

# Discover Bluebonnet On The Clear Learning Center

Grade 6–Algebra I

Rooted in our proven expertise, **Bluebonnet Learning Math** transforms math instruction with Texas SBOE-approved, research-based materials, refined through years of teacher feedback. The comprehensive Bluebonnet Learning Math solution, **only available through Carnegie Learning**, allows you to maximize all available funding and achieve greater success.

CARNEGIE LEARNING



## 100% TEKS and ELPS Alignment

Deepen math understanding with our 100% TEKS- and ELPS-aligned resources—delivering real-time insights that empower teachers and administrators. Each course seamlessly integrates the Problem-Solving Model to reinforce the Mathematical Process Standards every step of the way.

### 1 Writing Equivalent Expressions Using the Distributive Property

#### LESSON OVERVIEW

Students divide area models in different ways to see that the sum of the areas of the smaller regions equals the area of the whole model. They then rewrite the product of two factors as a factor times the sum of two or more terms, leading to the formalization of the distributive property.

#### GRADE 6 TEKS

##### Mathematical Process Standards

(2) The student uses mathematical processes to acquire and demonstrate mathematical understanding.

The student is expected to:

6.1A apply mathematics to problems arising in everyday life, science, and the workplace.

6.1B select tools, including real objects, manipulatives, paper and pencil, and technology, as appropriate, and techniques, including mental math, estimation, and number sense, as appropriate, to solve problems.

6.1C communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language.

6.1D use a variety of representations to model and solve problems.

6.1E determine solutions to problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms when dimensions are positive rational numbers.

6.1F use the distributive property to solve problems involving the distributive property.

6.1G use the distributive property to solve problems involving the distributive property.

6.1H use the distributive property to solve problems involving the distributive property.

6.1I use the distributive property to solve problems involving the distributive property.

6.1J use the distributive property to solve problems involving the distributive property.

6.1K use the distributive property to solve problems involving the distributive property.

6.1L use the distributive property to solve problems involving the distributive property.

6.1M use the distributive property to solve problems involving the distributive property.

6.1N use the distributive property to solve problems involving the distributive property.

6.1O use the distributive property to solve problems involving the distributive property.

6.1P use the distributive property to solve problems involving the distributive property.

#### MATERIALS

None

### Expressions, Equations, and Relationships

(7) The student applies mathematical process standards to develop concepts of expressions and equations.

The student is expected to:



6.7D generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties.

**TEKS-aligned content** that allows students to progressively build mastery over the course of a year.

### The Problem-Solving Model Graphic Organizer

<b>Understand the Problem</b>	<b>Devise a Plan</b>
<b>Carry Out the Plan</b>	
<b>Look Back</b>	
<b>Report</b>	

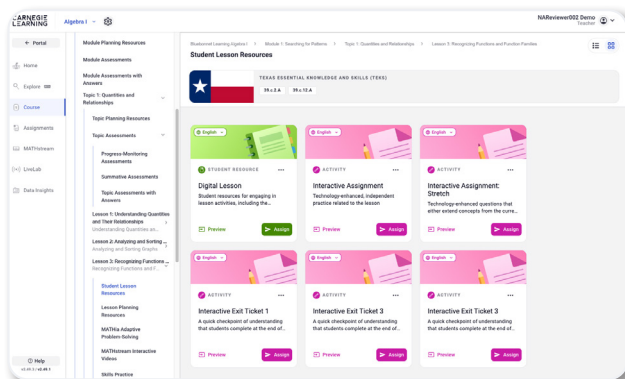
Students use the **Problem-Solving Model** throughout the course.

# Engage Students and Empower Teachers with the Clear Learning Center (CLC)



## Carnegie Learning Exclusive

The CLC offers a fully streamlined platform that simplifies instruction for grades 6 through Algebra II, including Accelerated 6th and Accelerated 7th grade courses. By consolidating tools, resources, and insights into one system, the CLC reduces complexity and ensures teachers can focus on what matters most—student success.

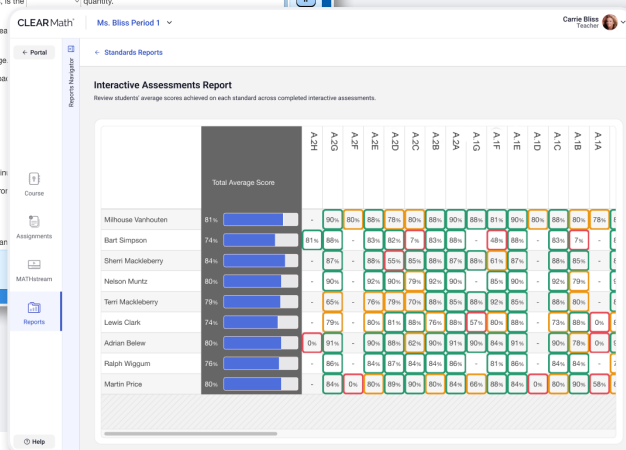
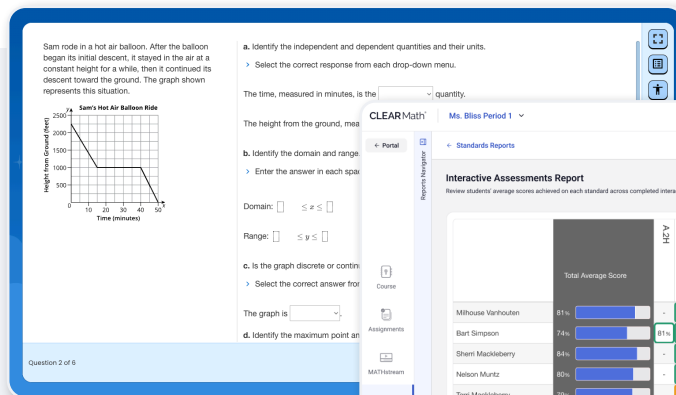


## Unified Platform for Secondary Math

Eliminate the need for multiple systems with a single, seamless platform covering all courses grades 6–Algebra II.

## Data-Informed Decision-Making

Feedback from interactive assignments, assessments, exit tickets, and interactive skills practice, along with TEKS-aligned reports provide real-time insights to inform instruction and track progress.



## Activity 4

### Linear Piecewise Functions

> Analyze the two functions shown. These functions represent the last two graphs of functions from the no absolute minimum or no absolute maximum category.

$$f(x) = \begin{cases} -2, & x < 0 \\ \frac{1}{2}x - 2, & x \geq 0 \end{cases}$$

**HABITS OF MIND**

- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

CARNEGIE LEARNING MODULE 1 Searching for Patterns Answer

**GETTING STARTED**

**SUMMARY** You can identify graphical characteristics from numberless graphs.

**Chunking the Activity**

- Read and discuss the directions
- Group students to complete the activity
- Share and summarize

**Student Look-Fors**

Whether students are demonstrating self-awareness:

- Showing a sense of confidence and optimism as they approach the problem
- Accurately perceiving their

## Embedded Digital Tools

Increase engagement with Lesson Slides and Desmos capabilities that can help students deepen their understanding and make meaningful connections.



## Carnegie Learning Exclusive

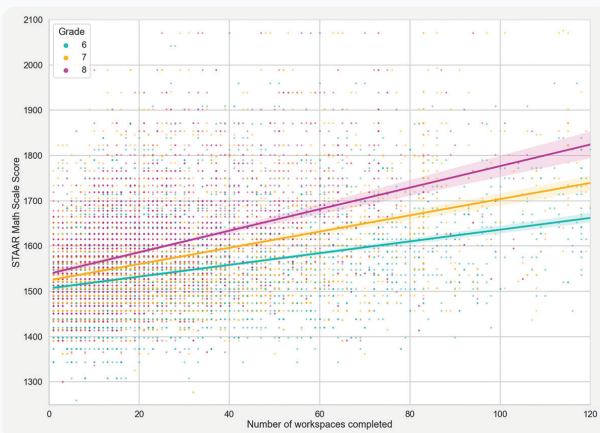
MATHia is proven to elevate student achievement in Texas with TEKS-mapped content aligned to the essential knowledge and skills assessed on the STAAR. Item types modeled after the STAAR redesign empower every student to feel confident at test time.

# MATHia: Your STAAR Strategy

## The best formative assessment tool for STAAR success

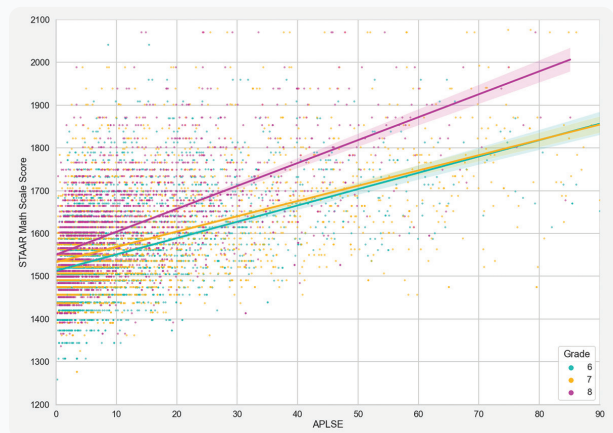
The Adaptive Personalized Learning Score (APLSE) report in MATHia is like your STAAR crystal ball. It can accurately predict a student's proficiency level on the end-of-year exam. The secret? Consistent, regular practice in MATHia drives the most accurate APLSE score.

On average, a student who completed ten additional workspaces saw a STAAR scale score **increase of 13–25 points**.



Data shows a strong correlation between the number of workspaces completed and the student's STAAR scale score.

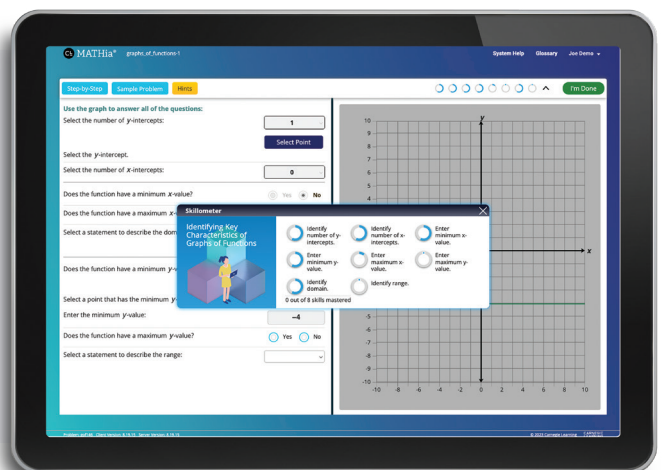
When a student raised their APLSE score by 10%, there was an **increase of 38–54 points** on the STAAR test!



Data shows a strong correlation between STAAR performance and the APLSE metric.

“The kids blew our expectations out of the water! They ALL passed the Algebra I STAAR in December. One hundred percent of the students in the first-semester pilot group passed the Algebra I STAAR on their first try.”

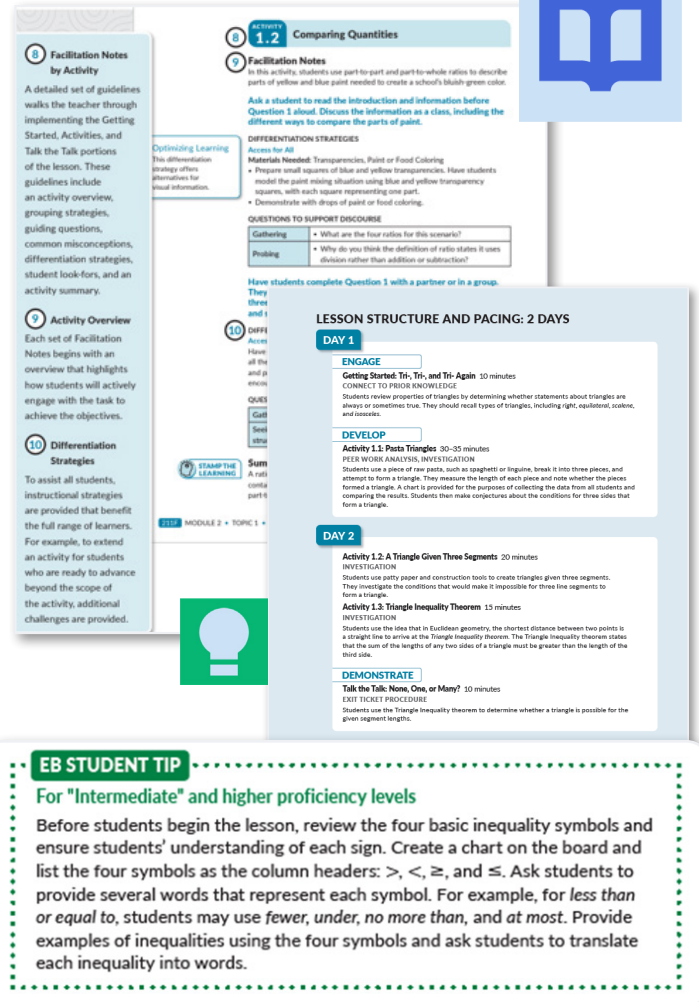
- Jennifer Everson, Algebra I Teacher, Aldine ISD



# Support ALL Students

Facilitation Notes in the Teacher Implementation Guide make teaching easier and support every student more effectively.

- **Questions to Support Discourse** include labels indicating the question type category.
- **Differentiation Strategies** offer Challenge Opportunities, Access for All, or Just in Time Support, plus a list of materials needed for implementation.
- Every lesson includes leveled **EB Student Tips**.
- Additional support includes **Chunking the Lesson, Student Look-Fors**, connections to **Skills Practice, Modeling Moments**, and suggestions for **Optimizing Learning**.
- **Standards Overview**: Highlights TEKS coverage in each module in each lesson and Skills Practice.
- **Stamp the Learning**: Guidance for explicit and direct instruction opportunities for key lesson concepts.
- A streamlined layout makes lesson planning simple, with updated guidance for chunking the lesson, pacing timestamps, and point-of-use answer keys.



**Facilitation Notes by Activity**

A detailed set of guidelines walks the teacher through implementing the Getting Started, Activities, and Talk portions of the lesson. These guidelines include an activity overview, grouping strategies, guiding questions, common misconceptions, differentiation strategies, student look-fors, and an activity summary.

**Activity Overview**

Each set of Facilitation Notes begins with an overview that highlights how students will actively engage with the task to achieve the objectives.

**Differentiation Strategies**

To assist all students, instructional strategies are provided that benefit the full range of learners. For example, to extend an activity for students who are ready to advance beyond the scope of the activity, additional challenges are provided.

**Questions to Support Discourse**

**Lesson Structure and Pacing: 2 Days**

**DAY 1**

**ENGAGE**

**Getting Started: Tri, Tri, and Tri-Again** 10 minutes

**CONNECT TO PRIOR KNOWLEDGE**

Students review properties of triangles by determining whether statements about triangles are always or sometimes true. They should recall types of triangles, including right, equilateral, scalene, and isosceles.

**DEVELOP**

**Activity 1.1: Pasta Triangles** 30-35 minutes

**PEER WORK ANALYSIS, INVESTIGATION**

Students use a piece of raw pasta, such as spaghetti or linguine, break it into three pieces, and attempt to form a triangle. They measure the length of each piece and note whether the pieces formed a triangle. A chart is provided for the purposes of collecting the data from all students and comparing the results. Students then make conjectures about the conditions for three sides that form a triangle.

**DAY 2**

**Activity 1.2: A Triangle Given Three Segments** 20 minutes

**INVESTIGATION**

Students use pattern paper and construction tools to create triangles given three segments. They investigate the conditions that would make it impossible for three line segments to form a triangle.

**Activity 1.3: Triangle Inequality Theorem** 15 minutes

**INVESTIGATION**

Students use the idea that in Euclidean geometry, the shortest distance between two points is a straight line to arrive at the Triangle Inequality Theorem. The Triangle Inequality Theorem states that the sum of the lengths of any two sides of a triangle must be greater than the length of the third side.

**DEMONSTRATE**

**Talk the Talk: None, One, or Many?** 10 minutes

**EXIT TICKET PROCEDURE**

Students use the Triangle Inequality Theorem to determine whether a triangle is possible for the given segment lengths.

**EB STUDENT TIP**

**For "Intermediate" and higher proficiency levels**

Before students begin the lesson, review the four basic inequality symbols and ensure students' understanding of each sign. Create a chart on the board and list the four symbols as the column headers:  $>$ ,  $<$ ,  $\geq$ , and  $\leq$ . Ask students to provide several words that represent each symbol. For example, for *less than* or *equal to*, students may use *fewer*, *under*, *no more than*, and *at most*. Provide examples of inequalities using the four symbols and ask students to translate each inequality into words.

**Summary**

Different relationships can exist when you only analyze parts of data sets. To understand and describe relationships in data, the entire data set must be considered.

## Don't take our word for it

Educators believe in us because they've seen how we positively impact both teachers and students.

"Carnegie's dedication to supporting our teachers through targeted classroom walkthroughs and the establishment of effective professional learning communities has been transformative. Carnegie is working side by side with our district and campus administrators to equip our educators with the tools and strategies necessary to create an environment where students engage deeply with mathematical concepts, encouraging them to articulate their thinking and tackle challenges collaboratively."

— Evangelina Gracia, Mercedes ISD, Elementary Curriculum Director

Want to see more?  
Connect with your Texas Math Expert.

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