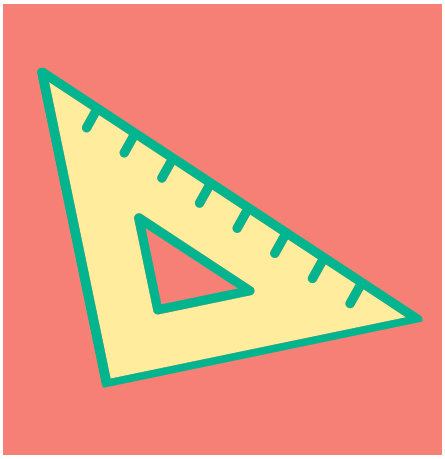


VCTM Virtual
Fall Conference

MAKING CONNECTIONS

Engaging and connecting with mathematics students from anywhere.

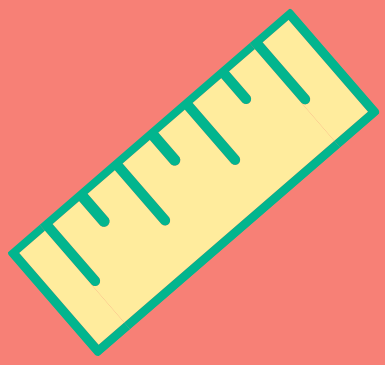
Please join our FREE virtual conference for teachers of mathematics grades K - 12. We will host two keynote speakers on Thursday and Friday evenings and offer a variety of workshops on Saturday morning for all grade levels.

VCTM
Vermont Council of Teachers of Mathematics

OCTOBER 22 - 24 2020

KEYNOTE SPEAKERS

Dan Meyer	John Tapper
October 22	October 23
6:30 p.m.	6:30 p.m.



FOR MORE INFORMATION, PLEASE VISIT VERMONTMATH.ORG

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VCTM CONFERENCE SCHEDULE

THURSDAY, OCTOBER 22, 2020

Dan Meyer

Connected and Creative Math Classrooms in a Time of Crisis

6:30 p.m.

FRIDAY, OCTOBER 23, 2020

John Tapper

Invisible Butterflies

6:30 p.m.

SATURDAY, OCTOBER 24, 2020

Session 1:
9:00 - 10:00 a.m.

Session 2:
10:15 - 11:15 a.m.

Session 3:
12:00 - 1:00 p.m.

Connecting with Peers:
1:15 - 1:45 p.m.

Business Meeting:
1:45 - 2:00 p.m.

VCTM
Vermont Council of Teachers of Mathematics

KEYNOTE SPEAKERS

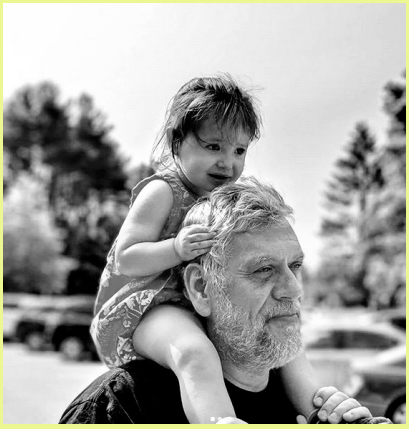
Dan Meyer

Thursday, October 22, 2020
6:30 p.m.

Connected and Creative Math Classrooms in a Time of Crisis

With teachers and learners in crisis, we need new technologies and pedagogies to help us maintain our connection and creativity in math class. We'll look at some of the ways math software separates us and several ways it can connect us, and help us flourish even now.

John Tapper



Friday, October 23, 2020
6:30 p.m.

Invisible Butterflies

Some of the most interesting butterflies are ones you never see. Both butterflies and moths survive by camouflaging themselves against their background or by looking like something they are not: the eye of a predator, for example. These strategies allow them to endure some of the harshness of their environments. Being invisible is a kind of protection. When it comes to math class, there are students who approach their learning the same way. Sometimes, because of past experience or self perception, they see the environment in math class as one where they are in peril - risking frustration and, in the most extreme cases, humiliation. To avoid this, students with learning challenges can try to hide in plain sight. They do not raise their hands or ask for help. They avoid calling attention to their struggles. In doing this, students on IEPs are sometimes invisible to their peers. In this workshop I'll take on ways to support students with learning challenges in grade level math. We'll examine the practice of rigorous, scaffolded inquiry. We'll learn about ways students on IEPs can be successful with math and access the opportunities that math gives them.

Session 1: 9:00 - 10:00 a.m.

Developing Flexibility Through Facts

Ann Elise Record

Fluency has four aspects: flexibility, efficiency, accuracy, and automaticity. Let's explore the heart of the strategic thinking for each operation and discuss how we can begin that conceptual understanding while developing students' fact fluency. Not only will students develop fluency for their basic facts, but they will understand the operations themselves and we will be setting a foundation of flexibility that will naturally progress to working with multi-digit numbers, decimals, and fractions down the road. Together we can create positive math journeys for all our students!

Elementary

From Student Invented Strategies to Standard Algorithms: What's the Rush?

Fran Huntoon

What is an algorithm? What are student invented strategies and why do they matter? In this session we will seek to answer these questions and examine the importance of allowing students time to develop strategies before introducing them to standard algorithms.

Elementary/MS

The Desmos Classroom

Michelle Page

Learn about ways you can engage students using Student.Desmos.com. The Desmos Classroom can be used to simulate by-hand graphing, which is hard to replicate in the online environment. It can also be used for group work and collaboration, formative assessments, and individualized feedback.

MS/HS

Session 2: 10:15 - 11:15 a.m.

Math Menus For All Situations

Tara Trudo

We know how important math menu is for providing students with voice and choice in classrooms. What happens to voice and choice when the learning moves from the classroom to the living room? Come see samples of math menus that can support kids in remote, hybrid and in person learning with COVID restrictions on sharing materials. Grab a template to help you get started on your own flexible menu. We can still differentiate practice for our students no matter where they are.

Elementary

All Students can SEE the Math

T.J. Jemison

Subitizing is not just for Pre-K-2! Harness the power of conceptual subitizing by using quick images. Come "play" as we explore and share daily routines to develop 3-5 computational fluency. Leave with ready-to-use activities that support ALL students' flexibility and understanding of many tricky intermediate grade concepts.

Elementary

Expanding Horizons

George Ashline, David Hathaway, Karla Karstens, and Beth Ruskai

Enrich and broaden your students' mathematical experience. Participants in the VT State Mathematics Coalition's "Expanding Horizons" program will outline lessons which you can incorporate into your classroom at no charge. A Q&A opportunity will be included.

MS/HS

Lunch: 11:15 a.m.- 12:00 p.m.

Session 3: 12:00 - 1:00 p.m.

Math Moments Matter!

Abby Wicker Maiello

In this session we'll be talking about math routines that work virtually because they have high levels of engagement for elementary students. I will share ideas about everyday math moments that teachers can share with their students (and families) in order to help students have real life experiences that bring a meaningful context to their at home math learning.

Elementary

Flip, Turn, and Slide

Jean McKenny

Transformational geometry is increasingly being incorporated into middle and high school programs. Transformational geometry includes reflections, rotations, translations and dilations. Once students understand these concepts, they can transfer that knowledge to functions. The CCSS for geometry state that "The concepts of congruence, similarity, and symmetry can be understood from the perspective of geometric transformation." Consequently, many high schools are changing the way that these concepts are taught. This session will present a learning activity involving transformations that can be done with middle and high school students. It is designed to be a fun, creative, discovery learning activity. It has been used successfully with students (and adults) in the past.

MS/HS

Sense Making: Is It at the Core of Your Math Classroom?

Annie Fetter

Are your students making sense of the mathematics they explore? Do they feel that mathematics is an inherently sensible endeavor? We'll look at ways in which students don't make sense of mathematics, consider why, and discuss strategies for making it a larger part of the expectations in your classroom.

Connecting with Peers: 1:15 - 1:45 p.m.

Connect with elementary, middle or high school teachers in a small group setting. Grade level groups will discuss successes and challenges of teaching mathematics during a pandemic. Teachers can share resources and ideas to stay connected with students, families ,and colleagues during these unique times.

Business Meeting: 1:45 - 2:00 p.m.

Please join us for the VCTM Business Meeting. We will vote for the new slate of board members and discuss plans for the upcoming year. We will also be presenting the Presidential Awards for Excellence in Mathematics and Science Teaching and Vermont Math Teacher Rookie of the Year.

We are always looking for new board members, if you would like to join us, please reach out to a current board member.