



Engaging Students in Progressions

education.ti.com/tiwebinars

Moderator Bio



Mike Houston

**T³ National Instructor
Riverside High School
Ellwood City, PA**

Mike is in his twelfth year of teaching high school mathematics in Ellwood City, PA. While participating in a TI-Navigator™ Fast-Track in 2007, he learned how technology can effectively cultivate students' wide range of learning styles. During this time, Mike has served as a T³ National Instructor and a contributing author for MathForward™.

Panelists' Bios



Michelle Rinehart

T³ Regional Instructor

Fort Davis, TX

Born and raised in rural Ontario, Canada, Michelle studied mathematics, physics, and education before moving to Texas. Michelle has taught high school math and science at rural districts in Texas, while also working as a math and science consultant throughout the state. Her interests include technology integration, conceptual understanding, and curriculum and instruction.



Dan Ilaria

T³ National Instructor

West Chester, PA

Daniel Ilaria is a T³ National Instructor and professor of mathematics education at West Chester University of Pa. Dan has taught middle and high school mathematics as well as been a supervisor of mathematics for several school districts in New Jersey. Currently, he uses TI technology with pre-service and in-service teachers are part of pedagogy classes at both the undergraduate and graduate level.

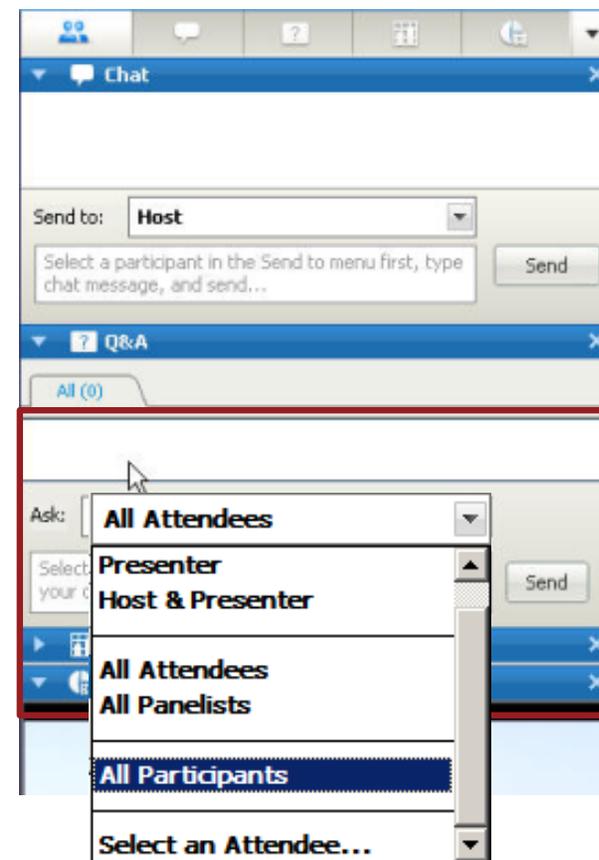
Chat & Questions?

Please ask questions using the Q&A box:

- When we are not in desktop-sharing mode, the **Q&A** panel is on the right side of your screen.
- When we are presenting in desktop-sharing mode, the **Q&A** panel can be accessed via the “floating toolbar” at the top of the screen.



*Note: Use the **Chat** panel for general communication*



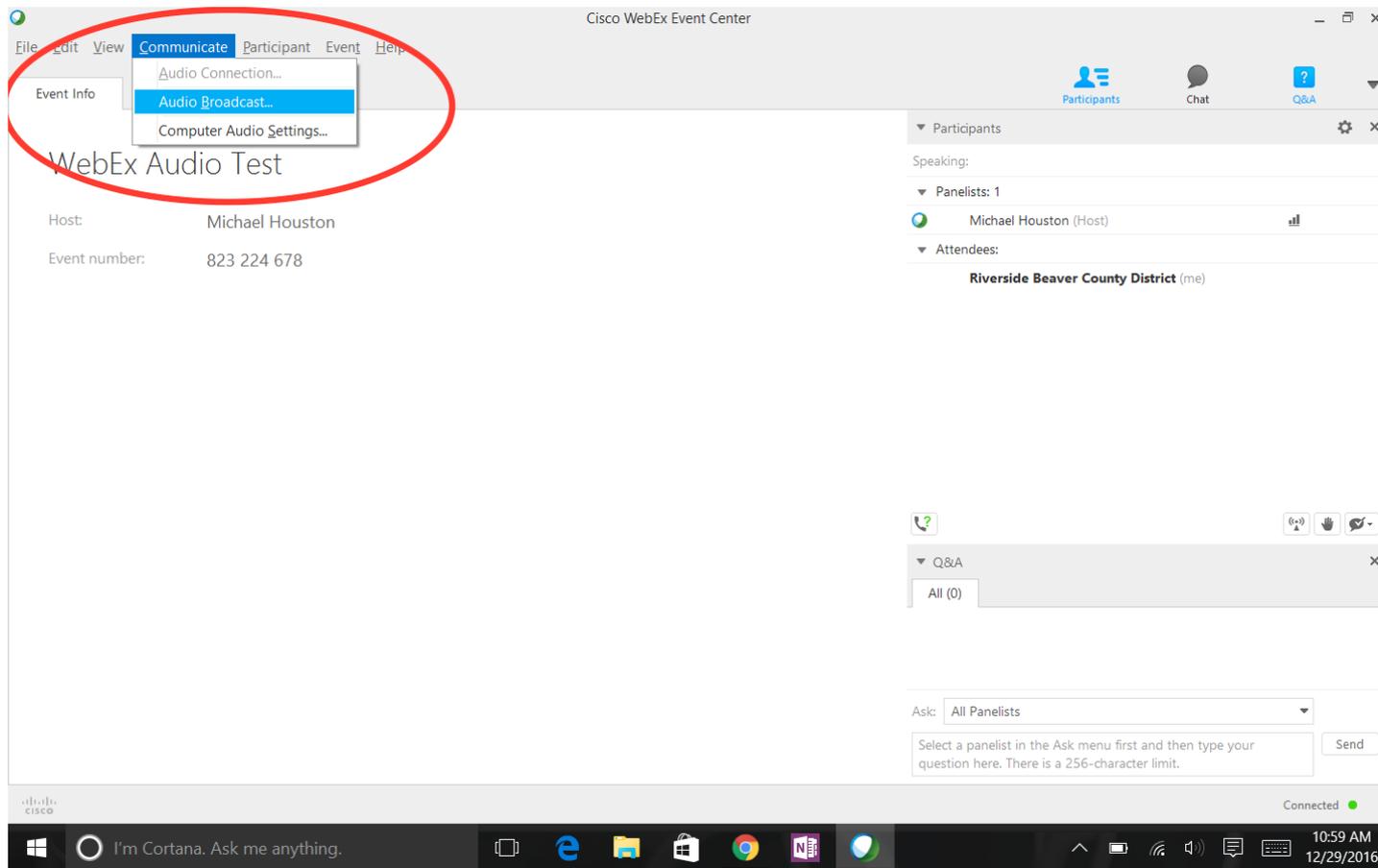
Questions directed to:

- All Attendees** excludes Moderator and Panelists
- All Participants** includes everyone in the meeting

Audio

If your audio becomes disconnected, follow these instructions to reconnect it.

1. In the menu at the top, choose communicate and choose audio broadcast.



Agenda

- Welcome & introductions
- Building Concepts Progressions
 - Background
 - Ratios & Proportional Reasoning
 - Statistics and Probability
 - Equations and Expressions
 - » Key content and pedagogical ideas across grade levels
- Online Resources
- *Webinar Giveaway: complimentary registration for the T³ International Conference*

Expected Outcomes:

- **Explore** how the Building Concepts files make the Progressions interactive and dynamic
- **Discuss** how technology supports the learning of content and effective pedagogical practices
- **Provide** resources you can use immediately in your classrooms

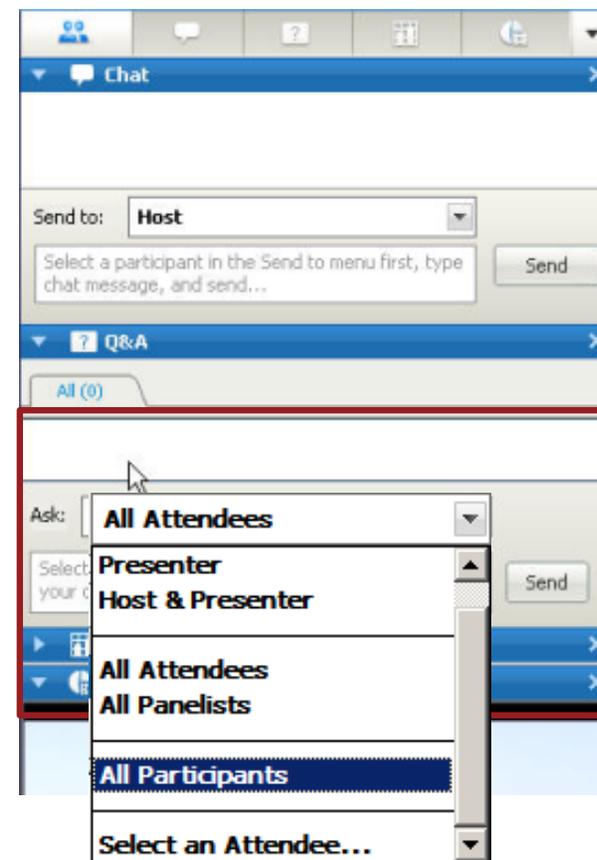
Chat & Questions?

Please ask questions using the Q&A box:

- When we are not in desktop-sharing mode, the **Q&A** panel is on the right side of your screen.
- When we are presenting in desktop-sharing mode, the **Q&A** panel can be accessed via the “floating toolbar” at the top of the screen.



*Note: Use the **Chat** panel for general communication*



Questions directed to:

- All Attendees** excludes Moderator and Panelists
- All Participants** includes everyone in the meeting

What is Building Concepts?

■ Building Concepts focused progressions of lessons

■ K-12 conceptual categories

Grade	K	1	2	3	4	5	6	7	8	HS Conceptual Categories
Domains	Counting & Cardinality						Ratios & Proportional Relationships	Functions		Functions
	Operations & Algebraic Thinking						Expression & Equations			Algebra
	Number and Operations in Base Ten						The Number System			Number & Quantity
				Fractions						
	Measurement & Data						Statistics & Probability			Statistics & Probability
	Geometry						Geometry			Geometry Contemporary Mathematics

Data Slide Placeholder

Rima and Eric have earned a total of 135 tokens to buy items at the school store. The ratio of the number of tokens that Rima has to the number of tokens that Eric has is 8 to 7. How many tokens does Rima have? (NAEP, 2013)

a) 8

7%

b) 15

9%

c) 56

24%

d) 72

43%

e) 120

14%

Building Concepts is...

- » Built upon learning progressions to tell a coherent story about mathematical concepts
- » Activities that are interactive and address “tough-to-teach, tough-to-learn” ideas
- » Support for deep learning of content from a conceptual foundation to procedural fluency and implementation of effective teaching practices

How Building Concepts is Different

- » Has students work through misconceptions
- » Emphasis on multiple representations and multiple approaches to solving problems
- » Focus on student interaction with mathematics to explore and discuss ideas

Upcoming Webinars & Survey



Register for upcoming webinars:

<http://education.ti.com/tiwebinars>

Survey

After the webinar, a brief survey will automatically appear in your web browser. We greatly appreciate your feedback!



Workshops

[T³™ Professional Development]

Spring Webinar
Drawing - Win
registration to a
2017 T³
Workshop

TI-Innovator Hub
problem-solving STEM
productive struggle
professional development
conceptual understanding
Building Concepts
teaching strategies
exam-accepted getting started
learning to code
#SlowMath collaboration
calculator basics

Choose from over 50
workshops offered
across the U.S.

An exceptional value -- TI
Technology included with
registration



Get a bonus half-day of
“Calculator Basics” instruction
for novice users, free
at select sites

Team discounts: Register 4
and the 5th attends free



education.ti.com/go/t3workshops

Stay Connected with TI



Facebook.com/TICalculators



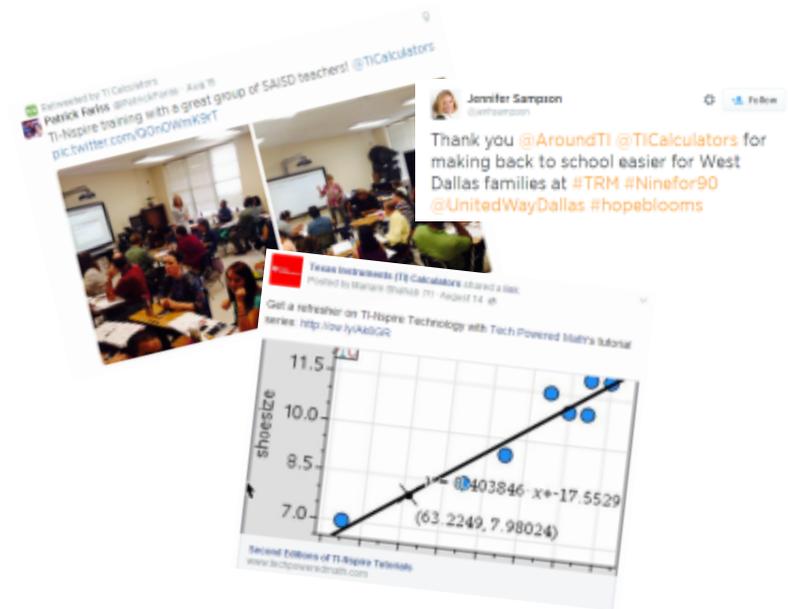
@TICalculators



Instagram.com/TICalculators



TI Calculators



Join the
conversaTION

#ScienceNspired
#MathNspired
#T3Learns

Certificate of Attendance

- » To generate a Certificate of Attendance with your name and information about the webinar, go to <http://bit.ly/2IDqg2c>

TEXAS INSTRUMENTS Education Technology
Your Passion. Our Technology. Student Success.™

Generate Your Certificate · 获取证书 · Generar Certificado de Asistencia

What's New and Tried & True with TI-Nspire™ Technology

Learn about the newest features of TI-Nspire technology, and continue to explore tried and true features such as dynamic links across multiple representations, dynamic measurement, color and images. Learn how to create interactive, media-rich math and science content with the PublishView™ feature of the Teacher and Student software.

Presented by: Todd Morslein and Tom Reardon. See archive at <http://education.ti.com/webinars>

(note: this form takes 90 seconds to generate your PDF certificate)

Your Name · 您的姓名 · Su Nombre:

Go · 获取证书 · Ir

PDF Certificate takes 90 seconds generation and will open in a new window or tab. You will need the free **Adobe Reader** to view and print your certificate.

PDF证书的生成需要大约90秒的时间生成。您需要安装免费的PDF阅读器**Adobe Reader**来浏览查看和打印证书。

La generación del archivo PDF, tardará 90 segundos y se abrirá en una nueva ventana o pestaña. Deberá tener la versión gratuita de **Adobe Reader** para ver e imprimir su certificado.

© Copyright 1995-2010 Texas Instruments Incorporated. All rights reserved. Trademarks | Privacy Policy | Link Policy

Math Nspired Resource Center: Calculus

CERTIFICATE OF ATTENDANCE

presented to
Your Name

1
Number of Hours

March 8, 2011
Date

TEXAS INSTRUMENTS
Your Passion. Our Technology. Student Success.™

© 2010 Texas Instruments Incorporated. All rights reserved.

TEXAS INSTRUMENTS
TECHNOLOGY

Post-webinar Follow-up

Find useful resources, answers to your questions & access to friendly, knowledgeable customer support and technical reps.

General Questions:

1-800-TI-CARES

Technical Questions:

972-917-8324

ti-cares@ti.com



For a consultation on an upcoming purchase of TI Technology or professional development, please contact us at:

ti-educators@ti.com

Thank you!

education.ti.com

Certificate of Attendance

- » To generate a Certificate of Attendance with your name and information about the webinar, go to <http://bit.ly/2IDqg2c>

TEXAS INSTRUMENTS Education Technology
Your Passion. Our Technology. Student Success.™

Generate Your Certificate · 获取证书 · Generar Certificado de Asistencia

What's New and Tried & True with TI-Nspire™ Technology

Learn about the newest features of TI-Nspire technology, and continue to explore tried and true features such as dynamic links across multiple representations, dynamic measurement, color and images. Learn how to create interactive, media-rich math and science content with the PublishView™ feature of the Teacher and Student software.

Presented by: Todd Morslein and Tom Reardon. See archive at <http://education.ti.com/webinars>

(note: this form takes 90 seconds to generate your PDF certificate)

Your Name · 您的姓名 · Su Nombre:

Go · 获取证书 · Ir

PDF Certificate takes 90 seconds generation and will open in a new window or tab. You will need the free **Adobe Reader** to view and print your certificate.

PDF证书的生成需要大约90秒的时间生成。您需要安装免费的PDF阅读器**Adobe Reader**来浏览查看和打印证书。

La generación del archivo PDF, tardará 90 segundos y se abrirá en una nueva ventana o pestaña. Deberá tener la versión gratuita de **Adobe Reader** para ver e imprimir su certificado.

© Copyright 1995-2010 Texas Instruments Incorporated. All rights reserved. Trademarks | Privacy Policy | Link Policy

Math Nspired Resource Center: Calculus

CERTIFICATE OF ATTENDANCE

presented to
Your Name

1
Number of Hours

March 8, 2011
Date

TEXAS INSTRUMENTS
Your Passion. Our Technology. Student Success.™

© 2010 Texas Instruments Incorporated. All rights reserved.

TEXAS INSTRUMENTS
Your Passion. Our Technology. Student Success.™