

When deciding on which eligible teaching assignments to include, a best practice is to start with assignments that already have known student growth measures and then expand the system to include more assignments in subsequent years.

Districts may begin by looking at the student growth measures already in place for each assignment and exploring which assignments may require a new or modified option. The timeline for implementing new student growth measures is often a top consideration when determining eligible teaching assignments and readiness to apply for a local designation system. Districts can opt to start with teaching assignments which already have valid and reliable growth measures while exploring student growth measures for additional teaching assignments in subsequent years.

TEA does not limit designations to teachers of record. Districts may also include support teachers such as interventionists, special education inclusion teachers, and dyslexia teachers if they are employed as a teacher (087 Role ID in the Public Education Information Management System [PEIMS]) and have a valid and reliable student growth measure.

Best Practice

A recommended best practice is to consider eligible teaching assignments in tandem with the possible performance data. This requires careful analysis of student growth measure options available for each teaching assignment and historical appraisal data to determine if the existing performance data is valid and reliable.

Sample District Expansion Plan

Timeline	Teaching Assignments	Student Growth Measures
Initial System Application	3rd–8th Math and Reading K–2nd	MAP mClass
Year 2 Expansion and Modification Application	Algebra I, English I and II, STAAR Retests Geometry, Algebra II and Pre-Calculus	STAAR Transition Tables District-created pre-test and post-test
Year 3 Expansion and Modification Application	6th-12th science and social studies Fine arts, world languages, Career and technical education (CTE)	District-created pre-test and post-test SLOs Portfolios

In the System Application, districts confirm their eligible teaching assignments with **Texas Student Data Systems (TSDS) Service IDs**. A service ID is an eight-digit number tied to a course. Teachers are linked to the service IDs for the courses they teach and may have more than one service ID. In these cases, the district may select the course(s) and service ID(s) that are used for data collection and determining designations. During data submission and validation, TEA uses service IDs and PEIMS data to ensure the district captured data for all eligible teachers. Note that some atypical teaching assignments, such as dyslexia instructors or interventionists, may not have a service ID. These teachers may still be eligible under the local designation system if their content aligns with an eligible service ID.

Teacher Performance Data and Designation Criteria

For the purposes of TIA, teacher performance data includes the teacher observation data, student growth measures data, and data from optional components the district chooses to include in their system. Designation criteria refers to the teacher performance data and mathematical process a district uses to determine which teachers qualify for each level of designation.

Districts must outline how they use teacher performance data in conjunction with statewide performance standards to determine business rules and cut points for each level of designation. Districts must also determine designation criteria for each eligible teaching assignment or group of assignments.

Teacher Observation Component

TIA Requirements for Teacher Observation

One or more observations of a teacher instructing students for a minimum of 45 minutes or multiple observations that aggregate to at least 45 minutes.

Districts must use an approved appraisal rubric and implement observation protocols to ensure valid and reliable data. The T-TESS appraisal system incorporates all the requirements needed for appraiser certification, recertification, and calibration. Districts using Danielson, Marzano, or NIET TAP may use the corresponding T-TESS crosswalk. Districts using a locally developed rubric must ensure that it aligns to TEC §21.351 or §21.352 prior to developing a local designation system or submitting a System Application.

For Data Validation

Districts will report dimension-level appraisal data from all observable domains (Domains 2 and 3 for T-TESS, or the equivalent for a third party or district-created rubric).

District designation systems must provide fair and consistent evaluations to ensure highly effective teachers have equitable access to a designation. The System Application requires districts to narrate how they will adhere to and implement each protocol.

Student Growth Component

For eligible teaching assignments, districts must use a valid and reliable student growth measure and implement protocols for secure administration and scoring. Unlike previous incentive programs based on achievement data, TIA requires districts to identify effective teachers using student growth data. Districts are not required to use STAAR data or other standardized assessments for the local designation system.

Statewide performance standards for each designation level align with teacher effectiveness based on the teacher's percentage of students who meet or exceed an expected growth target over the course of a single school year. Rather than using the magnitude of growth, effectiveness is measured by the impact teachers have on all students by setting individualized growth targets. This method allows more equitable access to designation for effective teachers, regardless of their student population.

Key Consideration

When selecting growth measures for TIA, consider how accurately the resulting data will delineate teacher effectiveness for a particular teaching assignment.

Districts can use a variety of student growth measures for their eligible teaching assignments and select different student growth measures, or combinations of growth measures, for each. For example, a district may choose to use Advanced Placement (AP) exams as the student growth measure for AP teachers but use both Student Learning Objectives and portfolios as the student growth measures for fine arts teachers.

Growth Versus Achievement
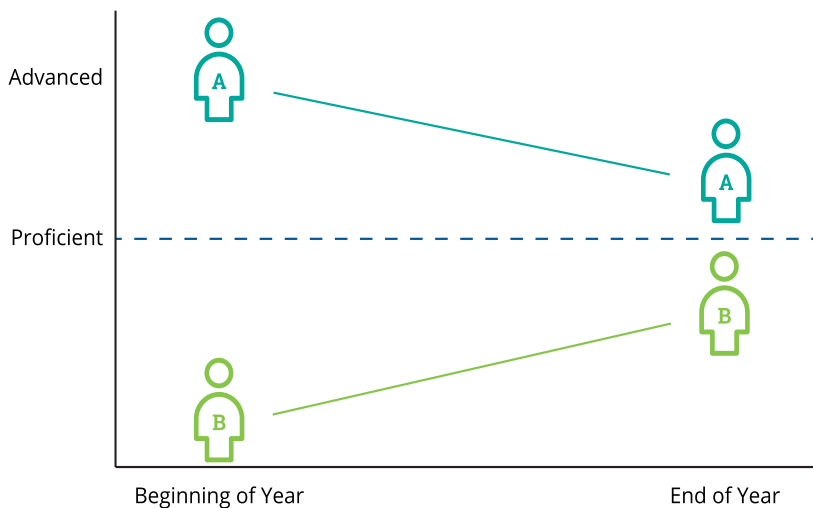
In the graph to the left, student A starts the year Advanced in their growth measure and ends Proficient. While they still scored high enough for achievement goals, they would not meet or exceed their expected growth target. Student B starts out the year less than Proficient and still ends the year less than Proficient. However, the student has moved closer to Proficient and therefore would meet or exceed their expected growth target.

Districts may choose from any of the four TIA-recognized student growth measures, or a combination thereof, for each eligible teaching assignment.

1 Student Learning Objectives (SLOs)

2 Pre-tests and post-tests, with either third-party or district-created expected growth targets

3 Portfolios

4 Value-Added Models (VAMs)

◢ Student Learning Objectives

Student Learning Objectives (SLOs) focus on a foundational skill that is developed throughout the course curriculum and tailored to the context of individual students. SLOs measure student growth through a body of evidence (BOE) with a minimum of five pieces of student work. Teachers set expected growth targets for each student. They evaluate their students individually using the BOE.

TIA Requirements for Student Learning Objectives

*TIA requires district SLOs align with all guidelines from **TexasSLO.org**.*

Stay Updated

TexasSLO.org was established in 2018. Districts using a previous version of SLOs may either update their processes to align with TexasSLO.org or select the pre-test and post-test option for their student growth measure.

SLOs contain three phases.

Phase 1 Create the SLO	**Phase 2** Monitor Progress	**Phase 3** Evaluate Success
• Create a skill statement • Create an Initial Skill Profile (ISP) • Match current students to ISP • Create a Targeted Skill Profile (TSP) • Set expected growth targets for each student	• Monitor student work • Define what counts as a quality task, assessment, or project • Set a minimum of five or more data points • BOE check-ins at midyear with teacher and appraiser	• Evaluate student progress at EOY • Ground student mastery levels to their BOE • Require SLO evidence review as part of EOY teacher appraisal

Using the Student Growth Tracker, teachers regularly review each student's BOE against the Targeted Skill Profile. At the end of the year, teachers work with their appraiser to determine which students met or exceeded their expected growth target, based on their respective BOE. Students who met or exceeded the expected growth target are then divided by the total number of students with a complete BOE. This provides each eligible teacher with a growth rating of percentage of students who met or exceeded expected growth.

◢ Portfolios

Using a collection of standards-aligned artifacts, portfolios assess student growth over the course of a year by measuring a student's movement along a skill progression rubric. Portfolios are best suited for courses that have skill standards in creation and production as opposed to demonstration of knowledge and problem-solving.

TIA Requirements for District Portfolio Process

The process should demonstrate student work aligned to the standards of the course, demonstrate mastery of standards, utilize a skills proficiency rubric, and include criteria for scoring various artifacts.

With portfolios, students' beginning-of-year skill levels are determined using a skill progression rubric, and an expected growth target is set for the students' end-of-year skill levels that demonstrates movement along the skill progression rubric. An assessment of student work products is grounded in the specific skill details of the rubric. Best practice is to collect a minimum of five artifacts valid and specific to the evaluated content. The type of artifact will vary by content area, such as audio and video of a student musical, choir, or theatrical performance; student artwork either scanned digitally, submitted as a hard copy, or both; or student-created products such as welding or woodwork.

When Are Portoflios Used for TIA? ——

Portfolios are most often used for eligible teaching assignments such as

→ Career and technical education
→ Fine arts/performance arts
→ Early childhood
→ Special education

Districts interested in using portfolios as a student growth measure may refer to the **Portfolio Suite of Resources**.

◢ Pre-tests and Post-tests

Pre-tests and post-tests involve the administration of a beginning-of-year (BOY) pre-test and an EOY post-test. Districts must select or create pre-tests and post-tests aligned directly with the standards of the course in which the teacher is providing instruction.

Pre-test Post-test Timeline

Pre-Test

Expected
Growth Target

Post-Test

Determination
of Growth

Beginning of Year
[First 9 Weeks]

End of Year
[Last 12 Weeks]
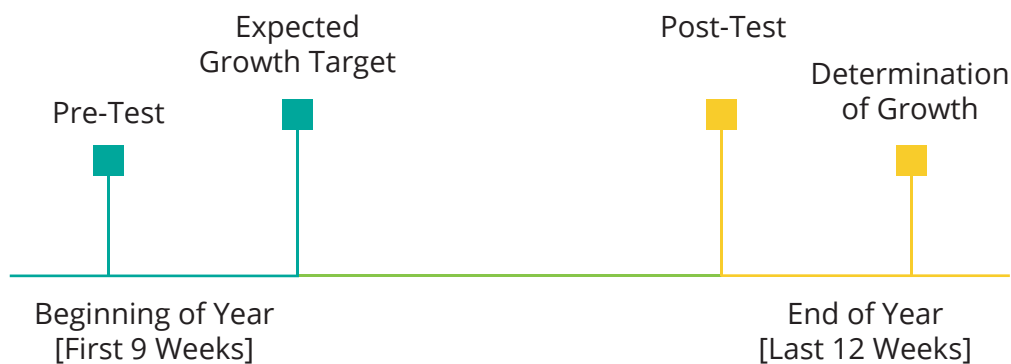
Standards can be based on Texas Essential Knowledge and Skills (TEKS), the College Board AP standards (for AP courses), or other approved state or national standards such as National Council on the Teaching of Mathematics (NCTM) standards, American Council on the Teaching of Foreign Languages (ACTFL) standards, or career and technical education (CTE) industry standards. The instrument must assess student proficiency in the standards of the course with questions that represent an appropriate level or range of levels of rigor for the course.

TIA requires districts to establish individual student growth targets.

Districts can choose to use the expected growth targets that come with a third-party test (when available) or set expected growth targets locally at the district level. If using the expected growth targets from a third-party test, districts must ensure the third party uses a valid and reliable method for calculating expected growth.

How Districts Use Pre-tests and Post-tests

Most districts use nationally normed or criterion-referenced tests. Some use district-created or teacher-created tests. Some use a combination: district-created test for the pre-test (BOY) and third-party tests for post-test (EOY).

The Four Pre-test Post-test Options

Option	Pre-test Creator	Who Sets Growth Targets	Post-test Creator	Examples
1	Third Party	Third Party	Third Party	STAAR Transition Tables, NWEA RIT Goals
2	Third Party	District	Third Party	Released STAAR pre-test, district growth targets, spring STAAR post-test
3	Third party	District	District	District pre-test, district growth targets, district post-test
4	District	District	Third Party	District pre-test from item bank, district growth targets, spring Istation post-test

> ***For all options, districts are required to ensure that each assessment:***
>
> → *Aligns with the standards of the course tied to the eligible teacher*
>
> → *Allows for setting an individual student growth target between the pre-test and the post-test*
>
> → *Follows state and district guidelines for administration and scoring security*
>
> → *Contains questions representing an appropriate level of rigor and range of question levels*
>
> → *Accurately measures what is taught over the course of the year*

Pre-tests and post-tests must have a set administration window and standardized guidelines to ensure validity and reliability. All tests must be kept secure prior to administration, while testing is taking place, and during the scoring process. Annual training should be provided to all test administrators and proctors.

◢ Value-Added Models

Value-Added Models (VAMs) set predicted scores based on multiple years of historical testing data across multiple contents using statistical modeling. The VAM is widely recognized as a valid and reliable method to determine student growth. It is based on an accurate underlying statistical model that predicts future performance based on past ability. In a VAM, when a student performs at, above, or below their expected score, it correlates with the teacher's effectiveness.

A value-added model looks at how much progress students make from year to year. It compares the combination of a student's current and prior assessments with a student's achievement on a quality, normed assessment such as STAAR. By looking at a student's prior data together with data from other students who have similar testing histories, a predicted or expected score can be calculated for that group of students with similar testing histories. Growth is calculated by looking at expected progress to actual progress of a student to see if more than, less than, or an expected amount of growth occurred. Details of the VAM process involve complex statistical analyses that are often conducted by independent researchers.

Common Assessments Used with VAM

→ STAAR NWEA MAP   → IACT   → Iowa Tests (SAT/PSAT)

→ mCLASS   → Istation

VAM can be used with any nationally normed or criterion-referenced test. The assessment must meet three main criteria to be used in growth models:

1 **Sufficient scale stretch.** The test can distinguish student performance for both high- and low-achieving students and differentiate growth across all achievement levels. The test must have questions at various difficulty levels to accurately discern a student's ability, including those on the edges.

2 **Demonstrated relevance and validity.** The test must align to state or national standards of what students are expected to know and do.

3 **Sufficient reliability.** The assessment provides consistent results within and across administrations to make comparisons and establish a predictive relationship. The scales must be reliable from year to year.

Student Growth Measures Benefits and Challenges

Growth Measure	Benefits	Possible Challenges
Student Learning Objectives (SLOs)	Can be used for all teaching assignments High teacher engagement Based on a body of student work	Training for all participating staff is required Appraiser is heavily involved Time required to evaluate the BOE
District-created pre-tests and post-tests	Can be used for all teaching assignments Local control TEA issued guidance on building quality assessments	Content and assessment design expertise required to build and approve assessments Requires multiple levels of review
Third-party-created pre-tests and post-tests	Demonstrated validity and reliability Districts may already use third-party vendor tests	May not work for all content areas May require purchasing
Portfolio	Recommended for performance-based classes such as Fine Arts	Heavy planning at BOY Appraiser may be heavily involved
Value-Added Models (VAM)s	Demonstrated validity and reliability Statewide protocols for administration and scoring (if using STAAR)	Often requires contracting with a third party

◢ Selecting Student Growth Measures

When selecting a growth measure for TIA, districts must consider the capacity of district and campus personnel to consistently implement each growth measure with fidelity across campuses and teaching assignments.

Key questions when discussing and selecting student growth measures for different teaching assignments:

→ What growth measures are best for each subject area/grade level?

→ Is the district currently using any growth measures that are approved for TIA?

→ How will the district set individual growth targets for each measure and track student progress?

→ What role will teachers have in setting student growth goals?

→ What is the current capacity for implementing different growth measures with fidelity?

◢ Calculating Student Growth

To calculate the percentage of a teacher's students who met or exceeded expected growth, districts divide the number of students who met or exceeded their expected growth target by the total number of students with an expected growth score who completed the final assessment.

To be included in a teacher's total number of students, the student must have an expected growth target set at the beginning of the year and must complete the assessment, portfolio, or BOE at the end of the year.

Districts may implement business rules for determining which students will count toward a teacher's total number of students. Some districts institute a minimum number of days a student must have attended class to factor into a teacher's student growth rating. For teachers with multiple course sections or assignments, the district may combine growth data for all students in the same course or select a section or course most reflective of the teacher's student population.

Optional Performance Components

Districts have the option to incorporate data from other sources into their evaluations to align with district goals and values. Examples may include results from student and parent surveys, leadership within the school community, mentorship, club sponsorship, or teacher attendance.

Districts may also choose to establish local eligibility prerequisites, such as mentoring, years of experience, attendance, or campus leadership roles. These prerequisites may exclude teachers from designation consideration, even if their performance otherwise qualifies them. Note that districts must still collect and submit data for all teachers in eligible assignments, even if they do not meet local prerequisites for designation.

Statewide Performance Standards

The statewide performance standards serve as a guide and reference when developing a designation system and when making designation decisions. Districts may compare local observation and student growth data with statewide teacher performance to establish local cut points for each level of designation.

> *TEA requires a minimum score of Proficient for all observable dimensions. Outside the observation proficiency requirement, TEA does not require exact alignment with the performance standards.*

During the data validation process, Texas Tech reviews how closely a district's system aligns their designations to the statewide performance standards for both student growth measures and teacher observations. Teachers in each designation category will generally exceed minimum averages; however, the overall holistic review may allow for ratings that are lower than the stated minimums in some cases.

$$\text{percent of students who met or exceeded growth targets} = \frac{\text{total number of students who met or exceeded growth target}}{\text{total number of students with an expected growth score}}$$

Eligible Teacher Categories and Component Weighting

A successful designation system ensures only highly effective teachers qualify for designation. This requires careful consideration of the validity and reliability of the collected data points for each eligible teaching assignment.

Once the district has determined eligible assignments and designation criteria for each assignment, the System Application requires the district to group teaching assignments into categories. A category is the combination of eligible teaching assignments that share the same teacher observation rubric at the same weight and the same student growth measure at the same weight, including using the same assessment if the student growth measure is a pre-test and post-test. Eligible teaching assignments that use different assessments cannot be grouped together into the same category.

Using the statewide performance standards and historical performance data as a guide, districts assign a "weight" or percentage to each of their system components and establish preliminary cut points for Recognized, Exemplary, and Master designations within each eligible teacher category. Component weights are outlined in the district's System Application; however, districts may adjust the weighting prior to data submission if needed. TEA provides annual training and guidance related to component weighting and designation determination processes.

How Do Districts Capture Data for Teachers in Multiple Assignments?

This is a local decision. Best practice is to communicate with teachers and campus administrators early in the year. For teachers who work across assignments in the same eligible teacher category, the district can choose to combine data from multiple assignments or use a single assignment.

Example A: A self-contained third grade teacher's students take MAP reading and math. If third grade math and reading fall under the same eligible teacher category, the district may choose to either collect both reading and math data for TIA or only use one set of data. Note that teachers may not belong to more than one eligible teaching category.

Example B: An eighth-grade math teacher also teaches sections of US history, for which the district uses two different growth measures. In this case, the district and campus administrator would determine one assignment to be used for capturing statewide performance data.

TIA Spending Plan

Strong local designation systems have goal-oriented spending plans based on engagement with district- and campus-level stakeholders. There are a variety of options for using TIA funds to support district goals for teacher retention, teacher recruitment, and prioritization of high-needs campuses.

The System Application requires the district to outline how and when they will spend the allotment, plan for contingencies when designated teachers move, and set a timeline for school board approval.

TIA Statutory Spending Requirements

Districts must spend 90% or more of the allotment on teacher compensation on the campus where the designated teacher works. Up to 10% of the allotment may be used by the district to support the local designation system or to support teachers in earning designations.

Districts are notified of their annual allotment in late April and must spend all funds by August 31 of the same calendar year. Please note spending requirements and timelines do not apply to fees reimbursed through TIA.

90%	10%

Districts are **required** to spend at least **90% of their allotment funds on teacher compensation** on the campus where the designated teachers works. Districts **may** use up to 10% for costs associated with implementing a local designation system or supporting teachers in earning a designation.

For the Purposes of Compensation

Teacher is defined as student-facing instructional staff. This may include instructional aides and paraprofessionals, classroom inclusion support teachers, and other staff members who primarily work directly with students in an instructional setting.

Spending Requirements

90% Allowable Spending

- Designated teacher stipends or salary increases

- Other teachers at the campuses stipends or salaries

- Other staff—whose primary responsibility is instructing students—compensation at the campus

10% Allowable Spending

- Any professional development for teachers

- TIA assessment costs

- Rubric costs, appraiser rater training, or certification

- Other student growth costs

- Central supports (funding for TIA coordinator or HR needs)

- Compensation for staff associated with TIA needs or with professional development (e.g. school leaders or instructional coaches)

- Benefits and retirement contributions for teachers may be taken from the 90% or 10%

90% Prohibited Spending

- School leader compensation

- Other non-instructional staff compensation (including Instructional coaches that do not teach)

- Central staff or staff at a different campus

10% Prohibited Spending

- General administrative expenses

- Compensation for staff not associated with TIA needs nor with professional development

Funding Distribution

Within the parameters of the spending requirements on page 31, districts may choose to split the allotment funding in several ways. Some districts choose to give the full 100% of funding to the designated teachers. Other districts choose to split the funding to reward other eligible educators who contribute to student success, such as interventionists and instructional paraprofessionals. Districts may use funds from the 10% to provide additional professional development opportunities to designated teachers and teachers who may be eligible for designation in the future.

District Goal	TIA Funding Possibilities
Recruit Effective Teachers	Signing bonuses, higher starting salaries, opportunities for pay increases within the first few years
Support Educator Development	Stipends to acquire specific knowledge and pedagogical skills, increased compensation for serving in leadership roles or mentoring new teachers
Improve Retention	Annual retention bonuses, career pathways that increase compensation and provide growth opportunities within the classroom

Example Funding Distribution

60%	**30%**	**10%**
DESIGNATED TEACHER	SUPPORT TEACHERS	PROFESSIONAL DEVELOPMENT
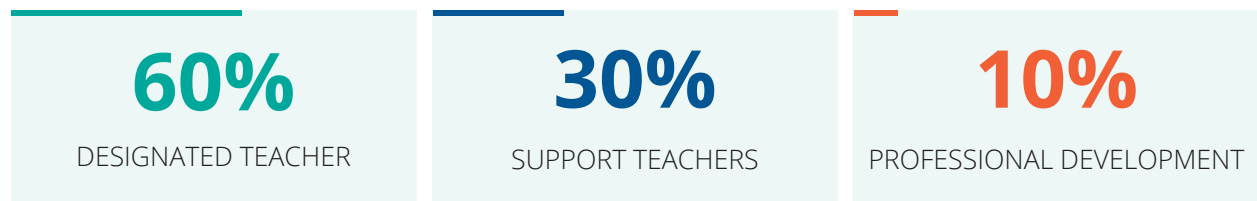
Methods of Compensation

Spending plans can take many forms. The two main types of plans are those based on stipends or raises to base salaries.

Stipends are a simple method for targeting additional pay aligned with district priorities such as recruitment and retention of high-quality teachers or providing incentives for teaching in high-needs schools. Since stipends are extra payments outside of a teacher's base salary, the stipend payment is lost if a teacher is no longer eligible.

Salary-based plans provide a raise to a teacher's base salary. Districts adopting a base salary raise plan need to consider:

→ Adding performance-based lanes to the existing salary schedule

→ Creating a new salary schedule based on performance

→ Providing performance-based raises—either fixed amounts or percentages—for designated teachers or other eligible educators

The district can combine salary raises with stipends to align compensation with additional district goals. For example, the district could develop a salary schedule and offer stipends for signing bonuses or retention bonuses. Timing may direct the choices a district makes. Some districts pay out stipends in the first year and then change to salary schedules in subsequent years.

If a district chooses to adopt a stipend plan, they must decide if the stipend is paid in a single lump-sum payment or in multiple payments over several weeks or months. For districts adopting a base salary raise plan, they need to decide how the raise is added.

Planning for Teacher Movement

Allotment values are determined by each designated teacher's campus as of the last Friday in February. Funds do not follow designated teachers in real time, and allotments are not prorated between campuses or school districts. If a designated teacher moves districts midyear, the timing is paramount to determining which district, if any, receives funds.

Districts must outline how the spending plan will be adjusted when teachers move into or out of the district before and after the February snapshot date. Note that districts can create spending plans that reward designated teachers across the school year. For example, some districts implement a quarterly payment system. As a best practice, districts should have a plan to adjust or account for actual allotments received, which are finalized in April each year.

Funding Examples

Stipends

Payment Schedule	Recognized	Exemplary	Master
Payment 1 — May	$1,500	$9,000	$18,000
Payment 2 —August	$3,000	$6,000	$12,000

In this example, the stipends are paid out in two payments, with a larger final stipend paid in August as a retention bonus for those educators returning to the school.

Salary Raise

Steps	BA	MA	PH.D.	Recognized	Exemplary	Master
1	$32,000	$38,000	$45,000	$4,500	$9,000	$18,000
2	$32,800	$38,950	$46,125	$4,500	$9,000	$18,000
3	$33,620	$39,924	$47,278	$4,500	$9,000	$18,000
30	$65,485	$77,763	$92,088	$4,500	$9,000	$18,000

In this example, the statewide performance raise for designated teachers is created by adding lanes to the district's standard teacher salary schedule. The amounts in the Recognized, Exemplary, and Master lanes are added to the designated teacher's salary based on where they fall within the standard steps and lanes.

Combination Plan

Salary Step	Base Salary
Master	$105,000
Exemplary	$90,000
Recognized	$70,000
Proficient	$60,000
Progressing	$55,000
Novice	$45,000

Stipend	Amount
Hard to Staff School	$3,000
Hard to Staff Subject	$3,000

This example uses a salary schedule ranging from Novice for new teachers to Master for the highest performing teachers. It includes stipends of $3,000 as an incentive for teachers to work in hard-to-staff schools and subject areas.

Districts need a plan for teachers who resign or retire prior to the scheduled payout date. Some districts may choose to give the full or remaining payment to the designated teacher who earned the funding in one lump stipend payment. Other districts may choose to keep the money for supporting teachers who remain on campus to help their retention goals. If the district chooses not to forward allotment funds, the district must still spend at least 90% on teacher compensation on the campus where the designated teacher worked by August 31 of the same calendar year.

Districts' spending plans should take into account National Board Certified Teachers (NBCTs) and designated teachers who move into a district. Some districts differentiate spending plans if the designation was earned outside the local designation system. Most districts apply the same spending plan to all designated teachers.

How Teacher Resignations Affect Funding

FALL	WINTER	SPRING	SUMMER	
Aug - Nov	**Dec - Feb**	**Mar - May**	**Jun - Jul**	
	A	A	A	**Teacher A Generates Full Allotment**
B	B			**Teacher B Does NOT Generate an Allotment**
C	C	C		**Teacher C Generates Full Allotment**

February Winter Class
Roster Submission (TSDS)
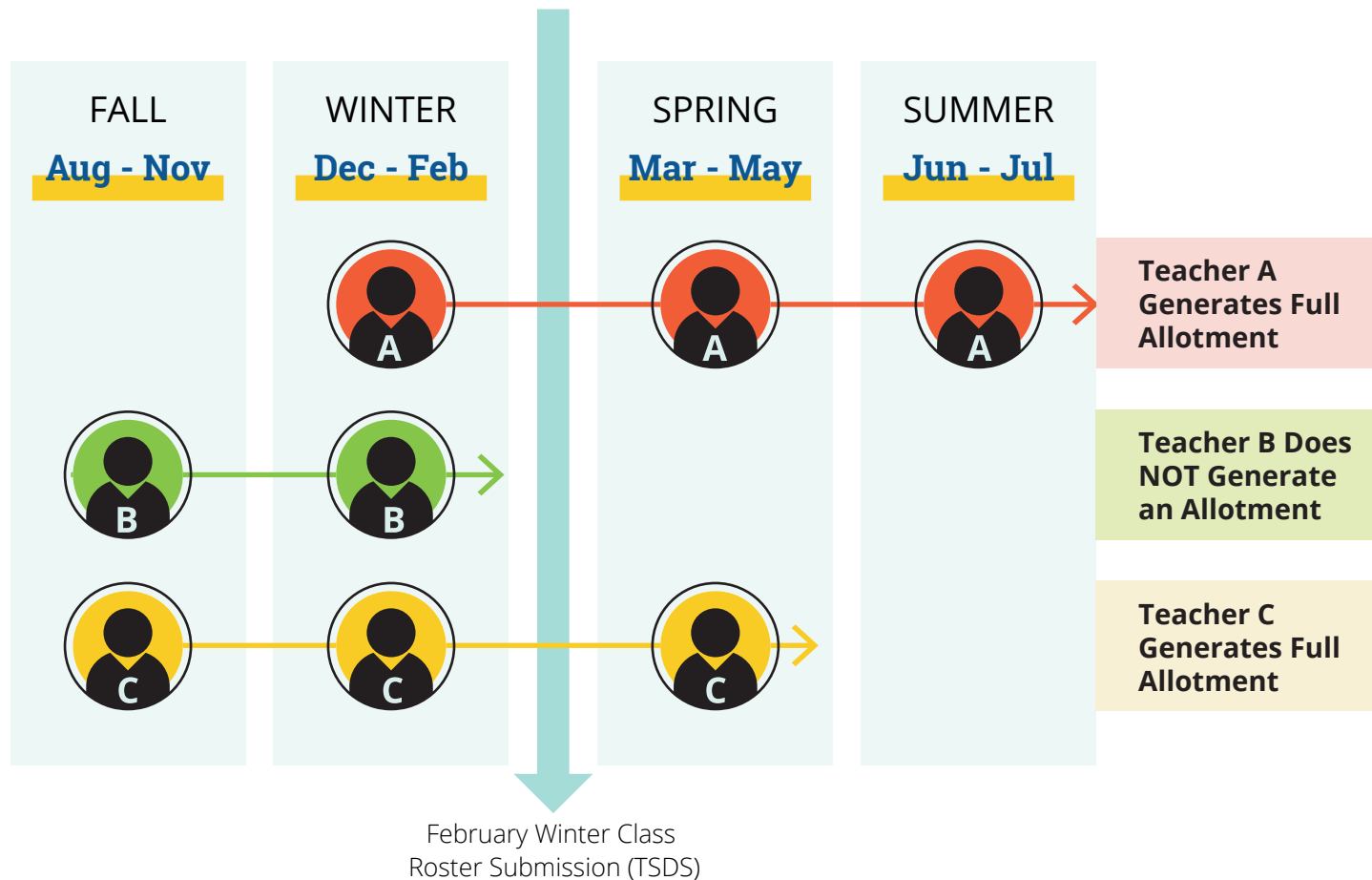
Formalizing the Spending Plan

Once a district has narrowed down spending plan options, the TIA Lead(s) may work with the district business office to examine the feasibility of each option and consult with impacted departments. Teacher spending plans often require additional support from the district chief financial officer (CFO), payroll department, or human resources. Prior to completing the System Application, the district must finalize decisions on the timing, amount, and mode of compensation, and ensure district departments have the capacity to implement the spending plan. Once the district's System Application is accepted, the district may amend their spending plan and/or budget through their normal local procedures.

Districts should obtain school board approval of the proposed spending plan. Most districts choose to either do this annually or the summer before they anticipate designating and compensating TIA teachers, which is often the year after the Data Capture Year. Once the district's System Application is accepted, best practice is to communicate the spending plan to teachers and stakeholders and make it accessible.

System Application and Approval Process

Year 1: Submit a System Application

Once the local designation system is fully designed and prepared to implement the following school year, districts may submit an application to TEA. The System Application allows TEA to assess the district's readiness for implementing a successful local designation system. TEA updates the System Application annually and posts the application in early November.

Districts must submit a System Application by mid-April for the system to take effect the following school year. **The application deadline for the 2024 System Application (Cohort G) is April 15, 2024.** TEA reviews and scores applications to ensure systems are aligned with statutes and designed to maximize the validity and reliability of the teacher performance data and the local designation system. Districts must receive a score of "Full Readiness" in all statutory sections of the application to proceed with implementing their system the following year.

Statutory sections of the application include the Teacher Observation tab, Student Growth tab, and the Spending tab Part A.

2024 System Application (Cohort G) Approval Timeline

April 15, 2024
System Application Deadline

June 30, 2024
Resubmission Deadline

May 2024
Initial Notification and Feedback

August 2024
System Application Final Notifications

◤ **Application Format and Submission**

Districts must download and complete the application using Microsoft Excel 2019 or a later version. The application contains built-in features and automation that do **not** function in other programs, including Google Sheets. Districts with multiple collaborators are encouraged to maintain one official copy of the application and designate a lead to compile responses before submission.

The application is organized by tabs for each component of the local designation system and is a combination of drop-down responses, yes/no questions, and short answers. Directions and a submission link are embedded in the first tab of the application. Districts must also submit attestations with a superintendent signature with their application.

Note that application formats and questions may be updated annually.

When Do Districts Begin Filling Out the Application? ————————————

The application for local designation systems may be updated annually. Some districts work on the application as they build out their system, while others wait until the system is fully designed.

System Application (Cohort G) Tabs

Application Tab	Tab Description
District Information tab	• Districts must complete this tab first, as it populates district-specific data and the required tab's data based on the responses • District name and education service center (ESC) region • Contact information • Rationale for creating a local designation system • Texas Tech University data sharing agreement (DSA)
Weighting tab	• Clear summary of the system • Organizes eligible teaching assignments into categories* • Outlines designation criteria and teacher performance data used for each eligible teacher category* • Component weighting for observation data, student growth, and optional factors
Eligible Teachers and Campuses tabs	• Identify which campuses are included in the local designation system • Identify which courses/service IDs are eligible to earn a designation under the local system
Teacher Observation tab	• District explanation of the appraisal system, certification requirements, and training • Calibration practices • Data analysis • Observation protocols, including walkthroughs and annual appraisal requirement
Student Growth Measure tabs *Portfolios, Pre-test Post-test (4 options), Student Learning Objectives, Value-Added Models*	• Ensure each growth measure aligns to the content of the course • Ensure validity of administration, training, security, and scoring • Verify how each growth measure are used to set expected growth targets and calculate a student growth rating for each eligible teacher

Application Tab	Tab Description
Spending tab	• Outline the spending plan for allotment funds • Ensure compliance with 90/10 rule • Ensure planning for teacher movement
Stakeholder Engagement tab	• Explain process of developing the local designation system • Provide examples of stakeholder engagement practices • Provide examples of collection and implementation of feedback • District communication plan
District Support tab	• Describe systems and process for system support • Ensure the district is prepared for successful data capture and submission • Explain plans for retention and recruitment, supporting designated teachers, and strategic staffing of designated teachers

A category of teachers is the group of eligible teaching assignments that have: a) the same teacher observation rubric at the same weight and b) the same student growth measure(s) at the same weight, including the same assessment if using pre-test and post-test as the student growth measure.

◤ Application Scoring and Resubmissions

Following initial submission, TEA scores applications and notifies districts by the end of May if their application was accepted in the first round of scoring or not. Districts must meet Full Readiness in all statutory categories for the application to be accepted. For districts that do not pass in the first round of scoring, TEA provides office hours and a one-time resubmission opportunity by the end of June. By August, districts receive a formal notification if their System Application was accepted or denied. If a district's System Application is denied, the district may reapply the following spring.

Year 2: Implement the System and Capture Teacher Performance Data

Once the System Application is accepted, the district prepares to implement the system. The first year of system implementation is called the Data Capture Year. In alignment with the accepted System Application, the district conducts calibration exercises, analyzes data, administers student growth measures, and coordinates among departments to monitor data throughout the year. Districts must implement the system in accordance with their System Application.

Best Practice

It is best practice to closely monitor and track data collection for all teachers in eligible assignments throughout the year.

By the end of the Data Capture Year, the district has appraised and collected student growth data for all teachers in TIA-eligible assignments, and optional data components if applicable. These data are used to determine which teachers qualify for designation the following school year. Districts submit teacher observation and student growth data, along with proposed teacher designations, to Texas Tech in the fall for data validation. Once Texas Tech completes data validation, TEA conducts a holistic system review prior to approving designation systems and teacher designations.

To validate the system, districts must collect data for all teachers in eligible teaching assignments.

Data Capture Year	After Full System Approval
• All teachers in eligible teaching assignments must be appraised. • Districts must have complete observation and student growth data for all teachers in eligible assignments.	• Once a teacher has earned a designation, opting out of their annual appraisal is a local decision. Appraisals must comply with TEC §21.351 and §21.352. • For TEA and Texas Tech to verify data submission, best practice is to include teacher observation and student growth data for as many teachers as possible in eligible teaching assignments. • Appraisals are required for all teachers put forth for a new or higher designation.

Best Practice

TEA encourages districts to continue capturing data for all teachers in eligible assignments following the initial Data Capture Year and cautions approved districts to issue appraisal waivers sparingly. TEA and Texas Tech may exercise administrative discretion to suspend annual data validation and designation approval if sufficient data are not reported.

◢ Administer the TIA Teacher Buy-in Survey

The TIA Teacher Buy-In Survey, developed by Texas Tech, is designed to gauge teachers' understanding and degree of support for their district's local designation system prior to system implementation. Districts may use results as part of a continuous improvement cycle to ensure the local designation system is as fair, accurate, and reliable as possible.

As a change to previous years, districts no longer submit the Teacher Buy-In Survey with their System Application but instead submit it the fall after their application has been accepted. Districts must upload all teacher email addresses using the Qualtrics link provided by the application deadline. Texas Tech will administer the survey to all teachers and send weekly reminders to teachers who have not completed the survey. Once the survey window closes, districts will receive aggregated responses, a detailed report, and statewide averages by mid-June.

◢ Eligible Teaching Assignments

Eligible assignments are based on the district's System Application, for example, K–8th grade math and reading, CTE, or fine arts. During the Data Capture Year, all teachers in an eligible teaching assignment must have:

→ A formal appraisal with complete observation data

  ○ Appraisal waivers are not permitted during the Data Capture Year.

  ○ Districts report one numeric score for each observable dimension.

→ A final student growth rating

  ○ Districts report the percentage of the teacher's students who met or exceeded their individual expected growth target.

Data capture must also include teachers in eligible assignments who do not meet local eligibility criteria for designation (e.g., attendance, professional development requirements, district-required application). **Teachers in eligible assignments may not opt out of Data Capture Year requirements, even if they do not wish to be considered for designation.**

Note that eligible teaching assignments are tied to a course and not individual teachers. If a teacher moves out of an eligible assignment prior to the Data Capture Year, the district must collect observation and student growth data for the teacher who fills the eligible position. If a teacher moves from an eligible assignment to a non-eligible assignment before or during the Data Capture Year, they are no longer eligible for data capture or designation. TEA tracks eligible teaching assignments using **service IDs** linked to annual Fall PEIMS and TSDS Class Roster Winter Submissions.

◢ Data Capture Policies

Failure to capture a teacher's performance data for any reason may impact the district's data validation results. In rare cases, circumstances outside of the district's control may prevent the district from capturing data for one or more teachers. Please refer to the table on page 44 for allowable exceptions and prohibitions. Outside of these exceptions, if a district fails to collect complete data in alignment with the accepted System Application, TEA may exercise administrative discretion and suspend data validation and system review until the following school year.

Data Collection Exceptions

Circumstance	Allowable Exception	Prohibited Exception*
Teacher(s) on annual appraisal waiver in a district with full system approval	✓	
Teacher moved out of the eligible teaching assignment prior to administration of EOY growth data	✓	
Teacher was hired or moved to an eligible assignment after BOY growth data was collected	✓	
Teacher was on FMLA, bereavement leave, or special circumstances which resulted in significant absences	✓	
Extended campus closure	✓	
Teachers in eligible assignments were granted appraisal waivers during the Data Capture Year prior to full system approval		✗
Teacher or teacher group failed to administer or score student growth measures with fidelity		✗
Administrator(s) failed to conduct or complete formal appraisals		✗
Removing teacher data unfavorable to data validation checks		✗
District or campus failed to monitor data collection for a particular teaching assignment or exempted eligible teacher groups from data capture		✗
District allowed teachers to opt-out of administering student growth measures or opt-out of appraisal		✗

*Failing to submit data due to prohibited exceptions may result in the suspension of data validation.

To minimize the risk of incomplete data, a best practice is to institute clear policies for circumstances that may impact valid and reliable data capture. Scenarios to plan for may include:

What is the hiring deadline for a teacher to be eligible for data capture if they are hired after the first day of school? At what point after the BOY can the district confidently attribute student growth to the teacher's instruction?

If a teacher moves to a non-eligible assignment very late in the school year, at what point will the district continue to collect student growth data for TIA purposes?

Will teachers who take leave remain eligible for TIA? Should there be a minimum number of instructional days worked to be included in data capture?

What rules are in place for student mobility and attendance in data capture? Should students who miss significant instructional days be included when calculating a teacher's student growth rating?

By what date must a student be enrolled to factor into a teacher's growth rating?

How will the district determine teacher categories and capture data for teachers in multiple assignments? Which students and sections will be included for the student growth rating?

What is the minimum number of students required to determine a teacher's growth rating?

If the system includes non-teachers of record, such as interventionists and inclusion teachers, how will the district track student-teacher linkages and use data to determine an overall growth rating?

◢ Preparing for Data Submission

By the end of the Data Capture Year, the district has appraised and collected student growth data for all teachers in TIA-eligible assignments. Before determining designations and preparing data for submission, districts must ensure all data has been collected and checked for accuracy and completion.

A best practice is to ensure multiple common teacher identifiers, such as a local ID or unique ID and date of birth, are used across the district's data management systems for tracking each teacher's identifying information, appraisal data, student linkages, and student growth data. The district collates data into a single template for submission to Texas Tech. Multiple common identifiers help to ensure data are accurately tied to the correct teacher. Many districts consult with a data analyst or technology systems manager for assistance with data compilation and analysis.

Once teacher performance data are compiled and reviewed at the district level, best practice is to establish a window for campus administrators and teachers to verify the data. Many districts distribute teacher score cards with the individual teacher's appraisal rating, student growth or assessment scores, student roster verification, and a final growth rating. This allows the opportunity for appeal and correction of inaccuracies before designations are determined and data are sent to Texas Tech for validation.

Analyzing Teacher Performance Data

Districts can use the TIA Designation Determination Analysis tool to run analysis on their teacher-level data prior to submitting the information to Texas Tech University. This tool may help districts uncover areas of strength and areas of concern in their local designation systems. The overall purpose is to assist districts in understanding if their system is fair in evaluating teacher effectiveness. This tool does not mimic the data validation process or provide scoring. It is designed to show areas of skew, areas of correlation, and provide district, campus, appraiser, and subject/grade-level profiles. This tool can be used to help continuously improve a district's system before data submission as well as after their Data Capture Year

View the 2023 TIA Designation Determination Analysis Tool Training.

Year 3 and Beyond: Determine Designations and Submit Data for Validation

Following the Data Capture Year, districts determine designations using the process outlined in their accepted System Application. Districts submit teacher performance data for teachers in eligible assignments and proposed teacher designations. Using the submitted data, Texas Tech runs a data validation check which are used by TEA to determine final approval of the district's system and their teacher designations.

◢ Determine Designations

There are several components of teacher performance data that go into a district's decision around determining designations, including:

→ Teacher Observation Data (required by statute)

→ Student Growth Data (required by statute)

→ Any additional optional components a district chooses to include, such as survey results, teacher leadership, etc. (not required by statute)

Districts must establish performance cuts points for each designation level. For some districts, this may involve complex calculations and support from a data analyst.

Changes to Designation Determination Before Data Submission

Allowable Changes	Not Allowable
Changes to component weighting	Removing observation or student growth as weighted components
Removing optional local system components, such as attendance or student surveys	Adding or removing a student growth measure
Consolidating eligible teaching assignments with the same student growth measures and weighting into a single category	Removing eligible teaching assignments or categories

Why Are Some Modifications Allowed to the Weighting Tab but Not Others? ————

TEA recognizes that when a district begins creating their local designation system, they must outline a process to determine designation cut points without actual teacher performance data. These allowances provide flexibility in the designation determination process while maintaining fidelity of the captured data.

FINALIZE CUT POINTS

Performance cut points are used to determine which teachers qualify for each level of designation. Some districts establish minimum requirements for earning a designation for each teacher performance component used. This is typically done by using the statewide performance standards as a guide. Districts may publish the component weighting and designation cut points before the end of the Data Capture Year, or they can wait until they have analyzed their complete data. Most districts choose to determine designations in the early fall following the Data Capture Year.

Can Uncertified Teachers Earn Designations?

Yes. With the passage of HB 1525 in 2021, uncertified teachers who meet their district's performance criteria may earn designations.

VERIFY TEACHER ELIGIBILITY

In addition to district designation cut points and optional local designation criteria, districts must confirm teacher eligibility before assigning designations. The following criteria apply:

Criteria	Data Capture Year	Designation Year
Employed by the district	✓	✓
Employed as a teacher	✓	✓
Employed in an eligible teaching assignment	✓	
Creditable year of service in a teaching role		✓
Minimum score of "Proficient" or equivalent for all observable dimensions	✓	

▎COMMUNICATE DESIGNATION DECISIONS

When and how the district communicates designations to teachers is a local decision. Some districts publish cutoff points and notify teachers at the end of the Data Capture Year if their performance qualified for designation.

It is important for districts to communicate with teachers and ensure they understand the eligibility requirements and timelines for earning a designation. Designations are also contingent upon data validation results. Many districts in the first year of implementation wait on communicating designations until they are formally approved in April of the year following data capture.

◢ **Data Submission and Validation**

Following the initial Data Capture Year, districts with an accepted application may submit data to Texas Tech for validation. TEA then studies the data validation results and conducts a holistic system review before issuing full system approval. If approved, TEA then processes the district's designations. If a district system is not approved, the district may use feedback from the data validation process to make improvements to their system before reattempting data validation in subsequent years.

Can Teachers Earn a Designation if They Leave After Data Capture? ───────

Districts may not designate teachers who have resigned, retired, or permanently moved to a full-time non-teaching role before data submission. Additionally, teachers may not earn a designation if they leave after a district submits them for designation but prior to TEA final approval.

Fully approved districts may submit new or higher designations annually for the next four years. How-ever, they must continue to provide evidence that the designation system continues to be valid and reliable. For districts with an already approved system, TEA reviews data validation results and approves the district to issue new or higher designations annually. If the data validation indicates the system is no longer valid and reliable, new designations are not processed, and the district may submit data again the following year. Note: TEA approves district designation systems. TEA does not approve or reject individual teacher designations.

▌DATA SUBMISSION FILE TEMPLATE

The data submission files are updated annually and posted in March. These may be customized for each teacher appraisal rubric. Districts using a locally developed appraisal rubric must request a custom file template from Texas Tech.

The data submission file represents a performance data snapshot for each teacher employed in an eligible assignment for the prior school year. Using the template and directions, districts compile data for all teachers in an eligible assignment during the Data Capture Year. Teachers who have since resigned, retired, or moved to a non-eligible role or assignment must still be reported.

Districts are limited to one line of data per teacher. Districts use the instructions provided in the file template to report the following:

→ Identifying information (name, date of birth [DOB], county district campus number [CDCN], TEA ID, unique ID)

→ Proposed designation level, if applicable

→ Eligible teacher category

→ Service ID, subject, grade level

→ Indicator if still employed by the district

→ Appraiser information

→ Observation and student growth data

Note: Districts may not designate teachers who are no longer employed by the district in a teaching role or did not meet the minimum score of Proficient in all observable dimensions.

Once data is submitted and finalized, districts may not adjust their teacher performance data, add teachers, or remove teachers for designation.

Before Texas Tech can validate district data, Texas Tech and TEA complete two different reviews: a technical review and a system alignment review. The technical and system alignment reviews are designed to ensure the submitted data are aligned with the district's System Application and the Texas Administrative Code. Failure to address this review process may lead to districts not being able to submit their data.

Technical Review: This happens through the Texas Tech Data Submission Portal after districts submit their file. If there are technical errors, the portal generates a report, and districts need to address the feedback and resubmit through the portal. Once all feedback is addressed, the file is accepted through the Texas Tech Data Submission Portal.

System Alignment Review: After the district's submission passes the technical review, TEA reviews for alignment to the accepted System Application. This review looks at eligible teacher categories, system components (observation and student growth), and any context provided on the District Information tab.

TIA DATA SUBMISSION PORTAL

Districts submit the data submission file via the **TIA Data Submission Portal**. Data submission files uploaded to the portal will be sent directly to Texas Tech. The portal includes features to check submission files for formatting errors, a tab for district reference files, and links to data submission resources and guidance.

◢ Teacher Designation Fees

Once data are submitted, districts must send $500 per designation fee and a fee form to TEA. For example, a district submitting 12 teachers for a new or higher designation would submit a fee of $6,000.

Districts submit fees based on the number of new or higher designations in the final data submission file. TEA recommends waiting until early November to finalize the fee amount. Designation fees only apply to teachers submitted for a new or higher designation. No fees are required to maintain existing teacher designations.

As a change from prior years, all designation fees are reimbursed in the following year's Foundation School Program's September Settle-Up and is not held in escrow if a district's data is denied following data validation.

Automated Clearing House (ACH) deposit and wire transfer options are also available. Please reach out to **tia@tea.texas.gov** for those instructions.

◢ Data Validation

Data validation provides TEA with insight to approve or reject local designation systems and/or annual designations by examining:

→ The validity and reliability of the district's teacher performance data
  ○ Observation data for all teachers in eligible assignments
  ○ Student growth data for all teachers in eligible assignments
→ The fairness and accuracy of the district's proposed designation decisions, including:
  ○ Alignment with statewide performance standards
  ○ Alignment with value-added data
  ○ Alignment with campus performance data
  ○ Consistency across campuses and eligible teaching categories

DATA VALIDATION CHECKS AND SCORING

Texas Tech provides TEA with data validation results based on the scoring of nine different checks across five domains. Texas Tech also conducts four unscored supplemental checks. Texas Tech provides each district with a report of the scored results by late February.

Scores are established by dividing the points earned by the total possible points to create a percentage score. In some cases, checks cannot be conducted, and the total possible point value is reduced. A detailed statistical analysis and scoring rubric can be found in the appendix.

Domain A. Correlation Between Teacher Observation Ratings and Student Performance Ratings

Check 1: The correlation coefficient between observation and growth among all eligible teachers is within the range of expected magnitude reported in the research literature.

Domain B. Confirm Relation Between District Designations and Student Growth Calculations

Check 2: District designations of Recognized, Exemplary, and Master (REM) teachers are found in similar proportion to designations as determined by the statewide VAM.

Check 3: District designation decisions for REM teachers, in tested subjects, are in proximity to designations as determined by the statewide VAM.

Domain C. Degree of Reliability for Observation and Growth Judgements

Check 4: Across campuses, observation scores are similar for teachers in REM groups.

Check 5: Across campuses, percentages of student growth are similar or teachers in REM groups.

Check 6: Across assignments, observation scores are similar or teachers in REM groups.

Check 7: Across assignments, percentages of student growth are similar for teachers in REM groups

Domain D: Comparison of District Designation Percentage to Statewide Performance Standards

Check 8: Percentage of students who meet or exceed expected growth in the district is approximately equal to the statewide performance standards for student growth in each of the teacher designation levels (REM).

Check 9: Observation ratings in the district are approximately equal to the statewide performance standards for teaching proficiency in each of the teacher-designation levels (REM).

Domain E: Supplemental System Checks (Not Scored)

Check 10: The proportion of teachers on district campuses who are designated as Recognized, Exemplary, or Master is roughly equivalent to other campuses with the same Domain 2A rating.

Check 11: The variability in observation ratings among all eligible teachers is within the range of historical magnitude.

Check 12: The ranking of teachers based on observation scores closely aligns with their ranking on statewide performance standards for teaching proficiency.

Check 13: The ranking of teachers based on percentages of student growth closely aligns with their ranking on statewide performance standards for teaching proficiency.

System Approval and Awarding Designations

Districts receive formal notification of approval or denial in late February. TEA shares data validation reports and provide technical assistance for system improvement based on data validation results.

If a district's system is not approved, the System Application remains in an accepted status, and districts are not required to resubmit the System Application. The district may resubmit data the following year or make adjustments to their system implementation before submitting data.

TEA processes new and higher designations annually in April and verifies teacher eligibility using data from the TSDS Class Roster Winter Submission. TEA provides annual training to districts employing designated teachers to ensure they are properly reported in the Class Roster Winter Submission.

Teachers must meet the following criteria to earn a new or higher designation through their local designation system:

→ Submitted for designation by the district based on prior-year teaching performance data and does not already have an active designation at the same level or lower

→ Employed as a teacher by the designating district (087 PEIMS Role ID)

→ Met or will meet the creditable year of service requirement by the end of the school year

→ Does not have a Texas teaching certificate in revoked, suspended, voluntary surrender, or permanent surrender status

→ Is not listed on the Texas Do Not Hire registry

→ Reported by the designating district in the Class Roster Winter Submission as meeting eligibility criteria:

○ Employed by the designating district in a 087 teaching role as of the last Friday in February

○ Met or will meet the creditable year of service requirement by the end of the school year

Creditable Year of Service: the teacher was employed and compensated (or will be by the end of the school year) in a teaching role (087 role ID) for:

→ 50% or more of the day for a minimum of 180 days; or

→ 100% of the day for a minimum of 90 days, or the equivalent of one semester.

If a teacher leaves the designating district prior to the last Friday in February, they forfeit designation eligibility. TEA provides annual training to districts employing designated teachers to ensure they are properly reported in the Class Roster Winter Submission.

Teachers who meet the eligibility requirements are awarded the designation retroactively to the beginning of the school year. District-issued designations are valid for five school years.

Designation Policies

For certified teachers, TEA displays the designation in the top right-hand corner of the State Board of Education Certification (SBEC) teaching certificate. Designated teachers are be assigned a Designated Teacher ID and listed in the Designated Teacher Public Search Registry.

Teachers may only have one active designation at a time. Recognized and Exemplary teachers who meet an approved district's performance criteria may be submitted for a higher level of designation. In these cases, the five-year clock restarts, and the lower designation becomes inactive.

NBCTs who qualify for designation through their district's local designation system may be put forth for any level of designation. TEA defaults to the higher designation, and the NBCT designation becomes inactive. In the case of NBCTs with two Recognized designations, the later expiry date applies.

Teachers may not be submitted for an equal or lower designation. Once a teacher's designation expires, an approved district may submit them for a new or higher designation if they meet the local performance criteria.

Approval of individual teacher designations are voidable by TEA for one or more of the following reasons:

→ A teacher has not fulfilled all designation requirements.

→ The teacher is listed in the Texas Do Not Hire registry.

→ The designated teacher's certificate issued by the SBEC is in a sanction status. *Note: Certificate sanctions result in automatic designation revocation. If the sanction is lifted, the designation may be reinstated to the original expiry date.*

→ The designating district or charter school's designation system was voided.

→ The National Board for Professional Teaching Standards revokes a National Board Certification that provided the basis for a teacher's designation.

→ At the discretion of the Commissioner of Education.

Post System Approval

▲ TIA Annual Evaluation Survey

The TIA Annual Evaluation Survey, developed by Texas Tech University, is administered each spring to teachers, administrators, and human resources personnel. The survey is designed to gauge perceptions and support for the local designation system after implementation. The administration of these surveys is required for continued system approval. Results are used as part of a continuous improvement cycle to monitor the perception and impact of the local designation system. Districts receive survey results in early July and must analyze and respond to the results in their Annual Program Submission the following fall.

▲ Annual Program Submission

Districts with a fully approved local designation system must participate in an Annual Program Submission to maintain system approval and ensure compliance with statutory requirements. The Annual Program Submission requires districts to engage in analyzing the impact of the local designation system and focuses on continuous improvement. The submission consists of three parts and is due by August 31.

1 Annual Program Submission form. This requires districts to:

- Demonstrate how TIA funds were spent in alignment with statutes;
- Update contact information if needed; and
- Reflect using multiple sources of data, such as the TIA Annual Evaluation Survey and data validation reports, to determine how they might adjust the system in future years.

2 Attestations signed by the district superintendent ensuring compliance with statutory components.

3 Part three requires districts to verify compliance of the spending of their TIA funds. The district must show they expended 100% of the previous school year's Teacher Incentive Allotment by August 31 of the current school year and that they spent 90% on student-facing instructional staff on the campus where the designated teacher works and only spent at most 10% to support the designation system or to support teachers in getting designated.

Expanding or Modifying a Local Designation System

Districts with an accepted System Application may update their system by submitting a system Expansion and Modification Application.

System changes that require an Expansion and Modification Application include:

→ Adding or modifying eligible teaching assignments
   or eligible teacher categories
→ Adding or removing eligible campuses
→ Changing or adding student growth measures
→ Changing a teacher observation rubric
→ Changing the spending plan

System changes that do **not** require an Expansion and Modification Application include:

→ Changes to component weighting
→ Removing or adding optional system components
→ Changes to the process for setting expected student growth targets
→ Changes to district local performance standards and designation cut points
→ Adding newly built campuses to the eligible campus list, if the system
   already includes all campuses

Why do districts choose to expand their systems in later years?

Many districts choose to begin with a subset of eligible campuses or teaching assignments and expand their system in subsequent years with the goal of eventually including all teachers. This gives them an opportunity to build a foundation for a strong local designation system, and then add to their system.

Application Process for System Expansion and Modification

The annual window for system expansions and modifications mirrors the standard System Application process. Changes to statutory components are subject to TEA review and must be accepted prior to implementation. The Expansion and Modification Application is shorter than the original System Application and only includes statutory components. In addition, TEA does not require the district to administer a new Teacher Buy-In Survey. Districts answer an initial series of questions to determine which sections to complete and only completes areas pertaining to their specific system changes.

Like the initial System Application, TEA scores Expansion and Modification Applications and allows an opportunity for revision and resubmission if needed. If a district's Expansion and Modification Application is denied, the district may continue implementing the previously accepted System Application.

If accepted, the Expansion and Modification Application updates the current local designation system beginning at the start of the following school year — the system cannot be changed retroactively. Districts begin to capture teacher observation and student growth data in accordance with the newly expanded or modified application in the following school year, however the fall data submission must still reflect the previously accepted System Application. **Newly added teaching assignments will not be eligible for designation until the new system has been implemented for a full school year.**

Note: Because spending plans can be directly tied to district priorities, TEA may use administrative discretion to allow spending plan adjustments outside the expansion and modification window. Districts who want to use this option should reach out via email to tia@tea.texas.gov.

Do Districts Have to Repeat a Data Capture Year if They Expand or Modify? —————

For fully approved districts, a new Data Capture Year is not required. However, best practice is to collect teacher observation and student growth data for as many eligible teachers as possible in order to avoid potential complications with the data validation process. The original five-year approval window still applies and will not reset with a system Expansion and Modification Application.

System Renewals

Year 1

Renewal Application Year

Fall: Renewal Application Posted and Training Session Conducted

Spring: Renewal Application Submission Deadline

Year 2

Summer: Renewal Application Acceptances Communicated

Renewal Implementation Year

School Year: Accepted Renewal
Implementation and Data Capture Year

Year 3

First Year for Accepted Renewals

Fall: Renewal Data Submission to Texas Tech University

Spring: Renewed System Approvals
Communicated and Designations Issued

TIA offers five-year system approvals for local designation systems. If districts would like to continue issuing new designations, then they need to submit a renewal application with enough time to meet the data submission and system approval timelines before the expiration date of their current system.

The renewal process is a streamlined opportunity for districts to:

1 Meet current statutory requirements

2 Holistically review the existing system to identify strengths and areas for continuous improvement, and

3 Expand or modify a local designation system to additional eligible teaching assignments.

District goals and needs can change a lot in five years. To ensure their local designation system is still set up to provide the best value to their teachers, and still follows the requirements set by TIA, districts should take the following actions through the system renewal process.

→ Check that the district's local designation system aligns with current TIA requirements, which may have been updated since their initial System Application

→ Update their local designation system and spending plan to reflect the district's current goals and needs

→ Work to include more teaching assignments in the local designation system to expand opportunities for teacher designations

→ Submit updated teacher observation and student growth data that demonstrate the positive impact the local designation system has had on the district

The renewal process starts in the fourth year of a district's five-year local designation system approval period. For example, a district that first issued designations in the 2022–23 school year would start their renewal process in December 2026.

National Board Certification and TIA

NBCTs employed as Texas public school teachers may be designated as Recognized notwithstanding statewide performance standards. All districts employing eligible, designated NBCTs may receive TIA allotment funds. A local designation system is not required.

National Board Certification is a voluntary, advanced professional certification for Pre-K–12 educators that identifies teaching expertise through a performance-based, peer-reviewed assessment. Teachers are certified based on standards set by the **National Board for Professional Teaching Standards (NBPTS)**. NBPTS requires teachers to have at least two years of experience as a certified teacher before registering as a candidate for National Board Certification. Some exceptions may apply.

Teachers may pursue National Board Certification independently or with the support of a district or regional cohort. On average, candidates who successfully certify take two to three school years to complete and pass all components.

NBCT Recognized Designations

TEA oversees the designation process for Texas NBCTs; no application is required from the NBCT or their employing district.

NBCTs must meet the following criteria to earn a Recognized designation in a given school year:

→ Hold an active certificate issued by the NBPTS.

→ Employed as a public school teacher and reported with a 087 Role ID in the Class Roster Winter Submission. Alignment with the National Board certificate area is not required.

→ Listed as a Texas teacher in the NBCT Directory as of January 31. NBCTs moving to Texas from out of state must update their information to reflect Texas employment.

→ Does not have a Texas teaching certificate in revoked, suspended, or voluntary surrender status.

→ Is not listed on the Texas Do Not Hire registry

Designations for newly certified NBCTs who meet the eligibility criteria are awarded the same school year in which they certify. Designations are valid through July 31 following the expiry of the National Board certificate. TEA updates the designation expiry date for NBCTs who recertify.

Timeline	Deadline
November–March	• January 31 deadline for NBCTs to update their directory listing • New NBCT certifications issued by NBPTS • Winter Class Roster snapshot of NBCT campus placement • Districts submit reimbursement requests for NBPTS fees (optional)
April	• New NCBTs receive Recognized designations and become designated teachers • Designation placed on SBEC certificates retroactive to beginning of school year • Allotment funds calculated based on designated teacher CDCNs reported in Winter Class Roster • Districts notified of designated teacher allotment funding for that school year • Designation expiry dates updated for NBCTs who successfully renewed or maintained certification

Allotments for Districts Employing NBCTs

Districts employing a designated NBCT may receive allotment funds if the NBCT works a creditable year of service in a teaching role. A local designation system is not required to receive funds for designated NBCTs. TEA cross-references NBCT data provided by the NBPTS with teacher placement in Fall PEIMS and contact their employing districts with resources and next steps.

Districts receiving funds for designated NBCTs must comply with statutory spending requirements. If the NBCT works in a district with a local designation system, they must follow the spending plan for NBCTs outlined in their System Application.

National Board Certification Fee Reimbursement

TEA may reimburse districts for fees paid to the National Board for Professional Teaching Standards. Districts may request fee reimbursement on behalf of Texas NBCTs who certified or recertified in 2019 or later. TEA reimburses up to:

→ $1,900 for initial certification;

→ $1,250 for renewal; and

→ $495 for Maintenance of Certification (MOC).

Annual registration fees and retake fees are not eligible for reimbursement.

There is no statute of limitations for National Board fee reimbursement. TEA does not verify the NBCT's current role or employment status with the district. To request reimbursement, districts must submit a reimbursement request form and signed assurances. Districts must also provide documentation of fees paid directly to the National Board and/or reimbursed to the NBCT prior to the request. Fees paid by a third party other than the district, such as a grant or technical assistance provider, are not eligible for reimbursement. TEA may exercise administrative discretion if the NBCT has paid certification fees to NBPTS through a third party.

For more information, please visit **National Board Fees and Reimbursement**.

Allotment Funding for Districts Employing Designated Teachers

Allotment Eligibility

Once a designation is earned and awarded, TEA verifies allotment eligibility annually in April using data from the Class Roster Winter Submission. Districts employing designated teachers in a teaching role must ensure they are reported accurately in the Class Roster Winter Submission. This requires coordination between district TIA Leads, human resources personnel, and the district PEIMS designee. TEA hosts annual training for districts employing designated teachers.

Districts receive allotment funds when they employ designated teachers who meet the following criteria:

→ Employed by the district as a teacher (087 Role ID)
→ Met or will meet the creditable year of service requirement by the end of the school year

Creditable Year of Service: the teacher was employed and compensated (or will be by the end of the school year) in a teaching role (087 role ID) for:

→ 50% or more of the day for a minimum of 180 days; or
→ 100% of the day for a minimum of 90 days, or, the equivalent of one semester.

For districts issuing designations, the district receives an allotment for all teachers in their first year of a new or higher designation.

Movement of Designated Teachers

Once awarded, designations remain active until the expiry date regardless of the teacher's district, role, or employment status. TEA checks designated teacher placement and allotment eligibility annually using data from the Class Roster Winter Submission.

If a teacher moves districts prior to the snapshot date in late February and works a creditable year of service with the new district, the new district is awarded the funds. If the designated teacher leaves after the snapshot date and worked a creditable year of service prior to leaving, then the previous district receives the funds. All funding updates are handled through the Foundation School Program (FSP). No funds are transferred between districts.

Districts may choose whether to forward funds to designated teachers who leave the district prior to the August 31 spending deadline. This depends on the district's local spending plan. Designated teachers are encouraged to reach out to their district prior to moving to determine if they still receive TIA compensation. If the district chooses not to forward allotment funds, the district must still spend at least 90% on teacher compensation on the campus where the designated teacher worked.

Verifying Annual Allotments

Districts employing eligible designated teachers verify and confirm their annual allotment in the Strategic Compensation Operations Management System (SCOMS). SCOMS is a TEA Login (TEAL)-based web application used for TIA. SCOMS allows district users to view, sort, filter, and export annual allotment data and teacher designation records. TEA provides SCOMS user guides and training to all districts employing designated teachers. An updated guide for 2023-2024 will be available in April 2024.

Timing Matters ————————

Allotment values are determined by each designated teacher's campus as of the last Friday in February. Funds do not follow designated teachers in real time, and allotments are not prorated. For eligible teachers, allotment funding is awarded to the district where the designated teacher worked as of the last Friday in February. For designated teachers moving districts, the time that a teacher moves is paramount to determining which district will receive funds.

Allotment Timeline and Spending Requirements

◢ Receiving the Allotment

For districts receiving TIA funds for the first time, the allotment arrives as a lump-sum reimbursement in September settle-up. The district Summary of Finances (SOF) Report, line 30 or 32, displays the total allotment (sum of designated teacher allotments + reimbursed fees). Note the line number may be either 30 or 32 depending on other state funding allotments. After the September settle-up process, the final SOF report matches the Payout by School Year values in SCOMS.

Funding and Spending Timeline

TEA issues FSP payout of current school year allotments including fee reimbursements.

TEA issues next school year monthly FSP payout based on previous school year actual amounts.

Districts expend scheduled TIA allotment funding.

By August 31

New School Year

September

District confirms allotment.

TEA notifies teachers of allotment they generated.

TEA sends notification of designations and annual allotments based on the current school year's Class Roster Winter Submission.

May

April

Sample First-Year Settle-Up FSP Report

32.	Teacher Incentive Allotment 48.112	Detail Report		$0	$79,581

	Funding Elements	LPE # OF TEACHERS	LPE Allotment	DPE # OF TEACHERS	DPE Allotment
1.	Master Teacher Designation	0	$0	0	$0
2.	Exemplary Teacher Designation	0	$0	3	$41,226
3.	Recognized Teacher Designation	0	$0	5	$34,355
4.	Fee Reimbursement	N/A	$0	N/A	$4,000
5.	Teacher Incentive Allotment	N/A	$0	N/A	$79,581

Sample Continuing FSP Report

30.	Teacher Incentive Allotment 48.112	Detail Report		$79,581	$79,581

	Funding Elements	LPE # OF TEACHERS	LPE Allotment	DPE # OF TEACHERS	DPE Allotment
1.	Master Teacher Designation	0	$0	0	$0
2.	Exemplary Teacher Designation	3	$41,226	3	$41,226
3.	Recognized Teacher Designation	5	$34,355	5	$34,355
4.	Fee Reimbursement	N/A	$4,000	N/A	$4,000
5.	Teacher Incentive Allotment	N/A	$79,581	N/A	$79,581

◢ Spending the Allotment

The statute requires 90% or more of the funds are spent on teacher compensation on the campus where the designated teacher works. Up to 10% may be used by the district for costs associated with implementing a local designation system or supporting teachers in earning designations.

Districts must expend all allotment funds for the given school year by August 31. For districts receiving funds for the first time, please note that funds must be spent prior to the September reimbursement.

Best Practice

Best practice is to consider spending plan options alongside district goals for retention and recruitment. Once the district has a clear spending plan, the district may update their spending plan to include expenditure of TIA funds. All TIA funds are TRS eligible.

Districts without a local designation system must work with their business office to develop a spending plan in compliance with the statute. Districts in the process of developing a local designation system may institute a tentative spending plan if they employ designated teachers before the system takes effect.

The spending plan should outline:

→ The percentage of funds to be awarded to the designated teacher

→ The percentage of funds to be awarded to other teachers on the campus, if applicable

→ The anticipated payout date

→ The policy for teachers who retire or resign prior to the scheduled payout date. Some districts choose to give the full or remaining payment to the designated teacher that earned the funding in one lump stipend payment. Other districts choose to keep the money for supporting other teachers that remain on campus to help their retention goals.

2023-24 Deadlines

Districts Developing a System (Cohort G)

November 2023	Application Posted
April 15, 2024	System Application Due to TEA
August 1, 2024	System Application Results

Districts in Data Capture Year (Cohort F, 2023 Renewals)

August-May	Implement the Local Designation System
	Collect Teacher Performance Data
November 2023	Expansion and Modification Application Posted
April 15, 2024	Expansion and Modification Application Due to TEA
August 1, 2024	Expansion and Modification Results

Fully Approved Districts (Cohort A-E)

October 19, 2023	Data Submission Due to TTU
November 2023	Expansion and Modification Application Posted
	Renewal Application Posted
February, 2024	Final System Approval Notification
April 15, 2024	Expansion and Modification Application Due to TEA
April 2024	Final Designations & Allotments Verified
August 1, 2024	Expansion and Modification Application Results
	Renewal Application Results
August 30, 2024	Annual Program Submission Due
September 2024	Approved Districts Receive Initial Payout via FSP

Appendix A: TIA Approved Technical Assistance Providers

TIA Approved Technical Assistance Providers

2023 - 2024 School Year
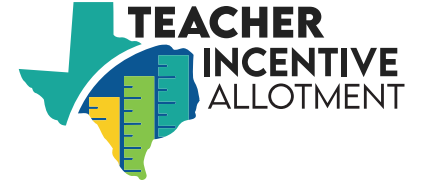
Provider	General TIA Support	Teacher Observation	Student Growth Measures	Data Analysis	Spending & Strategic Comp
Activated Partners	✔	✔	✔	✔	✔
Deep Dive LLC	✔		✔	✔	✔
EDpact	✔	✔	✔	✔	✔
Education Analytics	✔		✔	✔	
Eduphoria	✔	✔	✔	✔	✔
engage2learn	✔	✔	✔	✔	✔
Kreuz Consulting Group	✔	✔	✔	✔	✔
National Institute for Excellence in Teaching (NIET)	✔	✔		✔	✔
Region 1 - Edinburg	✔	✔	✔	✔	✔
Region 3 - Victoria	✔	✔		✔	

Provider	General TIA Support	Teacher Observation	Student Growth Measures	Data Analysis	Spending & Strategic Comp
Region 4 - Houston	✔	✔	✔	✔	✔
Region 6 - Huntsville	✔	✔	✔	✔	✔
Region 9 - Wichita Falls	✔	✔	✔		
Region 10 - Richardson	✔	✔	✔	✔	✔
Region 11 - Fort Worth	✔	✔	✔		
Region 12 - Waco	✔	✔	✔	✔	✔
Region 13 - Austin	✔	✔	✔	✔	
Region 15 - San Angelo	✔	✔	✔	✔	✔
Region 18 - Midland and TxCEE	✔	✔	✔	✔	✔
Region 20 - San Antonio	✔	✔	✔	✔	
RTI International & Safal Partners	✔	✔		✔	
SAS Institute	✔		✔	✔	
Steady State Impact Strategies	✔	✔		✔	✔

Provider	General TIA Support	Teacher Observation	Student Growth Measures	Data Analysis	Spending & Strategic Comp
Texas Association of School Boards (TASB)	✔	✔			✔
The Commit Partnership	✔	✔		✔	✔
TNTP	✔	✔	✔	✔	✔

Appendix B: Data Validation Documentation
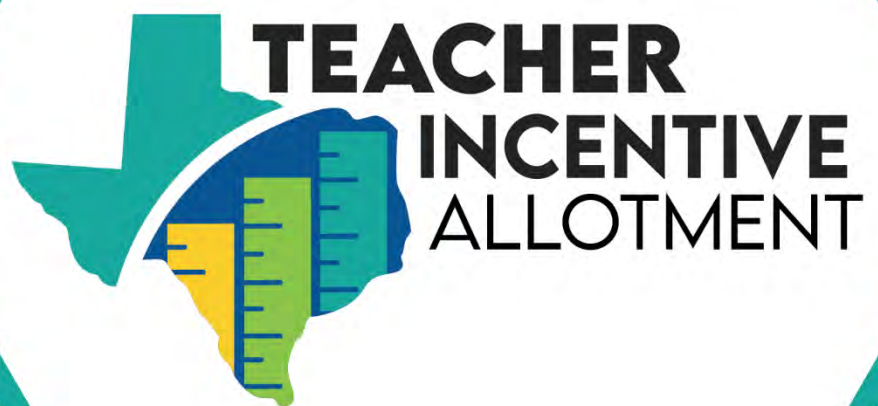
Summary of the Step 2
Data Validation Process
Cohort A, B, C, D, & E
Year 5 – 2023 Data Submission

Table of Contents

Dear LEA Colleagues,

Thank you for participating in the Teacher Incentive Allotment. We recognize the significance of this decision and admire your willingness to benefit students, teachers, and the LEA through this program.

Purpose of this document

This document provides a *summary* of the Step 2 Data Validation process in three sections.

- The first is a reader-friendly description of the statistics used in each check and the type of evidence each check provides toward validating a district's system for designation.
- The second section contains the Validation Scoring Rubric. This rubric is used to summarize evidence and assign points for each check. Ultimately, scores on the rubric allow the Texas Education Agency (TEA) to determine if sufficient evidence exists to support the conclusion that a district's designation system will result in valid teacher selections. A district need not score perfectly on every dimension, but component scores, taken together, help TEA make decisions about a district's system.
- For those interested in a deeper understanding of the data validation checks, the third section contains additional explanations about each of the statistical procedures, test statistics, and decision rules for assigning points on the rubric.

This resource is intended to provide a big picture perspective of the checks performed by Texas Tech on the data submitted by LEAs. We recommend that you read this document first before reviewing the data template, and keeping it handy while your data file is being prepared. If you have questions about this summary, please contact TIA@ttu.edu.

Procedural changes

A change was made that affects Step 2 for Year 5. This change was made to ensure clear and transparent ratings and establish a process that guarantees rigor and fair scoring for all LEAs regardless of size, demographics, or the local designation plan.

The change involves a shift to an ***adjusted*** VAM model. For the 2023-24 data validation check (using data from the 2022-23 school year), districts will be scored on both an adjusted model and the current unadjusted model. The highest overall data validation results will be taken. For the 2024-25 data validation check (using data from the 2023-2024 school year) the data will only be scored based on the adjusted model. We will no longer use the unadjusted model after this year. The impacted checks are 2, 3, 4, 10, and the new supplementary checks 12 and 13.

Additionally, beginning this year, a small number of districts, who may be on the cusp of passing as identified by TEA's review, will have the opportunity to submit an appeal of the decision. The appeals process will involve an opportunity to provide additional qualitative and quantitative context, which will then be reviewed. A district with a granted appeal will receive a one-year provisional approval and must receive full approval the following year to continue to designate teachers. More details will be available for districts who qualify for this opportunity.

Additional changes to the checks and data validation scoring process are listed below. If you have questions about this summary or these changes, please contact TIA@ttu.edu.

Sincerely,

Texas Tech Team for TIA

Summary of Changes to Data Validation Checks

Overview of Changes:

2023-24 Check Number	Domain	Prior Check Number	Weight	Change
1	A	1	10	Changed weight and scoring rubric
2	B	2	7	Changed weight and scoring rubric
3	B	3	3	Changed weight and scoring rubric
4	C	4	3	Changed weight and scoring rubric
5	C	5	2	Changed scoring rubric
6	C	6	3	Changed weight and scoring rubric
7	C	7	2	Changed scoring rubric
8	D	8	1	Changed scoring rubric
9	D	9	1	Changed scoring rubric
10 (supp)	E	10 (supp)	0	Changed scoring rubric
11 (supp)	E	11 (supp)	0	Changed scoring rubric
12 (supp)	E	NA	0	New supplemental check
13 (supp)	E	NA	0	New supplemental check

New Supplemental (unscored) Check 12 and Check 13:

We will examine rank correlations between observation scores (Check 12) or growth scores (Check 13) and VAM scores among teachers of tested subjects. These checks are intended to help system administrators gauge the level of agreement between the rankings of teachers within the district on observation/growth and VAM scores. For this year, these checks are unscored and may be considered as a scored check in the future.

12. The ranking of teachers based on observation scores closely aligns with their ranking on statewide performance standards for teaching proficiency.

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$\rho \leq 0$	$\dfrac{\rho - 0}{0.10 - 0}$	$\rho = 0.10$	$\dfrac{\rho - 0.10}{0.37 - 0.10} + 1$	$\rho = 0.37$	$\dfrac{\rho - 0.37}{0.64 - 0.37} + 2$	$\rho \geq 0.64$

13. The ranking of teachers based on percentages of student growth closely aligns with their ranking on statewide performance standards for teaching proficiency.

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$\rho \leq 0$	$\dfrac{\rho - 0}{0.10 - 0}$	$\rho = 0.10$	$\dfrac{\rho - 0.10}{0.25 - 0.10} + 1$	$\rho = 0.25$	$\dfrac{\rho - 0.25}{0.50 - 0.25} + 2$	$\rho \geq 0.50$

Reader-Friendly Description of Data Validation Checks

The analyses described below are intended to validate the district designation system by comparing designations with external data and performing internal consistency checks. The purpose is to confirm that the district system functions in a manner that meets certain reliability (consistency) and validity (accuracy) standards, not to confirm or reject the designation of individual teachers. Meeting these standards allows stakeholders to have confidence that the designation system is fair and accurate.

Domain A. Correlation between teacher observation ratings and student performance ratings
Check 1 The correlation coefficient between observation and growth among all eligible teachers is within the range of expected magnitude reported in the research literature.
For this check, analysts calculate the correlation coefficient (Pearson product-moment correlation) between teacher observation scores and student growth scores submitted by the district. This analysis involves looking for a trend or pattern in the relation between teaching proficiency (i.e., observation scores) and the learning gain exhibited by students (i.e., student growth). Based upon findings reported in peer-reviewed research literature, the expectation is that the trend or relation will be at least minimally positive. For example, the analysts will expect to see that teachers who are assigned higher observation ratings by appraisers will also have students that exhibit greater growth. Conversely, teachers who are assigned lower observation ratings by an appraiser would be expected to have students who exhibited less growth. Results from this analysis provide one piece of evidence about the validity of the designation system.

Domain B. Confirm relation between district designations and student growth calculations
Check 2 District designations of Recognized, Exemplary, and Master (REM) teachers are found in similar proportion to designations as determined by the state-wide VAM.
For this check, analysts calculate a rank correlation coefficient (Kendall's tau) between the designation category assigned to a teacher by the district and the equivalent category derived from state-level value-added scores calculated for teachers in the district. This analysis uses district data from SY2022-2023 restricted to the group of teachers whom the district has designated and for whom a state-level STAAR-based value-added score can be calculated. This analysis looks at the <u>rank</u> of the designation (REM) and compares it to the <u>rank</u> derived from a value-added score. The expectation is that teachers assigned a Master designation would have a higher-ranking designation as determined by the state-wide VAM than those with an Exemplary designation and that teachers with this designation would have a higher-ranking designation as determined by the state-wide VAM than those with a Recognized designation. Results from this analysis provide another piece of evidence about the validity of the designation system.
Check 3 District designation decisions for REM teachers, in tested subjects, are in proximity to designations as determined by the state-wide VAM.
For this check, analysts examine the accuracy with which local designation systems designate each eligible teacher in a tested subject based on calculations of the designations if they were determined by the state-wide VAM. The table below shows how scores are calculated based on the proximity of district designation to the designation if it was determined by the state-wide VAM. Scores reflect a positive value for accurate designation, and a negative value for decisions that are not aligned with designations if they had been determined by the state-wide VAM. For example, if a local system designates a teacher as Exemplary, and this designation is consistent with the designation determined by the state-wide VAM, then an accuracy score of 1.00 is assigned. On the other hand, if a local system designates a teacher as Master, but the designation as determined by the state-wide VAM indicates no designation should be made, then an accuracy score of -1.00 is assigned. The expectation is that local systems will accurately identify teachers, and their levels, for designation. This analysis provides evidence about the concurrent validity of the local designation system.

	Designations if determined by the state-wide VAM			
District Designations	*Not Designated*	*Recognized*	*Exemplary*	*Master*
Recognized	0.00	**1.00**	0.75	0.50
Exemplary	-0.25	0.75	**1.00**	0.75
Master	-1.00	0.25	0.75	**1.00**

Domain C. Degree of reliability for observation and growth judgements

Check 4

Across campuses, observation scores are similar for teachers in REM groups.

For this check, analysts use an analysis of variance (ANOVA) to calculate the extent to which there are similarities in observation scores for REM teachers across campuses. The expectation is that there will be small, statistically non-significant differences between the same designation levels across campuses within the district. That is, observation scores for teachers designated at the Master level are expected to be comparable regardless of campus. Similar analyses are performed for the observation scores associated with teachers in the other designation groups. If the expected level of consistency is found in the observation data, it provides evidence about the reliability of the district's designation system.

Check 5

Across campuses, percentages of student growth are similar for teachers in REM groups.

This check is like Check 4 in that ANOVA is used to calculate similarities for REM teachers across campuses. In this case, however, analysts are interested in comparing student growth scores, or the percentage of students who meet or exceed learning expectations. As above, the expectation is that there will be small, statistically non-significant differences between the same designation levels across campuses within the district. That is, growth scores associated with teachers designated at the Master level are expected to be comparable regardless of campus; and similar analyses are performed for the growth scores associated with teachers in the other designation groups. If the expected level of consistency is found in student-growth data, it provides evidence about the reliability of the district's designation system.

Check 6

Across assignments, observation scores are similar for teachers in REM groups.

This check is also like Check 4, but instead of making comparisons across campuses, it looks for similarities in observation ratings within REM groups across teaching assignment. As before, ANOVA is used to calculate similarities among designation groups based on teaching assignments. Teaching assignments and the subsequent comparisons will be defined in one of two ways, based upon the data provided by the district.

- First, assignment may mean looking at similarities in observation scores across eligible teacher groups as identified in the district TIA application; or if districts identify only one group of eligibility, and
- Second, assignment may mean looking at similarities in observation scores across teachers in STAAR-tested vs. non STAAR-tested assignments (e.g., Grade 3 math vs. Grade 5 science).

If the expected level of consistency is found in observation data across assignments, it provides evidence about the reliability of the district's designation system.

Check 7

Across assignments, percentages of student growth are similar for teachers in REM groups.

This check is like Check 5, but instead of making comparisons in observation, the comparison is of student growth (percentage of students who meet or exceed learning expectations) within the REM groups across teaching assignment. As before, teaching assignment will be defined as eligible teacher groups or STAAR-tested vs. non-STAAR-tested, depending on the district system and the eligible teacher groups put forward for designation. This check is the last of four checks that are intended to provide evidence about the reliability of the district's designation system.

Domain D. Comparison of district designation percentage to statewide performance standards
Check 8 The percentage of students who meet or exceed expected growth in the district is approximately equal to the statewide performance standards for student growth in each of the teacher-designation levels (REM). *Check 9* Observation ratings in the district are approximately equal to the statewide performance standards for teaching proficiency in each of the teacher-designation levels (REM).
Both checks involve simple comparisons between statewide performance standards for each designation level and district-level results. Performance standards were calculated for both student growth and teacher observation ratings for the top 33% (Recognized level), top 20% (Exemplary level) and top 5% (Master level). Performance standards for student growth are set for each designation level (i.e., Recognized = 55%; Exemplary = 60%; Master = 70%). The district's results for the percentage of students who meet or exceed growth are compared to the performance standards. District results that meet the designation performance standards from the state are considered to be a match, but those that fall below the state standard are considered to be a mismatch. Performance standards for teacher observation are also set for each designation level based on the average number of points assigned by appraisers for Domain 2 and 3 of T-TESS (i.e., Recognized = 3.7 points; Exemplary = 3.9 points; and Master = 4.5 points). The district's results for appraiser ratings are compared to the performance standards. District point values that meet the performance standards are considered to be a match, but those that fall below are considered to be a mismatch. In cases where districts use an observation other than T-TESS, a crosswalk between the rubrics is performed and equivalent levels are set (i.e., Recognized = 74% of possible points; Exemplary = 78% of possible points; Master = 90% of possible points). The scoring criteria for these analyses will be based on the number of designation groups with which district data matches the performance standard for growth and observation scores. A greater number of points will be awarded when there is a greater number of groups with which district designations match the levels described above. Results from these analyses provide evidence about the validity of the designation system.

Domain E. Supplemental system checks (not scored)
Check 10 The proportion of teachers on district campuses who are designated as Recognized, Exemplary, or Master is roughly equivalent to other campuses with the same Domain 2A rating.
The purpose of this check is to examine patterns in designation groups and compare them to district campuses with the same Domain 2A ratings. The expectation is that a district's proportion of designated teachers across all campuses with a specific rating will be like other campuses across the state with the same rating. Results from analyses provide evidence about how well districts have calibrated their system to state standards as well as outcomes found among similarly rated peer districts across the state. Results from this analysis also provide evidence about the validity of the designation system. For the 2023 Step 2 Data Validation process, TEA will use 2022-23 Domain 2a ratings. Any district submitting a campus receiving a "Not Rated" label will be excluded from this analysis for comparison purposes. The scoring criteria reflect the size of the difference between the proportion of teachers designated by the district, and the proportion of designated teachers found in statewide averages of districts with the same Domain 2A ratings. Smaller differences in proportion (i.e., less than or equal to 0.10 difference) earn more points. Districts with proportions that differ from the statewide average by more than 0.70 receive "0" points on this check.
Check 11 The variability in observation ratings among all eligible teachers is within the range of historical magnitude.

The purpose of this check is to display for leaders of the district's TIA initiative the spread of teacher observation scores gathered during the data capture year. For this check, analysts calculate standard deviation of (max-scaled) observation scores among all eligible teachers.

The expectation is that observation scores for the district will be distributed in a manner that gives some evidence about the ability of the local system to differentiate between ineffective and effective instruction.

Check 12
The ranking of teachers based on observation scores closely aligns with their ranking on statewide performance standards for teaching proficiency.

Check 13
The ranking of teachers based on percentages of student growth closely aligns with their ranking on statewide performance standards for teaching proficiency.

For these checks, analysts calculate a rank correlation coefficient (Spearman's ρ) between observation scores (Check 12) or student growth scores (Check 13) and state-level value-added scores calculated for teachers in the district. This analysis uses district data from SY2022-2023 restricted to the group of teachers for whom a state-level STAAR-based value-added score can be calculated. This analysis looks at the rank of the observation or growth score and compares it to the rank derived from a value-added score. The expectation is that teachers with a higher-ranking on the observation or growth score would have a higher-ranking as determined by the state-wide VAM. Results from this analysis provide another piece of evidence about the validity of the designation system.

Validation Rubric

None or almost no evidence supports judgements	Limited evidence supports the accuracy of judgements	Some evidence points toward the accuracy of judgements	Most evidence supports the accuracy of judgements
Score of 0	Score of 1	Score of 2	Score of 3

Domain A. Correlation between teacher observation ratings and student performance ratings

This check is intended to confirm that teachers' appraisal scores are related to student growth scores.

1. The correlation coefficient between observation and growth among all *eligible* teachers is within the range of expected magnitude reported in research literature.
Earned points x 10 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$r \leq 0$	$\dfrac{r-0}{0.08-0}$	$r = 0.08$	$\dfrac{r-0.08}{0.16-0.08}+1$	$r = 0.16$	$\dfrac{r-0.16}{0.24-0.16}+2$	$r \geq 0.24$

Domain B. Confirm the relation between district designations and VAM

These checks are intended to confirm that district designations are aligned with state-level student-growth calculations. For the current year, this analysis compares district designations to SY2022-2023 VAM data.

2. District designations of Recognized, Exemplary and Master (REM) teachers are found in similar proportion to designations as determined by the state-wide VAM.
Earned points x 7 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$\tau \leq 0$	$\dfrac{\tau-0}{0.10-0}$	$\tau = 0.10$	$\dfrac{\tau-0.10}{0.30-0.10}+1$	$\tau = 0.30$	$\dfrac{\tau-0.30}{0.50-0.30}+2$	$\tau \geq 0.50$

3. District designations for REM teachers, in tested subjects, are in proximity to designations as determined by the state-wide VAM.
Earned points x 3 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$s \leq 0$	$\dfrac{s-0}{0.10-0}$	$s = 0.10$	$\dfrac{s-0.10}{0.30-0.10}+1$	$s = 0.30$	$\dfrac{s-0.30}{0.70-0.30}+2$	$s \geq 0.70$

Domain C. Degree of reliability for observation and growth judgements

These checks are intended to confirm that observation ratings and student performance are determined in a consistent manner across campus and teaching assignment. [1]

4. <u>Across campuses</u>, observation scores are similar for teachers in REM groups.
Earned points x 3 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$sp.\omega^2$ ≥ 0.25	$\dfrac{0.25 - sp.\omega^2}{0.25 - 0.14}$	$sp.\omega^2$ $= 0.14$	$\dfrac{0.14 - sp.\omega^2}{0.14 - 0.06} + 1$	$sp.\omega^2$ $= 0.06$	$\dfrac{0.06 - sp.\omega^2}{0.06 - 0.01} + 2$	$sp.\omega^2$ ≤ 0.01

5. <u>Across campuses</u>, percentages of student growth are similar for teachers in REM groups.
Earned points x 2 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$sp.\omega^2$ ≥ 0.25	$\dfrac{0.25 - sp.\omega^2}{0.25 - 0.14}$	$sp.\omega^2$ $= 0.14$	$\dfrac{0.14 - sp.\omega^2}{0.14 - 0.06} + 1$	$sp.\omega^2$ $= 0.06$	$\dfrac{0.06 - sp.\omega^2}{0.06 - 0.01} + 2$	$sp.\omega^2$ ≤ 0.01

6. <u>Across assignments</u>, observation scores are similar for teachers in REM groups.
Earned points x 3 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$sp.\omega^2$ ≥ 0.25	$\dfrac{0.25 - sp.\omega^2}{0.25 - 0.14}$	$sp.\omega^2$ $= 0.14$	$\dfrac{0.14 - sp.\omega^2}{0.14 - 0.06} + 1$	$sp.\omega^2$ $= 0.06$	$\dfrac{0.06 - sp.\omega^2}{0.06 - 0.01} + 2$	$sp.\omega^2$ ≤ 0.01

7. <u>Across assignments</u>, percentages of student growth are similar for teachers in REM groups.
Earned points x 2 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$sp.\omega^2$ ≥ 0.25	$\dfrac{0.25 - sp.\omega^2}{0.25 - 0.14}$	$sp.\omega^2$ $= 0.14$	$\dfrac{0.14 - sp.\omega^2}{0.14 - 0.06} + 1$	$sp.\omega^2$ $= 0.06$	$\dfrac{0.06 - sp.\omega^2}{0.06 - 0.01} + 2$	$sp.\omega^2$ ≤ 0.01

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[1] Observation and growth should be equal when compared across campuses and assignments. A smaller effect-size indicates small differences, thus a greater level of agreement. A larger effect-size indicates larger differences, thus a smaller level of agreement.

Domain D. Comparison of district designation percentage to statewide performance standards

These checks are intended to confirm that designation rates in each district are aligned with statewide projections of the proportion of designated teachers in each district.

8. *The percentage of students who meet or exceed expected growth* in the district is approximately equal to the statewide performance standards for student growth in each of the teacher-designation levels (REM).
Earned points x 1 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$s \leq 0.55$	$\dfrac{s - 0.55}{0.60 - 0.55}$	$s = 0.60$	$\dfrac{s - 0.60}{0.65 - 0.60} + 1$	$s = 0.65$	$\dfrac{s - 0.65}{0.70 - 0.65} + 2$	$s \geq 0.70$

9. *Observation ratings* in the district are approximately equal to the statewide performance standards for teaching proficiency in each of the REM levels.
Earned points x 1 = weighted score for this check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$s \leq 0.50$	$\dfrac{s - 0.50}{0.60 - 0.50}$	$s = 0.60$	$\dfrac{s - 0.60}{0.70 - 0.60} + 1$	$s = 0.70$	$\dfrac{s - 0.70}{0.80 - 0.70} + 2$	$s \geq 0.80$

Domain E. Supplemental Checks

These checks are intended to provide additional, non-scored evidence to districts about the validity of their local designation system. Check #10 reflects the degree to which designation decisions are comparable among districts with the same Domain 2A ratings. Check #11 shows the variance in district's teacher observation scores as an indicator of the extent to which observers differentiate between more effective and less effective instruction. Checks #12 and #13 indicate the level of agreement between the rankings of teachers within the district on observation/growth and VAM scores. For the current year, these checks are supplemental and are not factored into data validation scores or system validation decisions.

10. The proportion of teachers on district campuses who are designated as *Recognized*, *Exemplary*, or *Master* is roughly equivalent to other campuses with the same Domain 2A rating.
No points assigned for supplemental check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$w \geq 0.70$	$\dfrac{0.70 - w}{0.70 - 0.50}$	$w = 0.50$	$\dfrac{0.50 - w}{0.50 - 0.30} + 1$	$w = 0.30$	$\dfrac{0.30 - w}{0.30 - 0.10} + 2$	$w \leq 0.10$

11. The variability in observation ratings among all eligible teachers is within the range of expected magnitude.
No points assigned for supplemental check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$\sigma \leq 0.06$	$\dfrac{\sigma - 0.06}{0.08 - 0.06}$	$\sigma = 0.08$	$\dfrac{\sigma - 0.08}{0.10 - 0.08} + 1$	$\sigma = 0.10$	$\dfrac{\sigma - 0.10}{0.12 - 0.10} + 2$	$\sigma \geq 0.12$

12. The ranking of teachers based on observation scores closely aligns with their ranking on statewide performance standards for teaching proficiency.
No points assigned for supplemental check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$\rho \leq 0$	$\dfrac{\rho - 0}{0.10 - 0}$	$\rho = 0.10$	$\dfrac{\rho - 0.10}{0.37 - 0.10} + 1$	$\rho = 0.37$	$\dfrac{\rho - 0.37}{0.64 - 0.37} + 2$	$\rho \geq 0.64$

13. The ranking of teachers based on percentages of student growth closely aligns with their ranking on statewide performance standards for teaching proficiency.
No points assigned for supplemental check

0 points	0-1 points	1 point	1-2 points	2 points	2-3 points	3 points
$\rho \leq 0$	$\dfrac{\rho - 0}{0.10 - 0}$	$\rho = 0.10$	$\dfrac{\rho - 0.10}{0.25 - 0.10} + 1$	$\rho = 0.25$	$\dfrac{\rho - 0.25}{0.50 - 0.25} + 2$	$\rho \geq 0.50$

Description of Statistical Analysis Protocols

Check 1. **The correlation coefficient between observation and growth among all eligible teachers is within the range of expected magnitude reported in research literature.**

Pearson product-moment correlation coefficient (*r*) is calculated between the teacher observation and growth scores of all eligible teachers. Pearson's coefficient is a measure of the strength and direction of linear association between two variables, which can be written as:

$$r_{xy} = \frac{\sum_{i=1}^{n}(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^{n}(x_i - \bar{x})^2 \sum_{i=1}^{n}(y_i - \bar{y})^2}},$$

where *n* is the sample size; x_i and y_i are the person *i*'s values on *x* and *y* (e.g., *x* = observation score, *y* = growth score); and $\bar{x}$ and $\bar{y}$ are the sample means of *x* and *y*.

Correlation coefficient has a value between –1 (a perfect negative correlation) and +1 (a perfect positive correlation). A positive correlation indicates a positive relationship while a negative correlation signifies a negative relationship. For example, when teachers with higher observation scores show higher growth scores, the correlation will be positive; in contrast, when teachers with higher observation scores show lower growth scores, the correlation will be negative. Two correlations with the same numerical value have the same strength whether the correlation is positive or negative. A zero correlation indicates no relationship between the variables. The following guidelines are useful when determining the strength of a correlation: ±0.1 (small), ±0.3 (moderate), and ±0.5 (large) (Cohen, 1988, 1992).

Check 2. **District designations of Recognized, Exemplary and Master (REM) teachers are found in similar proportion to designations as determined by the state-wide VAM.**

Kendall rank correlation coefficient (*τ*) is calculated between the designation level that the district has made for their teachers (Master, Exemplary, or Recognized) and the same teachers' designation level that is determined by their value-added (VAM) score (Master, Exemplary, Recognized, or Not Designated). Kendall's coefficient is a measure of the strength and direction of ordinal association between two variables, which can be written as:

$$\tau_{xy} = \frac{n_c - n_d}{\sqrt{(n_0 - n_1)(n_0 - n_2)}},$$

where *n* is the sample size; $n_0 = \frac{n(n-1)}{2}$; $n_1 = \sum_i \frac{t_i(t_i - 1)}{2}$; $n_2 = \sum_j \frac{u_j(u_j - 1)}{2}$; n_c is the number of concordant pairs; n_d is the number of discordant pairs; t_i is the number of tied values in the ith group of ties for the first quantity; and u_j is the number of tied values in the jth group of ties for the second quantity. Any pair of observations (x_i, y_i) and (x_j, y_j), where $i < j$, are said to be concordant if the sort of (x_i, y_i) and (x_j, y_j) agrees—that is, if either both $x_i > x_j$ and $y_i > y_j$ holds or both $x_i < x_j$ and $y_i < y_j$. Otherwise, they are said to be discordant.

For example, the correlation will be +1 (a perfect positive correlation) when the agreement between the district's designation and designations if determined by the state-wide VAM model is perfect (i.e., the two rankings are the same). The correlation will be positive when the two designations are similar. The correlation will be −1 (a perfect negative correlation) when the disagreement between the two designations is perfect (i.e., one ranking is the reverse of the other). When the two designations are independent, then the correlation will be approximately zero.

Check 3. **District designation decisions for Recognized, Exemplary, and Master teachers, in tested subjects, are in proximity to designations as determined by the state-wide VAM.**

For teachers of tested subjects who earned a designation in the district (Master, Exemplary, or Recognized), it is determined whether the district designation is in the same, higher, or lower than the designation if it were determined by the state-wide VAM model. An "accuracy" score ranging from –1.00 to +1.00 is assigned based on

the proximity between the district designation and the designation if it were determined by the state-wide VAM model. The table below shows how values are assigned based on proximity:

	Designations if determined by the statewide VAM			
District designations	*Not Designated*	*Recognized*	*Exemplary*	*Master*
Recognized	0.00	**1.00**	0.75	0.50
Exemplary	–0.25	0.75	**1.00**	0.75
Master	–1.00	0.25	0.75	**1.00**

More points are given when the district designation is closer to the designations if determined by the state-wide VAM model. After a score has been assigned to each teacher, these scores are averaged to produce an overall score for the district.

Check 4. Across campuses, observation scores are similar for teachers in REM groups.

Check 5. Across campuses, percentages of student growth are similar for teachers in REM groups.

Analysis of variance (ANOVA) is performed to compare teachers' observation score (Check 4) or growth score (Check 5) across different campuses. The analysis model includes the main effects of campus and teacher designation (Master, Exemplary, Recognized) as well as their interaction effect. Then, semi-partial omega-squared (ω^2) for the campus effect is calculated. Semi-partial omega-squared is a measure of standardized group difference (effect size)—the proportion of the variance in a dependent variable (e.g., observation or growth score) that is accounted for by the independent variable (e.g., campus), with other effects (terms) in the model parsed out of the independent variable. It can be written as:

$$\text{semi-partial } \omega^2 = \frac{df_{\text{effect}}(MS_{\text{effect}} - MS_{\text{error}})}{df_{\text{effect}}MS_{\text{effect}} + (N - df_{\text{effect}})MS_{\text{error}}},$$

where N is the sample size; df is the degrees of freedom; MS_{effect} is the mean sum of squares for the independent variable; and MS_{error} is the mean sum of squares for the error. (Semi-partial) omega-squared is widely viewed as a lesser biased alternative to (semi-partial) eta-squared, especially when sample sizes are small.

Semi-partial omega-squared can have a value between –1 and +1. The following guidelines are useful when determining the strength of a semi-partial omega-squared: 0.01 (small), 0.06 (moderate), and 0.14 (large) (Cohen, 1988, 1992). A zero or negative value indicates no effect of the independent variable when controlling for the other effects included in the model.

Check 6. Across assignments, observation scores are similar for teachers in REM groups.

Check 7. Across assignments, percentages of student growth are similar for teachers in REM groups.

ANOVA is performed to compare teachers' observation score (Check 6) or growth score (Check 7) across different teaching assignments. Teaching assignment is defined as two or more eligible teacher groups; or defined as tested subjects, non-tested subjects, or both subjects when there is only one eligible teacher group. The analysis model includes the main effects of teaching assignment and teacher designation (Master, Exemplary, or Recognized) as well as their interaction effect. Then, semi-partial omega-squared (ω^2) for the teaching assignment effect is calculated.

Check 8. The percentage of students who meet or exceed expected growth in the district is approximately equal to the statewide performance standards for student growth in each of the teacher-designation levels (REM).

Check 9. Observation ratings in the district are approximately equal to the statewide performance standards for teaching proficiency in each of the REM levels.

For teachers who earned a designation in the district (Master, Exemplary, or Recognized), it is determined how close their growth score (Check 8) or observation score (Check 9) is to the published cut-point that corresponds to their

designation category. A closeness score based on the proximity of the growth score or observation score to the corresponding performance standard at each designation level is established on a 0-100% scale. The score value is calculated using an exponential equation that assigns a score based on the proximity of each teacher's score to the corresponding performance standard. More points are given when the score is closer to the performance standard. After a score has been assigned to each teacher, these scores are averaged. The state published cut-points used are shown below:

Growth standard group	% of students meeting or exceeding growth targets
Recognized	55%
Exemplary	60%
Master	70%

Observation standard group	Based on T-TESS	Based on another rubric
Recognized	3.7	74% of points
Exemplary	3.9	78% of points
Master	4.5	90% of points

The exponential equations used are shown below:

In Check 8
For Master teachers,

$$s_i = f(x_i) + g(x_i)\left(\frac{x_i - 0.5}{0.7 - 0.5}\right)^2,$$

$$f(x_i) = \begin{cases} 1 & 0.7 \le x_i \\ 0 & \text{otherwise} \end{cases}, g(x_i) = \begin{cases} 1 & 0.5 \le x_i < 0.7 \\ 0 & \text{otherwise} \end{cases};$$

For Exemplary teachers,

$$s_i = f(x_i)\left(\frac{x_i - 0.5}{0.6 - 0.5}\right)^2 + g(x_i) + h(x_i)\left(1 - \frac{x_i - 0.7}{1 - 0.7}\right)^2,$$

$$f(x_i) = \begin{cases} 1 & 0.5 \le x_i < 0.6 \\ 0 & \text{otherwise} \end{cases}, g(x_i) = \begin{cases} 1 & 0.6 \le x_i < 0.7 \\ 0 & \text{otherwise} \end{cases}, h(x_i) = \begin{cases} 1 & 0.7 \le x_i \\ 0 & \text{otherwise} \end{cases};$$

For Recognized teachers,

$$s_i = f(x_i)\left(\frac{x_i - 0.5}{0.55 - 0.5}\right)^2 + g(x_i) + h(x_i)\left(1 - \frac{x_i - 0.6}{1 - 0.6}\right)^2,$$

$$f(x_i) = \begin{cases} 1 & 0.5 \le x_i < 0.55 \\ 0 & \text{otherwise} \end{cases}, g(x_i) = \begin{cases} 1 & 0.55 \le x_i < 0.6 \\ 0 & \text{otherwise} \end{cases}, h(x_i) = \begin{cases} 1 & 0.6 \le x_i \\ 0 & \text{otherwise} \end{cases};$$

where s_i and x_i are the person i's values on closeness score and growth score, respectively.

In Check 9
For Master teachers,

$$s_i = f(x_i) + g(x_i)\left(\frac{x_i - 0.7}{0.9 - 0.7}\right)^2,$$

$$f(x_i) = \begin{cases} 1 & 0.9 \le x_i \\ 0 & \text{otherwise} \end{cases}, g(x_i) = \begin{cases} 1 & 0.7 \le x_i < 0.9 \\ 0 & \text{otherwise} \end{cases};$$

For Exemplary teachers,

$$s_i = f(x_i)\left(\frac{x_i - 0.7}{0.78 - 0.7}\right)^2 + g(x_i) + h(x_i)\left(1 - \frac{x_i - 0.9}{1 - 0.9}\right)^2,$$

$$f(x_i) = \begin{cases} 1 & 0.7 \le x_i < 0.78 \\ 0 & \text{otherwise} \end{cases}, g(x_i) = \begin{cases} 1 & 0.78 \le x_i < 0.9 \\ 0 & \text{otherwise} \end{cases}, h(x_i) = \begin{cases} 1 & 0.9 \le x_i \\ 0 & \text{otherwise} \end{cases};$$

For Recognized teachers,

$$s_i = f(x_i)\left(\frac{x_i - 0.7}{0.74 - 0.7}\right)^2 + g(x_i) + h(x_i)\left(1 - \frac{x_i - 0.78}{1 - 0.78}\right)^2,$$

$$f(x_i) = \begin{cases} 1 & 0.7 \le x_i < 0.74 \\ 0 & \text{otherwise} \end{cases}, g(x_i) = \begin{cases} 1 & 0.74 \le x_i < 0.78 \\ 0 & \text{otherwise} \end{cases}, h(x_i) = \begin{cases} 1 & 0.78 \le x_i \\ 0 & \text{otherwise} \end{cases};$$

where s_i and x_i are the person i's values on closeness score and observation score, respectively.

Check 10.** **The proportion of teachers on district campuses who are designated as Recognized, Exemplary, or Master is roughly equivalent to other campuses in the same Domain 2A rating.

The campus cumulative percentage of (1) Master designation, (2) Exemplary or higher designations, or (3) Recognized or higher designations are each compared to a State average of campuses within each of the Domain 2A categories. In other words, the district and state percentages are obtained for teachers within Domain 2A A-rated campuses, Domain 2A B-rated campus, etc. Then, Cohen's *w* is calculated from each possible comparison in the Domain 2A categories, and a mean value is calculated over the (1), (2), and (3) designation levels.

Cohen's *w* is a measure of association between two nominal variables. With a binary outcome (e.g., designated vs. not designated), it can be written as follows with directionality considered:

$$w = \text{sign}(p_1 - p_0)\sqrt{\frac{(p_1 - p_0)^2}{p_0} + \frac{(p_1 - p_0)^2}{(1 - p_0)}},$$

where p_1 is the district percentage and p_0 is the statewide expected percentage. The value will be 0 when the district percentage is equal to the statewide percentage for a Domain 2A category. In contrast, the value will be positive when the district percentage is larger than the statewide percentage; or it will be set to zero when the district percentage is smaller than the statewide percentage.

Check 11.** **The variability in observation ratings among all eligible teachers is within the range of expected magnitude.

Standard deviation (σ) is calculated for the (max-scaled) observation score of all eligible teachers. Standard deviation is a measure of variation or dispersion of a variable, which can be written as:

$$\sigma = \sqrt{\frac{\sum_{i=1}^{n}(x_i - \bar{x})^2}{n}},$$

where *n* is the sample size; x_i is the person i's values on x (e.g., observation score); and $\bar{x}$ is the sample mean of x. A low standard deviation indicates that teachers' observation scores are close to each other and to the mean, while a high standard deviation indicates that scores are spread out over a wider range.

Check 12.** **The ranking of teachers based on observation scores closely aligns with their ranking on statewide performance standards for teaching proficiency.

Check 13.** **The ranking of teachers based on percentages of student growth closely aligns with their ranking on statewide performance standards for teaching proficiency.

Spearman rank correlation coefficient (ρ) is calculated between observation scores (Check 12) or growth scores (Check 13) and VAM scores among teachers of tested subjects. Spearman's coefficient is a measure of the strength and direction of monotonic association between the rankings on two variables, which can be written as:

$$\rho_{xy} = \frac{\sum_{i=1}^{n}(Rx_i - R\bar{x})(Ry_i - R\bar{y})}{\sqrt{\sum_{i=1}^{n}(Rx_i - R\bar{x})^2 \sum_{i=1}^{n}(Ry_i - R\bar{y})^2}},$$

where n is the sample size; Rx_i and Ry_i are the person i's ranks on x and y (e.g., x = observation or growth score, y = VAM score); and $R\bar{x}$ and $R\bar{y}$ are the sample means of Rx and Ry.

For example, the correlation will be +1 (a perfect positive correlation) when there is a perfect agreement between the rankings of teachers within the district on the observation and VAM scores (i.e., the two rankings are identical). The correlation will be positive when the two rankings are similar. The correlation will be −1 (a perfect negative correlation) when there is a perfect disagreement between the two rankings (i.e., one ranking is the exact opposite of the other). When the two rankings are independent, then the correlation will be close to zero.
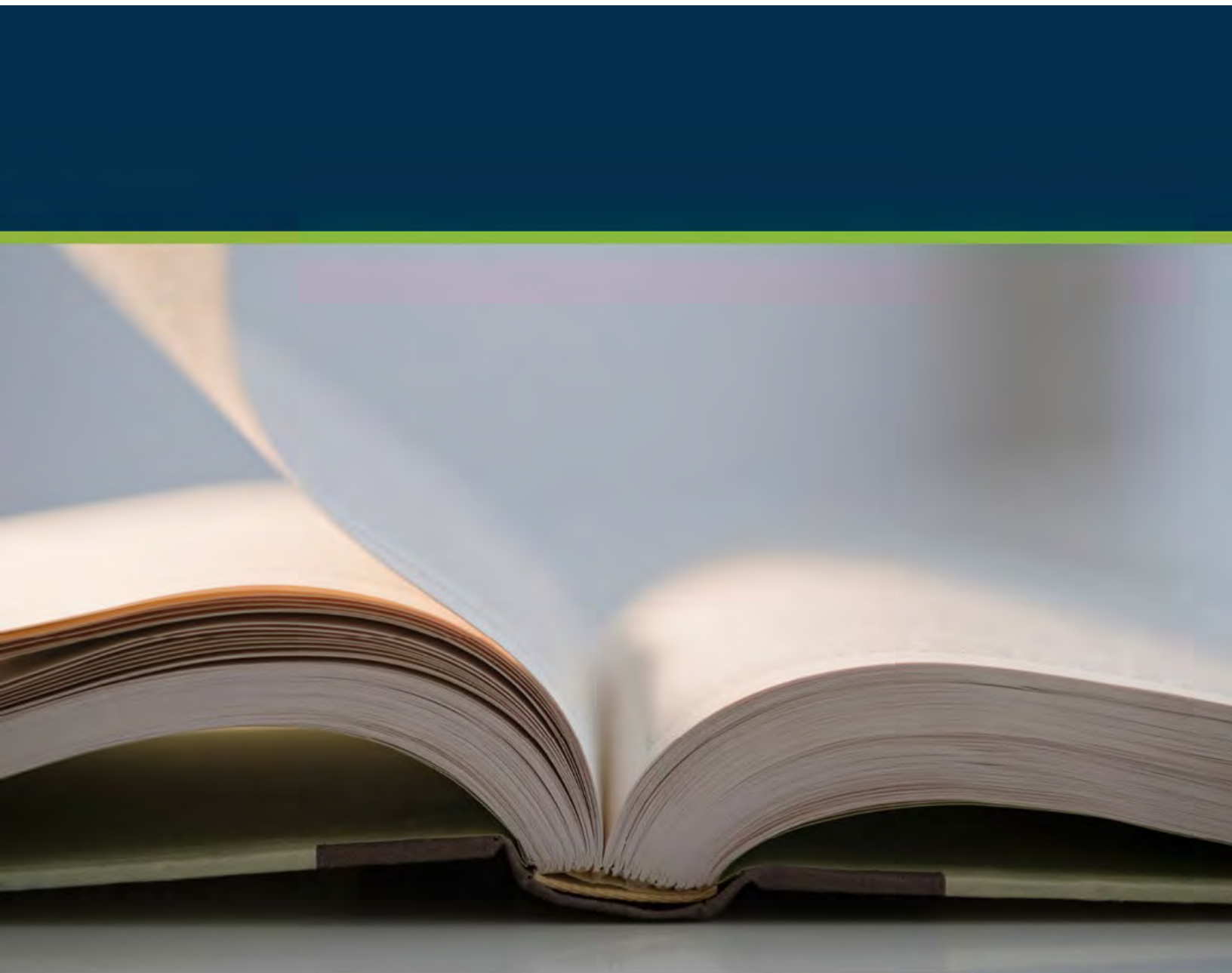
Data Validation Report Table

Domain	Check	Possible Points	Results	Score	Weight	Score × Weight
A. Correlation between teacher observation ratings and student growth ratings	C1	0-3	$r =$		$\times\, 10$	
B. Relationship between teacher designations and VAM	C2	0-3	$\tau =$		$\times\, 7$	
	C3	0-3	$s =$		$\times\, 3$	
C. Degree of reliability for observation and growth judgements	C4	0-3	sp. $\omega^2 =$		$\times\, 3$	
	C5	0-3	sp. $\omega^2 =$		$\times\, 2$	
	C6	0-3	sp. $\omega^2 =$		$\times\, 3$	
	C7	0-3	sp. $\omega^2 =$		$\times\, 2$	
D. Comparison of district designation percentage to statewide performance standards	C8	0-3	$s =$ %		$\times\, 1$	
	C9	0-3	$s =$ %		$\times\, 1$	
E. Supplemental checks	C10	0-3	$w =$		$\times\, 0$	–
	C11	0-3	$\sigma =$		$\times\, 0$	–
	C12	0-3	$\rho =$		$\times\, 0$	–
	C13	0-3	$\rho =$		$\times\, 0$	–
					Total	/

Appendix C: VAM Documentation

SAS® EVAAS

Statistical Models and Business Rules

Prepared for Texas Tech University and the Texas Education Agency

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THE POWER TO KNOW®

Contents

1   Introduction

1.1   Background and Purpose

In June 2019, the Texas Legislature passed House Bill 3, which established the Teacher Incentive Allotment (TIA). This new initiative aims, in part, to recruit and retain excellent teachers, and for participating Local Education Agencies (LEAs) to develop their own designation system in support of these goals. The legislation requires that LEAs submit their systems to the Texas Education Agency (TEA) for review and approval of the required components.

This document focuses on one required component of the local designation system: student growth measures. As part of the system review by Texas Tech University (TTU) and TEA, local student growth models can be compared to statewide models to verify their validity and relative accuracy. This document outlines the statewide statistical growth models that will be used as part of the comparison: two predictive value-added models. The document includes a technical description of the models, an explanation of expected growth within the models, and how model outputs can be used to classify teachers in accordance with TIA. These sections are followed by details outlining the data used and business rules.

The goal of this document is to provide clarity into the statewide student growth models that are compared to data submitted from local designation systems.

2 Predictive Model

2.1 Overview

The predictive model is a regression-based value-added model where growth is a function of the difference between students' expected scores and their actual scores. Expected growth is met when students with a district, school, or teacher made the same amount of growth as with the average district, school, or teacher.

In more technical terms, the predictive model used here is sometimes known as the univariate response model (URM), a linear mixed model, and, more specifically, an analysis of covariance (ANCOVA) model.

Conceptually, growth in the predictive model is simply the difference between students' entering and exiting achievement. If students score where they were expected to score, then the growth measure will be zero (or close to zero). Zero represents "expected growth." Positive growth measures are evidence that students made more than the expected growth, and negative growth measures are evidence that students made less than the expected growth.

For the analysis using 2022-23 STAAR data, two versions of the predicted model will be used. One, described in this document as the unadjusted model, uses student testing data. This model has been used for the past several years. Another, described in this document as the adjusted model, is a new model beginning with the 2022-23 analysis that controls for additional student-level and group-level factors in addition to considering students' prior testing history.

The model defines expected growth based on the empirical student testing data; in other words, the model does not assume a particular amount of growth or assign expected growth in advance of the assessment being taken by students. The predictive model defines expected growth within each year.

More specifically, expected growth means that a teacher's students made the same amount of growth as students with the average teacher in the state for that same year, subject, and grade when considering students' prior testing history and, in the case of the adjusted model, additional student-level and group-level factors. Growth measures tend to be centered on expected growth every year with approximately half of the teacher estimates above zero and approximately half of teacher estimates below zero.

2.2 Technical Description

In the predictive model, each student receives an expected score based on their own prior testing history. In practical terms, the expected score represents the student's entering achievement because it is based on all prior testing information to date.

The expected scores can be aggregated to a specific teacher and then compared to the students' actual scores. In other words, the growth measure is a function of the difference between the average exiting score (or actual scores) and the average entering score (or expected score) for a group of students. The expected scores are reported in the scaling units of the test.

The approach is described briefly below with more details following.

- The predicted score serves as the response variable (y, the dependent variable).
- The covariates (x terms, predictor variables, explanatory variables, independent variables) are scores on tests the student has already taken.

- The categorical variables (α terms, class variable, factor) are the teachers from whom the student received instruction in the subject, grade, and year of the response variable (y).

Algebraically, the model can be represented as follows for the ith student when there is no team teaching.

$$y_i = \mu_y + \alpha_j + \beta_1(x_{i1} - \mu_1) + \beta_2(x_{i2} - \mu_2) + \cdots + \epsilon_i \tag{1}$$

In the case of team teaching, the single α_j is replaced by multiple α terms, each multiplied by an appropriate weight. The μ terms are means for the response and the predictor variables. α_j is the teacher effect for the jth teacher—the teacher who claimed responsibility for the ith student. The β terms are regression coefficients. Predictions to the response variable are made by using this equation with estimates for the unknown parameters (μ terms, β terms, and sometimes α_j). The parameter estimates (denoted with "hats," e.g., $\hat{\mu}$, $\hat{\beta}$) are obtained using all students that have an actual value for the specific response and have three predictor scores. The resulting prediction equation for the ith student is as follows:

$$\hat{y}_i = \hat{\mu}_y + \hat{\beta}_1(x_{i1} - \hat{\mu}_1) + \hat{\beta}_2(x_{i2} - \hat{\mu}_2) + \cdots \tag{2}$$

Two difficulties must be addressed in order to implement the predictive model. First, not all students will have the same set of predictor variables due to missing test scores. Second, the estimated parameters are pooled-within teacher. The strategy for dealing with missing predictors is to estimate the joint covariance matrix (call it C) of the response and the predictors. Let C be partitioned into response (y) and predictor (x) partitions, that is,

$$C = \begin{bmatrix} C_{yy} & C_{yx} \\ C_{xy} & C_{xx} \end{bmatrix} \tag{3}$$

This matrix is estimated using the Expectation Maximization algorithm for estimating covariance matrices in the presence of missing data provided by the Multiple Imputation procedure in SAS/STAT® (although no imputation is actually used). Only students who had a test score for the response variable in the most recent year and who had the required number of variables are included in the estimation. Given such a matrix, the vector of estimated regression coefficients for the projection equation (2) can be obtained as:

$$\hat{\beta} = C_{xx}^{-1}c_{xy} \tag{4}$$

This allows the use of whichever predictors a student has to get that student's expected y-value ($\hat{y}_i$). Specifically, the C_{xx} matrix used to obtain the regression coefficients *for a particular student* is a subset of the overall C matrix that corresponds to the set of predictors for which this student has scores.

The prediction equation also requires estimated mean scores for the response and for each predictor (the $\hat{\mu}$ terms in the prediction equation). These are not simply the grand mean scores. It can be shown that in an ANCOVA if we impose the restriction that the estimated teacher effects should sum to zero (that is, the teacher effect for the "average teacher" is zero), then the appropriate means are the means of the teacher means. The teacher means are obtained from the EM algorithm mentioned above, which accounts for missing data. The overall means ($\hat{\mu}$ terms) are then obtained as the simple average of the teacher means.

Once the parameter estimates for the prediction equation have been obtained, predictions can be made for any student with any set of predictor values, so long as that student has a minimum of three prior test scores.

$$\hat{y}_i = \hat{\mu}_y + \hat{\beta}_1(x_{i1} - \hat{\mu}_1) + \hat{\beta}_2(x_{i2} - \hat{\mu}_2) + \cdots \tag{5}$$

The $\hat{y}_i$ term is nothing more than a composite of all the student's past scores. It is a one-number summary of the student's level of achievement prior to the current year, and this is sometimes referred to as the expected score or entering score. The different prior test scores making up this composite are given different weights (by the regression coefficients, the $\hat{\beta}$ terms) in order to maximize its correlation with the response variable. Thus, a different composite would be used when the response variable is Math than when it is Reading, for example. Note that the $\hat{\alpha}_j$ term is not included in the equation. Again, this is because $\hat{y}_i$ represents prior achievement before the effect of the current district, school, or teacher.

The second step in the predictive model is to estimate the teacher effects (α_j) using an ANCOVA model. While all previous steps are the same for the unadjusted model and the adjusted model, this is the step where the two models differ. Equation 6 describes this step for the unadjusted model and equation 7 describes this step for the adjusted model.

$$y_i = \gamma_0 + \gamma_1 \hat{y}_i + \alpha_j + \epsilon_i \tag{6}$$

In the unadjusted model, the effects (α_j) are considered random effects. Consequently, the $\hat{\alpha}_j$ terms are obtained by shrinkage estimation (empirical Bayes).[1] The regression coefficients for the ANCOVA model are given by the γ terms.

$$y_i = \gamma_0 + \gamma_1 \hat{y}_i + \gamma_2 + \gamma_3 x_s + \sum_{t=1}^{5} \gamma_{4.t} w_{i.t} + \gamma_5 \overline{w}_s + \alpha_j + \epsilon_i \tag{7}$$

The adjusted model is similar to what is described in equation 6 for the unadjusted model. However, it also includes additional terms for students' census tier, school rurality, average school census tier, and the teacher-level average expected score. $\overline{\hat{y}}_j$ is the teacher-level mean of $\hat{y}_i$, which represents average entering achievement. x_s represents school-level rurality, with a value of 1 for schools identified as rural and 0 for schools not identified as rural. $w_{i.t}$ is an indicator of student census tier with t taking on values of 1, 2, 3, 4, or 5 with t=0 as a reference category. $\overline{w}_s$ is the school mean of the student-level census tier values.

Note that prior test scores used in these models do not need to be on the same scale as the assessment being predicted. Just as height (reported in inches) and weight (reported in pounds) can predict a child's age (reported in years), the predictive model can use test scores from different scales to find the predictive relationship.

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[1] For more information about shrinkage estimation, see, for example, Ramon C. Littell, George A. Milliken, Walter W. Stroup, Russell D. Wolfinger, and Oliver Schabenberger, *SAS for Mixed Models, Second Edition* (Cary, NC: SAS Institute Inc., 2006). Another example is Charles E. McCulloch, Shayle R. Searle, and John M. Neuhaus, *Generalized, Linear, and Mixed Models, Second Edition* (Hoboken, NJ: John Wiley & Sons, 2008).

2.3 Model Outputs

2.3.1 Grades and Subjects

Based on the data received and described in Section 3.1, the predictive model provides student growth measures for teachers in the following assessed areas using both the unadjusted and adjusted models:

- Mathematics, grades 4–8
- Reading Language Arts (RLA), grades 4–8
- Science, grades 5 and 8
- Social Studies, grade 8
- Algebra I
- Biology
- English I
- English II
- US History

These measures can, in turn, be used and interpreted in different ways to assess the significance of growth made by students taught by a specific teacher. The output used to support TIA is the percentage of students meeting or exceeding expectations, which is described in more detail in Section 2.3.2. In addition to providing this metric in each individual subject/grade or course, an overall measure is created that spans across all subjects, grades, and course taught by a teacher each year.

2.3.2 Percentage of Students Meeting or Exceeding Expectations

As described in Section 2.2, the predictive model produces an expected scale score ($\hat{y}$) for each student included in the model. For the purposes of TIA, all available expected student scale scores a given school year are compared to students' actual scale scores to determine which students met or exceeded the expected scale score. These are then aggregated to the teacher level across all available grades and subjects for the teacher to generate a single value using the following equation:

$$\frac{\text{Number of student scale scores greater than or equal to expected scale scores}}{\text{Number of student scale scores}} \tag{8}$$

For example, if a teacher had 60 student scale scores included in the model across grades and subjects and 48 met or exceeded the expected scale score, then the calculation of this metric would be:

$$\frac{48}{60} = .80 = 80\% \text{ of students met or exceeded expectations} \tag{9}$$

To create an overall measure, all students are used in each subject and grade or course connected to a teacher, and an overall percentage of students that have scored greater than or equal to their expected score is calculated.

The overall measure including all available subjects and grades or courses is used to support the data validation checks performed by TTU on data submitted by districts. For use in the applicable data validation checks, the overall measures for teachers are assigned an overall category using performance standards determined by TEA. Teachers with percentages below 55 are categorized as "Not Designated," teachers with percentages of 55 or greater and less than 60 are categorized as "Recognized," teachers with percentages of 60 or greater and less than 70 are categorized as "Exemplary," and teachers with percentages of 70 or greater are categorized as "Master" for the purposes of the relevant data validation checks.

3   Data Received and Data Processing Business Rules

3.1   Data Received

TEA provides STAAR EOG Reading (through 2021-22)/Reading Language Arts (2022-23 forward) and Math data for grades 3–8, STAAR EOG Science data for grades 5 and 8, STAAR EOG Social Studies data for grade 8, STAAR Writing data for grades 4 and 7 (through 2021-22), and EOC assessment data (English I/II, Algebra I, Biology, US History) from the 2012-13 school year to present. TEA also provides teacher-student linkages for the purpose of connecting students to teachers in the modeling.

In addition to assessment score results and student teacher linkages, TEA provides additional student and campus level characteristics for use in the adjusted model. These include:

- Student Economic Disadvantaged Code
- Student Census Tier
- Campus Rurality Indicator

3.2   Entity Resolution

SAS connects students across multiple years of data received from TEA using student identification variables. These variables are last name, first name, birth date, Unique ID, and local Student ID.

3.3   Data Processing Business Rules

3.3.1 Course to Assessment Mapping of Linkages

Teacher-student linkages are connected to specific assessments based on a course to subject mapping approved by TEA.

3.3.2 Dropping Unused Linkages

Teacher-student linkages that are not successfully mapped to an assessed subject are not retained.

3.3.3 Exclusion of STAAR Version T Records

STAAR version T assessment records are excluded.

3.3.4 Exclusion of Non-Scorable Assessment Records

Non-scorable assessment results are excluded.

3.3.5 Exclusion of Retest Assessment Records

EOC retest assessments records are excluded. More specifically, records marked as retests are removed, and then any remaining records that are not the first record for that student for that EOC subject are also removed. For any student with multiple test records on a STAAR grade level assessment within a school year, only the record with the earliest test date is used.

3.3.6 Exclusion of June and July Records

The small number of records from assessments administered in June and July are not currently included in the data provided to SAS. As a result, these records are excluded from the analysis.

3.3.7 Exclusion of Raw Scores of 0

Records with raw scores of 0 are excluded.

3.3.8 Adjustment of Grade 3–5 Spanish STAAR RLA and Mathematics Records

Spanish assessment scores are adjusted using Deming regression such that the gains of students transitioning from Spanish-to-English are equivalent to students transitioning from English-to-English. This adjustment is applied for each combination of subject, grade, year, test language, and scale score if needed.

3.3.9 Minimum Number of Prior Assessment Scores

For most grades or subjects, three prior assessment scores are required for a student to be included in the predictive model. The only exceptions are assessments in grade 4, which require only two prior assessment scores. Note that the required scores do not necessarily need to include a score from the prior year in the same subject area, as the model can use the available prior scores and accommodate missing data.

3.3.10 Outlier Detection

Student assessment scores are checked to determine whether they are outliers in context with all other scores in a reference group of scores from the individual student. These reference scores are weighted differently depending on proximity in time to the score in question. Scores are checked for outliers using related subjects as the reference group. For example, when searching for outliers for Math test scores, all Math subjects are examined simultaneously. Any scores that appear inconsistent, given the other scores for the student, are flagged. Scores are flagged in a conservative way to avoid excluding any student scores that should not be excluded. Scores can be flagged as either high or low outliers. Once an outlier is discovered that outlier will not be used in the analysis.

This process is part of a data quality procedure to ensure that no scores are used if they were in fact errors in the data, and the approach for flagging a student score as an outlier is fairly conservative.

Considerations included in outlier detection are:

- Is the score in the tails of the distribution of scores? Is the score very high or low achieving?
- Is the score "significantly different" from the other scores, as indicated by a statistical analysis that compares each score to the other scores?
- Is the score also "practically different" from the other scores? Statistical significance can sometimes be associated with numerical differences that are too small to be meaningful.
- Are there enough scores to make a meaningful decision?

To decide whether student scores are considered outliers, all student scores are first converted into a standardized normal z-score. Then each individual score is compared to the weighted combination of all the reference scores described above. The difference between these two scores provides a t-value of each comparison. Using this t-value, SAS can flag individual scores as outliers.

There are different business rules for the low outliers and the high outliers, and this approach is more conservative when identifying high outliers.

For low-end outliers, the rules are:

- The percentile of the score must be below 50.
- The t-value must be below -3.5 when looking at the difference between the score in question and the reference group of scores within the same subject and/or below -4.0 when comparing to the reference group of scores across all subjects.

- The percentile of the comparison score must be above a certain value. This value depends on the position of the individual score in question but will range from 10 to 90 with the ranges of the individual percentile score.

For high-end outliers, the rules are:

- The percentile of the score must be above 50.
- The t-value must be above 4.0 when comparing to the reference group of scores within the same subject and/or above 5.0 when comparing to the reference group of scores across all subjects.
- The percentile of the comparison score must be below a certain value.
- There must be at least three scores in the comparison score average.

3.3.11 Minimum Number of Students for Teacher Growth Data

In order to generate a teacher growth measure for the predictive model in a given grade/subject/year, the teacher must have at least five full-time equivalent (FTE) students included in the model. The teacher's number of FTE students is based on the number of students linked to that teacher and the percentage of instructional time the teacher has for each student. For example, if a teacher taught 10 students for 50% of their instructional time, then the teacher's FTE number of students would be five, and they would meet the minimum for receiving a teacher growth measure.

3.3.12 Student Census Tier[2]

If the Student Economic Disadvantaged Code is missing or zero, then the Student Census Tier is set to zero. If Student Census Tier is missing, then the variable is set to zero.

3.3.13 Average School Census Tier[3]

The average school census tier used in the analysis includes only students in the analysis that are connected to a teacher with at least five FTE students.

3.3.14 Campus Rurality Indicator[4]

If a yes or no flag about the rurality of a campus is not received the value for that campus is set to no.

3.3.15 Teacher-Level Average Expected Score[5]

The teacher-level average expected score is calculated only for teachers with at least five FTE students and is weighted by instructional responsibility.
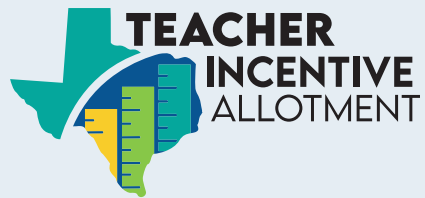
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[2] This data element only pertains to the adjusted model.

[3] This data element only pertains to the adjusted model.

[4] This data element only pertains to the adjusted model.

[5] This data element only pertains to the adjusted model.