

## USING THINK THROUGH MATH WITH SUMMER SCHOOL PROGRAMS

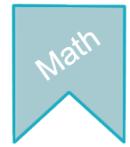
As a Web-based supplemental curriculum, Think Through Math provides a powerful solution to support summer school instruction. Although any program is more effective when an engaged classroom teacher oversees implementation, TTM is designed so that students can work independently on the computer.

Students work on individualized lesson pathways, with automatic access to immediate feedback and support from live, certified teachers.

Educators and other supervisors of a TTM summer school program can have access to student performance data that shows individual student progress.

As a part of a summer school program, TTM can be used in various ways:

- ▶ Supplemental support to classroom instruction
  - Blended learning
  - Computer lab
  - Extended day
- ▶ Intensive use
  - Test preparation
  - Part of a credit recovery program



## HOW THINK THROUGH MATH WORKS

*(If you are familiar with how the program works, please skip to the section titled “Setting Up a Summer School Program in TTM.”)*

### *Motivation*

- ▶ Think Through Math starts out by establishing an environment in which students want to do more math. We accomplish this through our student motivation program. As students work on TTM, they earn points. Students are awarded points for both their effort and their achievement. In that way, we are not only rewarding students for doing more math, but we are also encouraging them to do their best. With these points, students can decorate their own avatar, make a donation to a charity, or compete to earn rewards for their class.
- ▶ In addition, Think Through Math holds exciting contests throughout the year, such as *The Texas Math – Everybody’s Doing It!* summer contest. These contests allow individual students or class, school, or district teams to show off their math skills as they compete for some great awards. For more information on our current contests and our motivation program, in general, go to [www.tmtexas.com/texasmath](http://www.tmtexas.com/texasmath) and download the Motivation Overview and the Texas Math summer contest flyer.

### *Adaptive Content*

Think Through Math will provide a series of lessons designed to help each student better understand the content that is critical for success in math at his or her grade level.

Each lesson consists of several activities, each one designed for a specific purpose. Some lessons provide more support in the form of answer feedback, Learning Coach Help, and Live Teacher Help. Other lessons ask students to be more independent. Below is a list of those activities and their general properties:

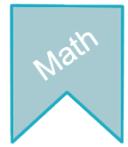
**PLACEMENT TEST:** When students first start using TTM, they take a Placement Test that assesses at what grade level they are able to consistently answer questions correctly. On that basis, TTM may automatically assign additional lessons to help students better understand the mathematics at their grade level. Here are a couple of key tips for the Placement Test:

- ▶ Students will only take the Placement Test one time in a given pathway.
- ▶ As the Placement Test progresses, students will encounter math content that they have never seen before. This is necessary to determine the level at which students are working. Simply encourage your student to try working out the problems and make an earnest attempt to solve them.

**PRE-QUIZ:** This activity is designed to assess student understanding of the content. TTM does not provide feedback, Learning Coach Help, or Live Teacher Help in this activity. Students who earn at least an 80% may be allowed to skip the rest of the activities in this lesson and move on to the next lesson in their pathway.

**WARM UP:** This activity has students work through problems they should already understand, to prepare for the material they are going to be learning.

**FOCUS:** The Focus provides students with an overview of the material they are about to work on. Students may want to take some notes during the Focus. *NOTE: Not every lesson has the Focus activity.*



**GUIDED LEARNING:** This is the activity in which TTM starts working on helping students understand a concept. Students automatically get feedback for correct and incorrect answers, but, here, they can click the Learning Coach image to ask for more math help. If students get really stuck, they can even get Live Help from certified math teachers. It is important that students read the on-screen feedback and use the help that is provided.

**PROBLEM SOLVING PROCESS (PSP):** This activity asks students to work through a process for solving real-world problems. As with Guided Learning, students will receive feedback and also have access to help from their Learning Coach, as well as Live Help from certified math teachers. *NOTE: Not every lesson has the PSP activity.*

During this activity, students practice the problem-solving process:

*Understand* what the problem is asking them to do.

*Organize* the information within the problem.

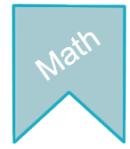
*Build* a word equation that represents how they might solve the problem.

*Solve* the problem, and answer to the question being asked.

*Reflect* on what they did, to enhance their understanding.

**PRACTICE:** This activity asks students to work more independently as they practice solving problems. While they still get feedback for correct and incorrect answers, students do not have access to either the Learning Coach or the Live Teacher Help.

**POST QUIZ:** This activity is just like the Pre-Quiz. Students who earn at least a 70% on this quiz will pass the lesson and move on to the next lesson in their pathway. If they earn less than a 70%, the program will assign other lessons that help build their understanding before they try the failed lesson again.



## SETTING UP A SUMMER SCHOOL PROGRAM IN TTM

Schools will need to make determinations about how to organize students in a summer school program that includes TTM. Many summer school students will already have TTM accounts that were organized under a different teacher's classroom during the regular school year. In addition, choices must be made regarding the level to which a summer school teacher will be able to access student data and assign content. Below are two options, with some of the related pros and cons for each.

### OPTION 1: STUDENTS REMAIN IN THEIR ORIGINAL TTM SCHOOL-YEAR CLASS AND UNDER THEIR ORIGINAL SCHOOL-YEAR TTM TEACHER'S ACCOUNT

#### Pros:

- ▶ **TTM WILL ASSIGN CONTENT STUDENTS NEED:** Students will continue to work on content that is appropriate for their specific needs and that drives them toward grade-level proficiency.
- ▶ **EASY TO MANAGE:** Teachers will not have to do anything, as students can continue using TTM, as usual, either as a part of their class or as an at-home resource.
- ▶ **TIME:** Given the short duration, teachers can immediately implement TTM into their summer school program.

#### Cons:

- ▶ **ASSIGNING PATHWAYS:** Without access to student accounts from their own teacher account, summer school teachers will be unable to control the content students are working on.
- ▶ **ACCESSING DATA:** Without having the students in their own teacher account, summer school teachers will be unable to access student data.

### OPTION 2: MOVE STUDENTS INTO A CLASS UNDER THE SUMMER SCHOOL TEACHER'S ACCOUNT

- ▶ **TIME:** Summer school teachers will need to submit a list of their students and their TTM usernames to [support@thinkthroughmath.com](mailto:support@thinkthroughmath.com) to move student accounts from the original teacher's account into their summer school class account. While students can continue to use their TTM accounts during this process, it may take up to 2 business days for this change to be implemented.

## TRAINING FOR SUMMER SCHOOL TEACHERS

It is highly recommended that summer school teachers attend one of the TTM summer school training webinars. Registration information and the full schedule of webinars is available by clicking the **Support** tab, once a teacher or an administrator has logged in to a TTM account, or by going to <http://www.thinkthroughmath.com/think-through-math-resources/upcoming-webinars/>.

## BEST PRACTICES TO SUPPORT STUDENTS USING TTM

It is critical that you encourage students participating in TTM to use the program as intended. Here are some key things you can do to help ensure that your students get the most out of using TTM.

### 1. Check Your Technology

Think Through Math requires that students access the program through the Internet, using a desktop or laptop computer. To benefit from all of the program's features, students must use the correct Web browser to access TTM. These are approved browsers:

- ▶ **INTERNET EXPLORER 8.0 OR HIGHER**
- ▶ **FIREFOX** – available for free download at [www.mozilla.org/en-US/firefox/new/](http://www.mozilla.org/en-US/firefox/new/)
- ▶ **CHROME** – available for free download at [www.google.com/chrome](http://www.google.com/chrome)

In addition to the correct browser, check that you have the latest version of Adobe Flash installed. For many of you, this will already be done. **If you are not sure about your version of Flash**, go to <http://get2.adobe.com/flashplayer/> to install the latest version.

### 2. Encourage Students to Set Goals

Setting clear goals is important for student success. Here are some student goals we recommend:

- ▶ To work on TTM for 30–45 minutes, two or three days a week, and . . .
- ▶ To complete at least 2–3 lessons a week, and . . .
- ▶ To work to pass at least 70% of the lessons on the pathway by the end of the summer.

### 3. Encourage Students to Use Headphones and a Notebook

- ▶ **HEADPHONES:** There are many areas of our program in which we can read the problem, answers, and feedback to the student. Hearing these aloud may help students better understand what they are working on. When students are receiving Live Help, our teachers can either type or talk to them. In many cases, Spanish translations of the problem can be read to the student.
- ▶ **JOURNAL:** Using a journal allows students to draw diagrams, think through solutions, or work out computations—some of the many devices that can help them solve the problems in TTM. An example of a journal is available under the TTM Knowledge Base. Click the **Support** tab, once you have logged in to a teacher or an administrator TTM account.



#### 4. Encourage Students to Use the Help Features

The feedback, Learning Coach Help, and Live Help features are there to further support students in their understanding of math concepts. Here are some key suggestions to help ensure that your student makes the most of these Help features:

- ▶ Encourage students to read the on-screen feedback and help provided.
- ▶ Encourage students who get stuck to ask for “More Help” or to click the Learning Coach image when present at the bottom right of the page.
- ▶ Encourage students to first make an attempt to answer the question, and then take advantage of the Live Help. *NOTE: Live Help is only available once students make an attempt to answer the question.*

Sorry, but this equation DOES represent this situation.

3:00 p.m.

Mile marker 50

4:30 p.m. – 3:00 p.m. = 1.5 hours

155 miles – 50 miles = 105 miles

4:30 p.m.

Mile marker 155

$$\frac{\text{Distance}}{\text{Rate}} = \frac{\text{Rate} \times \text{Time}}{\text{Rate}}$$

Dividing both sides of the distance formula by time gives this formula:

$$\text{Rate} = \frac{\text{Distance}}{\text{Time}}$$

Then substitute.

$$\text{speed} = \frac{105 \text{ miles}}{1.5 \text{ hours}}$$

Try again. Look for an equation that does NOT represent this situation.

REPLAY

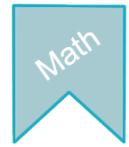
TRY AGAIN

MATH HELP

#### 5. Let the Program Help Your Student

As tempting as it is to jump in and provide answers and too much information to help your students as they work through the problems in TTM, you are reminded that TTM is continually assessing what your student does or does not understand, and adapts the content we provide accordingly. Any outside assistance makes it more difficult for the program to accurately measure student progress.

The best thing parents can do is to support your students and encourage them to use the program in line with the best practices outlined in this toolkit.



## HOW TO GET HELP AND TECHNICAL SUPPORT

If you encounter any technical issues, you can get help from a Think Through Math Instructional Coach covering the Educational Service Center region where your district resides. A list of Instructional Coaches, their e-mail addresses, and the regions they cover is provided below.

INSTRUCTIONAL COACH	REGIONS	INSTRUCTIONAL COACH	REGIONS
<b>Susan Cooper</b> <a href="mailto:scooper@thinkthroughmath.com">scooper@thinkthroughmath.com</a>	6, 12, 13, 15	<b>Melissa Lorenzo</b> <a href="mailto:mlorenzo@thinkthroughmath.com">mlorenzo@thinkthroughmath.com</a>	2, 3
<b>Mary Davis</b> <a href="mailto:mdavis@thinkthroughmath.com">mdavis@thinkthroughmath.com</a>	8, 9, 10	<b>Israel Pena</b> <a href="mailto:ipena@thinkthroughmath.com">ipena@thinkthroughmath.com</a>	1, 18, 19
<b>Jessica Davis</b> <a href="mailto:jdavis@thinkthroughmath.com">jdavis@thinkthroughmath.com</a>	11, 14, 16, 17	<b>Jayne Shanklin</b> <a href="mailto:jshanklin@thinkthroughmath.com">jshanklin@thinkthroughmath.com</a>	Online Support and Region 20
<b>Lonzetta Dunson</b> <a href="mailto:ldunson@thinkthroughmath.com">ldunson@thinkthroughmath.com</a>	7, 10, 12	<b>Karen Tillett</b> <a href="mailto:ktillett@thinkthroughmath.com">ktillett@thinkthroughmath.com</a>	4, 5

Additionally, online webinars are available to help with all of your summer school needs. Registration information and the full schedule of webinars is available by clicking the Support tab, once you have logged in to a teacher or an administrator TTM account, or by going to <http://www.thinkthroughmath.com/think-through-math-resources/upcoming-webinars/>.

For questions about Texas SUCCESS, please visit [www.texassuccess.org](http://www.texassuccess.org), e-mail [help@texassuccess.org](mailto:help@texassuccess.org), or call toll-free 877-315-4918. To learn more about Texas Success and Think Through Math teaming up together, visit [www.texassuccess.org](http://www.texassuccess.org) or [www.tmtexas.com](http://www.tmtexas.com).